

## Morpheme alternations

This handout is a first introduction to the topic of morpheme alternations. Further discussion and examples of the topics presented here will be seen when you read Odden (2005), Ch 4.

### 1. Finding alternating morphemes

Like the Turkish plural suffix, but unlike the English morpheme *tree*, many morphemes appear with **more than one surface shape**. This is also true of the Turkish genitive suffix. Morphemes like this are said to **alternate**.

When you find alternating morphemes, this is evidence that a **phonological process is applying** in the language. Why? Because, as previously discussed, the UR of a morpheme has one consistent shape. Therefore, if that UR corresponds to more than one surface form (surface representation/SR), something *in the phonology* of the language is responsible for the alternation.

### 2. Developing a phonological analysis for morpheme alternations

If you find that a language has morpheme alternations, your goal is to do the following:

- (a) Propose a **single, consistent UR** for all alternating morphemes.
- (b) Propose a **phonological process or processes** to produce the correct surface form(s) in the appropriate environments.

Note that **the choice you make in (a) affects the processes that you will need to propose in (b)**. Be sure to consider all the relevant hypotheses for (a); deciding which hypothesis is best usually involves comparing the processes you would need to model for (b) under each hypothesis.

Start your phonological analysis of an alternating morpheme by listing the **phonological environments** in which each version of the morpheme is found, and looking for aspects of that environment that **distinguish** the two cases.

Two more points to keep in mind when working with alternating morphemes:

- When you are trying to find the factors that predict which form of the morpheme will appear, always start by looking for **general phonological factors**, not morpheme-specific ones, as explanations for alternating morphemes. Only introduce morpheme-specific factors into your analysis when that is **unavoidable**.
- Remember that phonological processes **affect natural classes** of segments. In practice, each rule in a grammar generally changes a few features when a particular type of segment is found in a particular environment — a single rule doesn't usually change one *sequence* of segments directly into another. So if an alternating morpheme has multiple characteristics that vary (made-up example: [ip]~[ep]~[ib]~[eb]), it is probably being affected by **more than one rule**, with each rule being responsible for one subpart of the alternation. Here, we would propose one vowel height rule and one consonant voicing rule. We wouldn't propose a single rule that changes height features in one segment and voicing features in a different segment all in one step, because that wouldn't be a rule that operates on natural classes of segments.