

Morphology and phonology

Morphology and **phonology** are two **separate** modules of the mental grammar, but morphological information can sometimes be very useful to phonologists.

1. Some basic assumptions about morphology and phonology

Here are some reminders about morphology, phonology, and their relationship.

- We can define a **morpheme** as a **minimal systematic sound-meaning correspondence**: a minimal meaningful unit with a consistent sound shape (subject to systematic sound-shape alternations, such as when a phonological process applies in a particular environment).
- Most morphemes are stored in the mental lexicon with a **single phonological shape** — this is known as the **underlying representation (UR)** of the morpheme.

For example, the English morpheme meaning ‘tree’ has the single UR /tʃi/, which we can see in the morphologically simple form [tʃi], the plural noun /tʃi+z/ [tʃiz] (*trees*), the derived adjective /tʃi+lajk/ [tʃilajk] (*treelike*), etc. (Remember that **/slash brackets/** indicate URs, while **[square brackets]** indicate surface representations (SRs).)

(Exceptions to “one morpheme = one phonological form” do occur, most often with irregular or suppletive morphemes, like *wen-* as the past-tense root(?) of *go*. But in this course, always assume a **single UR** for a single morpheme unless you are specifically instructed otherwise.)

- Additional **morphemes** are added to a form by **morphological rules**, not phonological rules. We know this because morphological rules add semantic information as well as affecting the sound shape of a complex word. **Phonological rules never add meaning.**

For example, when the English noun /tʃi/ *tree* is inflected for plural, the plural morpheme /-z/ is added to the noun /tʃi/, affecting both the sound and the meaning of the now morphologically complex word (*trees*). The addition of the plural morpheme (by a morphological rule) precedes the beginning of the phonological component. In other words, as far as the phonology is concerned, everything starts from the fully assembled UR of the morphologically complex word (/tʃi+z/).

(There are certain morphemes that seem to get added partway through the phonological derivation, and there are interesting theories about how to model such morphemes. But in this course, assume that **morphology precedes phonology** unless you have explicit evidence to the contrary.)

2. Basic morphological analysis

In your Introduction to Language course, you learned how to identify morphemes in a data set by comparing related words to see how phonological shape corresponds to meaning.

For example, in the **Turkish** problem, we can identify the noun plural suffix by comparing the plural forms of all of the nouns to see how they are alike, and by contrasting the plural of each noun with the other forms of that noun to see what is unique to the plural. Doing this reveals that the plural morpheme surfaces as either [-ler] or [-lar].

Our next job is to work out where each form of this morpheme appears — and note that this is indeed just *one* morpheme, and not two! (Be sure you understand why this is.)