# **More Morphology**

**Problem Set #1** is up: it's due next **Thursday** (1/19)

fieldwork component:

Figure out how negation is expressed in your language.

| Image of martian removed for copyright reasons. |  |  |  |
|---|--|--|--|
| Martian fieldwork notes                         |  |  |  |

• (feel free to make up your own transcription system)

(popular Martian name)

X!oo

## X!oo kuulduud bii

'X!oo is a linguist'

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# **Martian fieldwork notes**

## X!oo kuulduud bii

- 'What's the word for "linguist"?'
- 'How do you say "X!oo is a physicist"?'

'X!oo is a linguist'

#### X!oo kuulduud bii

X!oo linguist is 'X!oo is a linguist'

- 'What's the word for "linguist"?'
- 'How do you say "X!oo is a physicist"?'

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## **Martian fieldwork notes**

## X!oo kuulduud bii

X!oo linguist is 'X!oo is a linguist'

# X!oo amsterdam digdug

X!oo canal dug 'X!oo dug a canal'

# X!oo amsterdam gudgid

X!oo canal is-digging 'X!oo is digging a canal'

#### X!oo kuulduud bii

X!oo linguist is 'X!oo is a linguist'

## X!oo amsterdam digdug

X!oo canal dug 'X!oo dug a canal'

#### X!oo amsterdam gudgid

X!oo canal is-digging 'X!oo is digging a canal'

#### X!oo kuulduud noowee

X!oo linguist NEG-is 'X!oo isn't a linguist'

## X!oo amsterdam digwedug

X!oo canal NEG-dug 'X!oo didn't dig a canal'

#### X!oo amsterdam gudwegid

X!oo canal NEG-is-digging 'Xoo isn't digging a canal'

#### **Martian fieldwork notes**

# hypotheses:

• negative of 'is' is irregular (**bii** > **noowee**)

• regular negation is an infix -we-

...after the first syllable? ...before the last syllable? ....??

#### X!oo kuulduud noowee

X!oo linguist NEG-is 'X!oo isn't a linguist'

## X!oo amsterdam digwedug

X!oo canal NEG-dug 'X!oo didn't dig a canal'

## X!oo amsterdam gudwegid

X!oo canal NEG-is-digging 'Xoo isn't digging a canal'

## X!oo yodeleehihuu

X!oo is-singing 'X!oo is singing'

# X!oo roovaa munchmunchyum

X!oo spacecraft destroyed 'X!oo destroyed a spacecraft'

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## **Martian fieldwork notes**

X!oo yodeleehihuuX!oo yowedeleehihuuX!oo is-singingX!oo NEG-is-singing'X!oo is singing''X!oo isn't singing'

X!oo yodeleehihuu
X!oo is-singing
X!oo NEG-is-singing
'X!oo is singing'
'X!oo isn't singing'

X!oo roovaa munchmunchyum X!oo roovaa munchwemunchyum X!oo spacecraft destroyed 'X!oo destroyed a spacecraft' 'X!oo didn't destroy a spacecraft'

Negative morpheme -we- apparently infixed after first syllable of verb.

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#### **More on fieldwork**

- Make sure your consultant knows what you're interested in: "how people really speak", not necessarily "proper language".
- Start with simple, culturally appropriate sentences.
- Don't assume that you're getting what you're asking for.
- Be organized.
- Be nice!

# returning to our previous discussion...

- prefixes
- suffixes
- infixes
- templatic morphology

**Tone**: Buli

nàgí wà 'I hit him'wà nàgì mù 'he hit me'

....etc., etc.....

lexicon contains morphemes, with information on:

- sound
- meaning
- bound vs. free
- prefix vs. suffix (vs. infix...)

