# Morphology

- Ling 105-

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Giuseppina Silvestri
(she/her)

Week 2, Class 1

#### Roadmap for today's class

- 1. Morphology Lab 2 (find material on *BruinLearn*)
- 2. Morphemes and Allomorphs
  - rules of alternation
- 3. Suppletion
- 4. Morphology Lab 3

## Morphology Lab 2: Turkish

# Morphemes and Allomorphs

#### allomorphs

- Complication!
  - morphemes may have different phonological shapes under different circumstances

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For example:
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When a single affix has more than one shape, linguists use the term allomorph

#### allomorphs in Turkish affixes

Turkish first-person possessive suffix: five allomorphs

-im	ev	'house'	ev-im	'my house'
	dil	'language'	dil-im	'my language'
-üm	köy	'village'	köy-üm	'my village'
	gün	'day'	gün-üm	'my day'
-um	yol	'way'	yol-um	'my way'
	tuz	'salt'	tuz-um	'my salt'
-1m	ad	'name'	ad-ım	'my name'
	kız	'girl'	kız-ım	'my daughter'
-m	baba	'father'	baba-m	'my father'

The crucial properties which define the suffixes above as being allomorphs are that they have the **same meaning** and occur in **different environments** in **complementary distribution**.

### phonological allomorphs

- morphemes can be different in shapes
- being phonologically similar is a common property of allomorphs, but is not a necessary one:
  - Allomorphs that have this property are phonological allomorphs.
  - -The formal relation between two (or more) phonological allomorphs is called an **alternation**.

### describing alternations (I)

Formation of plural in some German words:

Tag	[ta:k]	'day'	Tage	[ta:gə]	'days'
Hund	[hunt]	'dog'	Hunde	[hundə]	'dogs'
Los	[lo:s]	'lot'	Lose	[lo:zə]	'lots'

- alternations can be described with a special set of morphophonological rules
- such rules were historically phonetically motivated, but now affect morphology
- as for now, let's think about phonological allomorphy in terms of a **single underlying representation** that is affected by rules under certain conditions.
- The endpoint of our descriptions is what is actually pronounced, i.e. the surface representation.

### describing alternations (I)

Formation of plural in some German words:

```
Tag [ta:k] 'day' Tage [ta:gə] 'days' Hund [hunt] 'dog' Hunde [hundə] 'dogs' Los [lo:s] 'lot' Lose [lo:zə] 'lots'
```

- (a) underlying representations (symbols: //)
- (b) the respective rules in the examples
- (c) application of rule and surface representations (resulting word-forms; symbols [])
- (a)underlying representation /taːg/
- (b) rule: a voiced obstruent becomes voiceless in syllable-final position
- (c) application of rule and surface form:  $/ta:g/ \rightarrow [tag]$

#### describing alternations (II)

Formation of plural in some Russian words:

```
zamok 'castle' zamk-i 'castles'
kamen' 'stone' kamn-i 'stones'
nemec 'German' nemc-y 'Germans'
nogot' 'nail' nogt-i 'nails'
```

Let's describe the above alternation following these steps:

- (a) underlying representations (symbols: //)
- (b) the respective rules in the examples
- (c) application of rule and surface representations (resulting word-forms; symbols [])

#### describing alternations (II)

Formation of plural in some Russian words:

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```

- (a) /zamoki/ 'castle (sg.)'
- (b) /o/ and /e/ in the final stem syllable disappears when the stem is followed by a vowel-initial suffix
- (c) /zamoki/ → [zamki] 'castle (pl.)'

