



## Stress

### A. Stress Phonemes

In our discussion of phonemes up to now we have been concerned with the thirty-six phonemes of English. These are called segmental phonemes because each is a segment of the continuous flow of speech. But this is only part of the phonemic story. We utter phonemes with varying degrees of prominence or stress; we sound voiced phonemes on different pitch levels; and we employ breaks or disjunctures to break up the whole utterance into groupings. The consequence of these three oral practices is that three more language elements require scrutiny—stress, pitch, and juncture (the common term for disjuncture). All three are phonemic, and as they accompany, and are said to be superposed on, the segmental phonemes, they are called suprasegmental phonemes. In this chapter we shall investigate the first of these three suprasegmental phonemes, that of stress.

Stress refers to the degree of prominence a syllable has. In *agree*, for example, the *gree* sounds more prominent than the *a*. In any utterance there may be as many degrees of stress as there are syllables, but many of the differences will be slight and even imperceptible. We are concerned here only with those differences of stress that have the power to distinguish meanings, namely the stress phonemes. Of these there are three, when we

limit our analysis to individual words. Going from the most prominent to the weakest, we distinguish them by the following diacritics and names:

- ˈ Primary stress
- ˌ Mid stress
- ˘ Weak stress (usually not indicated)

They are all illustrated in the word *legendary*.

To demonstrate that stress is phonemic in words we shall again employ a minimal pair. If we contrast /pərmít/ with /pərmít/, we see that the segmental phonemes are identical and that the two words differ only in the position of their primary and mid stresses. So it must be these stresses that distinguish them as signifying a verb and a noun respectively, and the stresses must therefore be phonemes.

Since some students have difficulty in differentiating various degrees of stress, a few graduated exercises may be useful.

#### EXERCISE 38

Place a primary stress mark over the syllable that has the greatest prominence.

- |                    |              |
|--------------------|--------------|
| 1. defer           | 7. evil      |
| 2. differ          | 8. superb    |
| 3. pervert (verb)  | 9. romance   |
| 4. pervert (noun)  | 10. detail   |
| 5. conflict (verb) | 11. research |
| 6. conflict (noun) | 12. defense  |

#### EXERCISE 39

Place a mid-stress mark over the syllable that has the next-to-the-greatest prominence. The primary stress marks are supplied.

- |                |                  |
|----------------|------------------|
| 1. dictionary  | 6. aviación      |
| 2. sécretary   | 7. perpendicular |
| 3. separación  | 8. académic      |
| 4. íntellect   | 9. univérsity    |
| 5. fundaméntal | 10. absolutély   |

#### EXERCISE 40

Mark the primary and mid stresses on the following words:

- |                  |              |
|------------------|--------------|
| 1. accent (noun) | 6. forgive   |
| 2. austere       | 7. irate     |
| 3. ambush        | 8. pathos    |
| 4. humane        | 9. diphthong |
| 5. blackbird     | 10. phoneme  |

#### EXERCISE 41

Mark all three degrees of stresses that you hear in the following words.

- |                 |                 |
|-----------------|-----------------|
| 1. intellectual | 6. humanitarian |
| 2. designate    | 7. socialized   |
| 3. education    | 8. ceremony     |
| 4. busybody     | 9. military     |
| 5. interruption | 10. uninspired  |

In the preceding exercises you have been putting stress marks of three degrees on isolated words, the citation forms. When we turn our attention to word groups and sentences, we shall need four degrees of stress. These are indicated as follows:

- ˈ Primary stress
- ˌ Secondary stress
- ˘ Third stress (same as mid stress on words)
- ˙ Weak stress

The word *intellectual* has all three degrees of word stress; but when it occurs in a phrase, *intellectual curiosity*, its primary stress is demoted to secondary, as the markings show, and four degrees of stress are needed to describe the stress patterning. An exercise will furnish more illustrations.

#### EXERCISE 42

Place a primary stress mark on the single words, and both the primary and the secondary stress marks, /' and /', on the longer expressions. Omit the third and the weak stress marks.

- |                         |                         |
|-------------------------|-------------------------|
| 1. remarkable           | 7. praiseworthy         |
| 2. remarkable invention | 8. praiseworthy remark  |
| 3. tiresome             | 9. academic             |
| 4. tiresome job         | 10. academic procession |
| 5. contract (noun)      | 11. blooming            |
| 6. contract bridge      | 12. blooming plant      |

Note, however, that the secondary stress, as in *remarkable invention*, is still the strongest stress in the individual word, even though it has been demoted.

