

PROF. MARCUS KRACHT: LING 20. WINTER 2007.

Assignment C [Week 2] (5 Points per exercise, do 4 out of 5 exercises)

The exercises below may either be solved on the basis of spelling or on the basis of pronunciation (if you happen to know it, of course). Either way is correct.

**Exercise C.1.** Here are some facts about German verbs. From a stem the infinitive is formed by adding a suffix *en*. To the left you find some stems of verbs, and on the right the perfect active stems.

Present	Perfect	
führ	geführt	<i>to lead</i>
ausführ	ausgeführt	<i>to execute</i>
aufführ	aufgeführt	<i>to perform</i>
anführ	angeführt	<i>to cite</i>
sag	gesagt	<i>to say</i>
aussag	ausgesagt	<i>to give evidence</i>
aufsag	aufgesagt	<i>to recite</i>
ansag	angesagt	<i>to announce</i>

In this exercise, try to formulate a hypothesis about the structure of the verbal stems on the left. Form the infinitives of the verbs above.

Answer There are two stems, *führ* and *sag*, and three optional prefixes: *auf*, *aus* and *an*. The infinitives are *führen*, *aufführen*, *ausführen*, *anführen*, *sagen*, *ansagen*, *aufsagen*, *aussagen*.

**Exercise C.2.** (Continuing the previous exercise.) Write a rule that captures the formation (that is, give the morphs and environments) of the perfect active stem (given in the middle column).

Answer The verb *V* is decomposed into prefix (*P*) and stem (*S*). *P* may be empty. The rule is  $V \rightarrow PgeSt$ . (On the basis of this data; the real situation is much more complicated.) So, the morph of the perfect has two parts: *ge* and *t*, which are interleaved with prefix and stem in the way shown.

**Exercise C.3.** Suppose you have a word of the form

PREF<sub>1</sub>-PREF<sub>2</sub>-STEM-SUF<sub>1</sub>-SUF<sub>2</sub>

Draw all structures of this word without annotating word classes. (You may use brackets instead of drawing.)

Answer

(((PREF<sub>1</sub>-(PREF<sub>2</sub>-STEM))-SUF<sub>1</sub>)-SUF<sub>2</sub>)  
 ((PREF<sub>1</sub>-((PREF<sub>2</sub>-STEM)-SUF<sub>1</sub>))-SUF<sub>2</sub>)  
 ((PREF<sub>1</sub>-(PREF<sub>2</sub>-(STEM-SUF<sub>1</sub>)))-SUF<sub>2</sub>)  
 (PREF<sub>1</sub>-(((PREF<sub>2</sub>-STEM)-SUF<sub>1</sub>)-SUF<sub>2</sub>))  
 (PREF<sub>1</sub>-((PREF<sub>2</sub>-(STEM-SUF<sub>1</sub>))-SUF<sub>2</sub>))  
 (PREF<sub>1</sub>-(PREF<sub>2</sub>-((STEM-SUF<sub>1</sub>)-SUF<sub>2</sub>)))

(There is no choice in which way the prefixes are added, nor is there is a choice between the suffixes. Write P for ‘add the next prefix’ and S for ‘add the next suffix’. Then there are six possible sequences of operations: PPSS, PSPS, SPSS, PSSP, SPSP, SSPP.)

**Exercise C.4.** Adjectives of English have three forms. For example, from the adjective *simple* we can form the *comparative simpler* and the *superlative simplest*. For longer adjectives (for example, all words with more than two syllables) the gradation goes *beautiful/more beautiful/most beautiful*. Identify the morphemes for the comparative and superlative. The morpheme for the comparative and superlative has more than one allomorph. Can you find them? Can you find the allomorphs of *good* (which is a stem)?

Answer The comparative has the following allomorphs: *r* (*simple·r*), *er* (*hard·er*), *more* (*more beautiful*). Roughly the distribution is this. The first is used on words with at most two syllables ending in a vowel. The second on words with at most two syllables not ending in a vowel. (The list might be longer if you consider forms such as *redder*, though one would not analyse *matter* this way. If someone come up with these examples, it’s fine. Extra points if they suggest that this is rather a matter of reduplication rather than allomorphy.) The superlative has the allomorphs: *st* (*simple·st*), *est* (*hard·est*), *most* (*most beautiful*). Distribution is the same. On the basis of this we may propose for *good* the allomorphs *bett* and *be* (!).

**Exercise C.5.** Some languages have a case called *inessive*; given a noun N that means X (say *box*) the inessive means *in X* (eg *in (the) box*). The inessive case in Hungarian is formed in the following way (the spelling is pretty much indicative of the pronunciation):

Nominative		Inessive
ház	<i>house</i>	házban
ember	<i>human</i>	emberben
falu	<i>village</i>	faluban
hold	<i>moon</i>	holdban
öböl	<i>bay</i>	öbölben
tükör	<i>mirror</i>	tükörben
sziget	<i>island</i>	szigetben

What are the allomorphs of the inessive? Can you guess what determines the choice of the forms (based on this data)? What do the inessive forms mean (give examples only).

Answer The two forms are **ban** and **ben**. They are suffixed to the stem. The first is added if the word contains the vowels a, o, á, u. Otherwise **ben** is used. (The true facts are a little more complicated.) *holdban* means *in the moon*, *öbölben* *in the bay*.

Another way of putting this (on the basis of pronunciation) is that **e** is used with front vowels, **a** with back vowels; **e** and **i** however count as neutral, they can coexist with either of the two classes without changing the harmony. Neutral vowels alone trigger sometimes **a** sometimes **e**. I have avoided using phonological properties here because the facts actually become difficult to explain on phonological grounds.

Remember: If someone has another, consistent idea, it has to work to be regarded as correct. But if it works for the proposed data, that's enough.