•••

industri-al -al attaches to a ... nation-al autumn-al

industri-al -ation creates ...
\*industrializ-al
industrializ-ation-al

<sup>\*</sup>assert-al

<sup>\*</sup>impress-al

<sup>\*</sup>industrializ-al

lexicon contains **morphemes**, with information on:

- sound
- meaning
- bound vs. free
- prefix vs. suffix
- what kind of morpheme they can attach to
- what kind of category they create

In fact, sometimes the information about what a morpheme can attach to isn't just information about categories:

| sincere | -ity |
|---------|------|
| chaste  | -ity |
| scarce  | -ity |
| curious | -ity |
| deep    | -th  |
| wide    | -th  |
| warm    | -th  |

And there can be idiosyncratic information about what happens when the morphemes combine, too:

electri[k]-al
electri[s]-ity

hum humm-ed leap [lep]-t go [wen]-t sing sang

-i[k] and -i[s],leap and [lep]-[d] and -[t]

are <u>allomorphs</u>; different forms that a single morpheme takes in combination with other morphemes.

# **Allomorphy: Polish plurals**

jezyk 'language' jezyki 'languages' garnek 'pot' garneki 'pots' soki 'juices' wuk 'bow' wuki 'bows'

# **Allomorphy: Polish plurals**

jezyk 'language' jezyki 'languages' garnek 'pot' garneki 'pots' soki 'juices' wuk 'bow' wuki 'bows'

brzek 'bank of a river' brzegi 'banks of a river'

dwuk 'debt' dwugi 'debts'

wuk 'lye' wugi '(kinds of) lye'

# **Allomorphy: Polish plurals**

jezy**k** 'language' jezy**k**i 'languages' garne**k**i 'pots' garne**k**i 'pots' so**k**i 'juices' wu**k** 'bow' wu**k**i 'bows'

brzek 'bank of a river' brzegi 'banks of a river'

 $dwu\underline{\mathbf{k}}$  'debt'  $dwu\mathbf{g}i$  'debts'

wu**<u>k</u>** 'lye' wu**g**i '(kinds of) lye'

## **Allomorphy: Polish plurals**

jezy<u>k</u> 'language' jezy<u>k</u>i 'languages' garne<u>k</u>i 'pots' garne<u>k</u>i 'pots' so<u>k</u>i 'juices' wuk 'bow' wuki 'bows'

brzek 'bank of a river' brzegi 'banks of a river'

dwu**k** 'debt' dwu**g**i 'debts'

wu**k** 'lye' wu**g**i '(kinds of) lye'

wuk 'bow' and wuk 'lye' are a minimal pair.

-->we'll never be able to predict which k's change to g's in the plural....

# **Allomorphy: Polish plurals**

| jezy <b>k</b> 'language' | jezy <u>k</u> i 'languages' | jezy <u>k</u>  |
|--------------------------|-----------------------------|----------------|
| garne <b>k</b> 'pot'     | garne <u>k</u> i 'pots'     | garne <u>k</u> |
| sok 'juice'              | so <u>k</u> i 'juices'      | so <u>k</u>    |
| wu <u>k</u> 'bow'        | wu <u>k</u> i 'bows'        | wu <u>k</u>    |
| brzek 'bank of a river'  | brzegi 'banks of a river'   | brzeg          |
| dwu <u>k</u> 'debt'      | dwu <b>g</b> i 'debts'      | dwug           |
| wu <u>k</u> 'lye'        | wugi '(kinds of) lye'       | wug            |

plus a <u>rule</u>:  $\mathbf{g}$  changes to  $\mathbf{\underline{k}}$  at the end of a word.

# **Word structure**

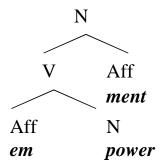
What does *-ment* attach to? What's the resulting category? government, treatment...
\*bodyment, powerment...

How about *em-*? **em**body, **em**power...

So why is there this contrast?