The reason for the demotion of stress we saw in exercise 42 lies in the nature of English phrase stress. Only one primary stress can occur in a phrase, and the strongest stress in a phrase (construction or word group) is normally near or at the end, as in these examples: *a tall building, an iron tool, in the pantry, very happy, delightfully ignorant, way out, often walks, goes for beer, the day before yesterday, joyful as a lark, get up early, wants to leave, ladies and gentlemen, up and down, walk or ride*. Exceptions to this principle occur, especially with phrases containing personal pronouns.

#### EXERCISE 43

Place a primary stress mark on the most strongly stressed syllable in each phrase.

- |                         |                           |
|-------------------------|---------------------------|
| 1. a wooden gate        | 7. Jack and Jill          |
| 2. a gate of wood       | 8. tea or coffee          |
| 3. completely gone      | 9. not at all             |
| 4. gone completely      | 10. all at once           |
| 5. run for the practice | 11. call the thief a liar |
| 6. practice for the run | 12. call the liar a thief |

The phonemic status of stress in individual words has been mentioned above, just before exercise 38. But stress can also be phonemic in word groups. As illustration let us look at a minimal pair, *Old Glory* (= the flag) and *old glory* (= a glory that is old). The difference between the two lies in the secondary and third stresses. A newspaper story telling of the discovery of a very old American flag juxtaposed these two *old's* in a way that highlights the difference in stress: *old Old Glory*.

### B. Shifting Stress

Many words in English have what is called shifting stress; the position of stress may shift with a change of context. In isolation, before a pause, or before weakly stressed syllables, these words have a primary stress on the last syllable, like *unknówn* and *downtówn*. But when the primary stress in such a word occurs directly before another syllable with primary stress, two things happen, as is illustrated in *an únknòwn thief* and *the dówntòwn báker*. First, the stronger stress is shifted toward the front of the word, because English tends to avoid consecutive primary stresses. English is an iambic language and favors an alternation of weaker with stronger stresses. Second, the primary stress is demoted to secondary, because an English phrase can have only one primary stress, and that is near or at the end, as we learned above in exercise 43.

#### EXERCISE 44

Place primary /'/, secondary /'/, and third /'/' stress marks on the words in italics.

1. His job was *inside*.
2. He had an *inside job*.
3. Our *overnight guests* did not stay *overnight*.
4. The *cut-glass bowl* was not really *cut-glass*.
5. *Inlaid tiles* are always *inlaid*.
6. Wasn't he *almost killed*? *Almost*.
7. She went *overseas* for her *overseas job*.

8. The soldiers are *Chinese* in the *Chinese* army.
9. He waited to be *fourteen* for *fourteen* years.
10. A *left-handed* pitcher doesn't always bat *left-handed*.

**C. Grammatical Stress Patterns**

Grammatical patterns are accompanied by regular stress patterns. Sometimes such stress patterns are the sole means of differentiating one grammatical pattern, with its concomitant meaning, from another. At other times the stress patterns just ride along. Of those in English we shall take up only four.

**Pattern 1.** A compound noun is usually accompanied by the stress pattern of ' '. It is exemplified by *blúebird*, *hígh schòol*, *díníng ròm*. A compound may be spelled as two words, as one, or as a hyphenated word. Both *sidewalk* and *shoe store* are compounds, because of their stress pattern, regardless of the fact that one is written as a single word and the other as two.

**EXERCISE 45**

Place the compound noun stresses over the following words.

- |               |                    |
|---------------|--------------------|
| 1. blackboard | 6. roundhouse      |
| 2. hotbed     | 7. paperback       |
| 3. paleface   | 8. rocking chair   |
| 4. mailman    | 9. spinning wheel  |
| 5. shortcake  | 10. flying teacher |

**Pattern 2.** The modifier + noun pattern is signaled by the stress pattern of ' ', as in *síck núrse*, *pòor hóuse*, *wòrking mán*.

**EXERCISE 46**

Place the modifier + noun stresses over the following words.

- |                |                    |
|----------------|--------------------|
| 1. hot house   | 6. red skin        |
| 2. dark room   | 7. funny bone      |
| 3. black bird  | 8. dancing teacher |
| 4. tender foot | 9. mowing machine  |
| 5. handy man   | 10. moving van     |

**EXERCISE 47**

Here are twelve pairs of compound nouns and modified nouns distinguished by stress. The items in column 1 have modifier + noun stress; those

in column 2 have compound-noun stress. Write a brief statement of the meaning of each.