#### describing alternation (III)

- Rule for plural morpheme in English

```
Case 1
```

```
underlying: /kæt-z/
rule: /-z/ → [-s] after voiceless consonants
surface: /kæt-z/ → [kæts]
```

#### ■ Case 2

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- underlying: -/feis-z/
- rule: [ə] is inserted between root ending [s, z, ʃ, ʒ, tʃ, dʒ] and morpheme /z/
- synthetic rule: [s, z, ʃ, ʒ, tʃ, dʒ] + [ə] + /z/
```

- surface: /feis-z/ → [feisəz]

#### allomorphs

- Rule for plural morpheme in English

- Case 3
  - underlying: /dog-z/
  - rule: [ə] is inserted between root ending [s, z, ʃ, ʒ, tʃ, dʒ] and morpheme /z/ (does not apply)
  - surface: /dog-z/ → [dogz]

### allomorphs in roots

- Also roots and stems may have different allomorphs

#### For example:

In English verbs such as <sleep>, <keep>, <deal>, <feel>, <mean>

- the root has the long vowel [i:] in the present-tense forms
- the root has an allomorph with short  $[\epsilon]$  in the past-tense forms:

```
<slept>, <kept>, <dealt>, <felt>, <meant>
```

#### historical motivation of allomorphy

- it is evident that in some cases the historical reason for the existence of the morphophonological rule is for the allomorphy is to facilitate pronunciation
- for instance, if the English plural were uniformly [-z], words such as cats and faces would be almost unpronounceable (try to pronounce [kætz] and [feisz]!)
- We will go back to phonological allomorphs later on!

#### important aspects about allomorphs

- ➤ phonological allomorphs represent a single morpheme whose form varies slightly depending upon the phonological context created by combining morphemes
- it is common to think of the morpheme as the more abstract underlying representation, rather than the more concrete surface word-form
- > the underlying and surface representations may be the same, or they may differ as a result of the application of morphophonological rules.
- however, it is important to remember that the underlying representation is a tool used by linguists, not by speakers
- there are examples where it seems *unlikely* that there is a single underlying representation in the minds of speakers
  - we see this in another type of allomorphy: suppletion

#### Suppletion: what is it?

- morphemes may also have allomorphs that are not at all similar in pronunciation
   These are called suppletive allomorphs.
- for instance, the English adjective 'good' has the suppletive stem 'bett-' in the comparative degree ('better')

Q: what verb paradigms below display suppletive allomorphs?

bake	go	be
I bake	I go	I am
we bake	we go	we are
she bakes	she goes	she is
he baked	he went	he was
they baked	they went	they were
have baked	have gone	have been

### Suppletion: more examples

#### Italian

verb prese	'go' ent indicat	ive	adjective 'good'
	vado	'I go"	positive grade 'buono' (MSG)
2	vai	'you go'	
3	va	's/he/it goes	comparative grade 'migliore' (M/F SG)
PL 1	andiamo	'we go'	
2	andate	'you go'	superlative grade 'ottimo' (FSG)
3	vanno	'they go'	

#### Suppletion: definition

a kind of allomorphy in which two allomorphs of the same morpheme are not similar in pronunciation

there are two subtypes of suppletion:

- 1. strong suppletion
- 2. weak suppletion

#### Morphology Lab 3: Turkish

- If we looked at the Turkish data, the primary finding was that the morphemes could be arranged in a linear order, which could be expressed as five slots.
- In a long word like *ellerimizde* 'in our hands', all five slots get filled.
- In an *agglutinating* language like Turkish, every slot is filled with a morpheme.
- > By observing the word *ellerimizde* (and/or the other two words on row 36), can you tell me what the order of the morphemes is?

(answer on the next slide: don't look!)

#### Morphology Lab 3

• If we looked at the Turkish data, the primary finding was that the morphemes could be arranged in a linear order, which could be expressed as five slots. In a long word like *ellerimizde* 'in our hands', all five slots get filled

#### ellerimizde

Stem	Plural	Possessor Person	Possessor Number	Case
<i>el</i>	<i>-ler</i>	- <i>im</i>	- <i>iz</i>	<i>de</i>
hand	plural	1 st	plur. poss.	locative

Stem	Plural	Possessor Person	Possessor Number	Case
el 'hand' ev 'house' zil 'bell'	-ler	-im 1st -in 2nd	-iz plural	<ul> <li>mominative</li> <li>accusative</li> <li>dative</li> <li>locative</li> </ul>

# I will see you on next Thursday (4/13): what can we do in the meanwhile?

review the lecture slides

do reading from the textbook

take a look at Assignment 1

**STAY SAFE**