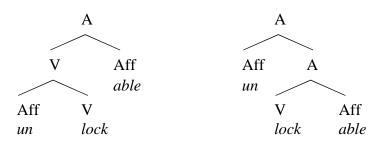
\*bodyment, powerment...

embodiment, empowerment...



em: 'sister' is an N, 'mother' is a V
ment: 'sister' is a V, 'mother' is an N

- industrialization
- re-industrialization
- unlockable



'able to be unlocked' 'impossible to lock'

#### morphemes:

- -able: takes a V, yields an A meaning 'possible to V' (readable, understandable)
- un-#1: takes a V, yields a V meaning 'reverse the effects of V' (untie, unwrap)
- *un-* #2: takes an A, yields an A meaning 'not A' (*unlikely*, *unhappy*)
- $\bullet \;\; lock: \;\; here, \; a \;\; V \; (\text{though there is also an N 'lock'}. \;\; \text{Is one of these derived from the other, via an unpronounced affix?})$

Most of our discussion of morphology has been about language-specific properties:

- a morpheme with a given meaning may be pronounced differently in different languages (Saussure)
  - a morpheme may be a prefix, a suffix, an infix...

English Lardil Tagalog danced yuud-luuli sumayaw

• a morpheme may be bound or free...

English Turkish
in my hand el -im -de
hand my in

English Mohawk

I bought a bed Wa'- ke- nakta-hnínu-'

PAST 1sgS bed buy PUNCT

In fact, languages are sometimes informally classified by how likely their morphemes are to be bound.

#### **Isolating** languages; not many bound morphemes

Chinese
Tā chī fàn le
he eat meal PAST

'He ate the meal'

#### **Polysynthetic** languages; opposite of isolating

#### Wampanoag

nu-pâhk-nuhtô-peepeenaw-uchuchôhq-ôkan-uhtyâ -eenun -eum -unôn-ak 1 clear skill look reflection device make person POSS 1PL AN.PL 'our very skillful mirror makers'

## **<u>Agglutinative</u>** languages; morphemes easily separable from each other

Turkish

tani -sh -tir -il -di -lar know each-other cause passive past 3PL 'They are introduced to each other'

#### Fusional/inflectional languages; morphemes tend to squash together

Russian

komnat -u

room Feminine.Singular.Accusative

komnat -y

room Feminine.Plural.Accusative

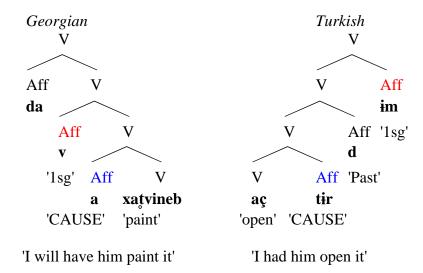
brat -a

brother Masculine. Animate. Singular. Accusative

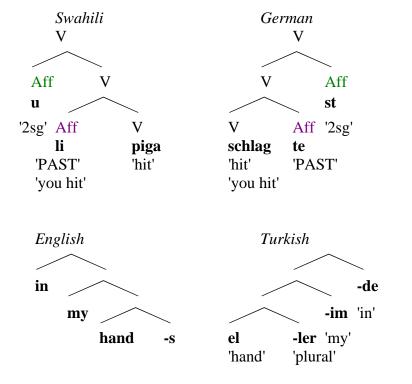
So we've seen that there's a lot that's language-specific. Is anything universal?

why, yes:

<u>inflectional</u> morphology (agreement, tense, etc.) is always 'higher' <u>derivational</u> morphology (category-changing, causative...)



similar universals for other kinds of morphemes:



• these trees have something in common; if A is higher than B in one tree, the same A is higher than B in the corresponding tree in a different language (where 'higher' means 'the mother of A has B as a daughter, or as the daughter of a daughter, repeating generations as necessary'). This is true, for instance, of the morphemes meaning 'in' and 'my' in English and Turkish, even though the morphemes are bound, and suffixal, in Turkish, while they are free, and precede their sisters, in English. If we look at these words in the way that we've been arguing that we should, then, we do see universals, despite the apparent variation between languages.

Of course, there are still questions: why do these particular morphemes have to be higher than these other morphemes? We're going to have to put that question aside, for now...