- |                     |                            |
|---------------------|----------------------------|
| 1a. hígh cháír      | 1b. hígh chàír             |
| 2a. gáme fish       | 2b. gáme fish              |
| 3a. blúe bóok       | 3b. blúebòok               |
| 4a. gréen hóuse     | 4b. gréenhóuse             |
| 5a. dóbble ú        | 5b. dóbble ù               |
| 6a. rácing hórse    | 6b. rácing hòrse           |
| 7a. smóking róm     | 7b. smóking ròom           |
| 8a. tráveling mán   | 8b. tráveling mànn         |
| 9a. dáncing gírl    | 9b. dáncing gírl           |
| 10a. còoling lótion | 10b. còoling lòtion        |
| 11a. Frénch téacher | 11b. Frénch tèacher        |
| 12a. lóng hánd      | 12b. lónghánd <sup>1</sup> |

<sup>1</sup> The distinction between compound noun (' ') and modifier-plus-noun (' ') cannot be consistently maintained in English. Here are a few of the complications:  
 1. Compare *his pèrsonal ínterests* with *his pártý ínterests*. By our rules the first is a modifier-plus-noun and the second a compound noun. Now let's make a sentence out of them:

He has both *pèrsonal* and *pártý* interests.  
 Here *pèrsonal* and *pártý* are coordinated by *and*, so that *pártý* must be a modifier and not part of a compound noun. You can repeat this coordination test with pairs like *míllítary clòthes—búsíness clòthes*.

2. Apart from the stress patterns, there seems to be no structural difference between *Fírst Stréet* and *Fírst Ávenue*, *páperbáck* and *páper dóll*, *bóy fríend* and *bóy scíentíst*, *tállíng máchine* and *flyíng sáucer*, and similar pairs. Thus it does not appear sensible to call the first member of each pair a compound noun and the second a modifier-plus-noun.

3. English contains expressions like *gréat grándfáther*, *spríng féver*, and *gránd júry*, which have modifier-plus-noun stress but whose meanings are certainly not the additive total of those of their components. Furthermore, when the first member is an adjective, we cannot add a second modifier after the first without destroying the meaning, e.g., *gréat óld grándfáther*. Hence these seem to be compound nouns with a secondary-primary stress pattern.

Despite such limitations we shall maintain the distinction because it is so widely operative.

Fig. 1.3-3

The charming princess  
 La princesa encantadora  
 The charmed prince  
 El príncipe encantado

(Vaction/process + P + A

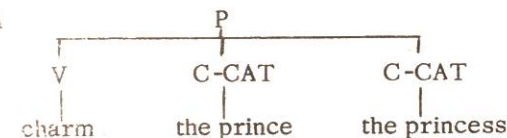


Fig. 1.3-1, 2, 3: Analyses of propositions with embedded adjective, according to DiPietro (modified)

In DiPietro, thus, the adjectives of 1 and 3 are verboids, that of 2 is a case category. The present approach, on the other hand, considers all adjectives as verboids, and 'be', 'become', and 'get' and their Spanish equivalents as surface elements.

**Exercises:**

Draw the deep structure models and label their elements, as far as discussed up to here, for the following sentences:

- 1- The boy is sick.  
El muchacho está enfermo.
- 2- The sky got dark.  
El cielo oscureció.

- 3- He is a teacher.  
El es profesor.
- 4- The summer was hot.  
El verano estuvo caluroso.
- 5- The grass became green.  
El pasto se puso verde.
- 6- CA is a problem.  
Análisis comparativo es un problema.
- 7- The analysis is a bore.  
El análisis es aburrido.
- 8- We were busy.  
Estuvimos ocupados.
- 9- Those words are convincing.  
Esas palabras son convencedoras.
- 10- The windows are open.  
Las ventanas están abiertas.

As said above, 'have' and 'tener' can appear in the surface when a state is expressed. The sentence pairs

I am hungry	Tengo hambre
She is ten years old	Tiene diez años

will be analyzed each as Vstate + P.

- 19- It had been snowing for three days.  
Había estado nevando durante tres días.
- 20- She writes her letters with the typewriter.  
Ella escribe sus cartas con la máquina de escribir.

When the term 'verboid' was justified, the possibility of surface structures other than verbs was mentioned. One of the most frequent cases of that kind is the surface structure that contains an adjective or a noun together with 'be' in English, or either "ser" or "estar" in Spanish. The nature of those sentences is that of state. Other, similar ones, have instead of 'be' a linking verb, e.g., 'become', 'get', 'remain', etc. in English; "parecer", "volverse", "hacerse", "ponerse", etc., in Spanish. These structures express either state or process. Other surface structures might show forms as 'have' and "tener" for expressing a state of being.

Proposals for the resolution of that problem are several: Fillmore places the adjective, for example, in the verb position, eliminates the surface verbs from the deep structure, and assigns them to the surface structure, only. To Chafe, the adjective is the verboid, but he does not care about realization rules. DiPietro exposes three different models for the adjective. They will be presented in a simplified form:

Fig. 1.3-1

The book is red  
El libro es rojo  
(Vstate + O)

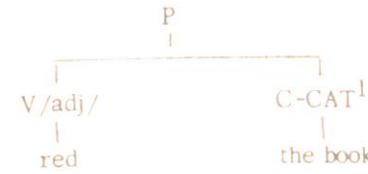
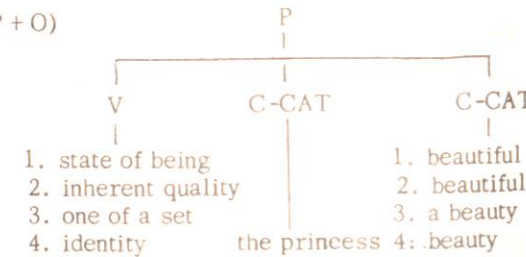


Fig. 1.3-2

The princess is 1- beautiful (está)  
2- beautiful (es)  
3- a beauty  
4- beauty  
(Vstate + P + O)  
/±inherent/



<sup>1</sup>Since DiPietro's labels for C-CAT are partly different from those used here, they have been dropped from the models. The classifications recommended for the present approach appear in the deep structure string between parentheses below the surface sentences.

<sup>2</sup>The verboid/state for a sentence type 2 must carry the feature notation /±inherent/ for the correct selection of the Spanish verb ("ser" vs. "estar")

**Pattern 3.** The verb + noun-object grammatical pattern has a stress pattern of ^', as in *They love birds* and *They are baking apples*. This pattern occasionally contrasts with the compound noun stresses ' ', as you will see in the next exercise.

EXERCISE 48

Restate the following sentences so as to explain the meaning of the word combinations that have stress marks.

1. They are rácing hõrses. \_\_\_\_\_
2. They are rácing hõrses. \_\_\_\_\_
3. Rúnning gréyhounds is his favorite sport. \_\_\_\_\_
4. He raises rúnning grèyhounds. \_\_\_\_\_
5. They are cóoking ápples. \_\_\_\_\_
6. They are cóoking ápples. \_\_\_\_\_
7. Sally has a dríving ambítion: she wants to become a doctor. \_\_\_\_\_
8. Sally has a dríving ambítion: she wants to use the family car as soon as she can get a dríving license. \_\_\_\_\_

We have seen that the stress pattern ^' is used for both a modifier plus a noun and for a verb plus a noun-object. This situation results in ambiguity when we do not know which of the two grammatical patterns is intended by the ^'. For example, in "Flying planes can be dangerous," the first two words can mean either "planes that are flying" or "the act of piloting planes."

EXERCISE 49

State briefly the two meanings of the italicized phrases.

1. She abhors *scratching dogs*. \_\_\_\_\_
2. *Moving books* always disturbed him. \_\_\_\_\_

3. We enjoy *entertaining visitors*. \_\_\_\_\_
4. They are *encouraging reports*. \_\_\_\_\_
5. *Burning oil* frightened him. \_\_\_\_\_

EXERCISE 50

Place stress marks over the words to indicate the verb + noun-object and the compound-noun patterns.

1. *Jump ropes* are used by boxers.
2. They *jump ropes* for exercise.
3. He has to *wash rags* after cleaning his gun.
4. *Washrags* are hard to get.
5. She likes to *map routes* for travel.
6. We never follow *map routes*.
7. The guards *flash lights* into the dark corners.
8. They all carry *flashlights*.
9. We *watch dogs* with great interest during the hunting season.
10. There are three *watchdogs* on their farm.

**Pattern 4.** The verb + adverbial grammatical pattern also has a ^' stress pattern, as in *You must look out* and *The tent had been pushed over*. The compound noun derived from such verb + adverbial combinations has the usual ' ' pattern, as in *The lookout had a long vigil* and *This problem is no pushover*.

EXERCISE 51

Place stress marks over the italicized words to indicate the verb-adverbial and the compound-noun combinations.

1. George is always *cutting up*.
2. He is an inveterate *cutup*.
3. This information is not to be *handed out*.
4. These *handouts* will give you the necessary information.
5. The movie was *held over*.
6. This movie is a *holdover* from last week.
7. She doesn't want to *come down*.
8. What a *comedown* she had.
9. She gave Jack the *comeon*, and he *came on*.

