

LINGUIST 168 Introduction to Linguistic Typology

LECTURE 10: PHONOLOGICAL TYPOLOGY, CONT.
MORPHOLOGICAL TYPOLOGY

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For Monday (5/3)

- Reading:
 - › Velupillai (2012), Ch.7.2 (pp.181-188)
 - › Whaley, Lindsay J. (1997) Introduction to Typology : The Unity and Diversity of Language. SAGE Publications. **(Chapter 8)**
- Discussion post:
 - › as usual (one interesting thing + one question) **or**
 - › identify a point of disagreement between Whaley (1997) and Velupillai (2012)
- Homework 5

Plan for today

- phonological typology: stress
- morphological typology
 - › discussion questions
 - › object of study
 - › dimensions of cross-linguistic variation

Prosodic typology

- subfield of phonological typology
- establishes generalizations in the domain of prosodic structure:

› **stress:** whether syllables vary in loudness or acoustic prominence

› **tone:** the role of changes in vocal pitch

Stress

- = prominence of particular syllable
- depending on language, is a combination of acoustic and perceptual properties
 - › increased duration
 - › higher pitch
 - › increased intensity / loudness

English: *contrast*

noun

['kɑn.træst]

verb

[kən.'træst]

Russian

'right (sg)'

['pra.və]

'rights (pl)'

[prʌ.'va]

Fixed stress languages

- predetermined location (counted from left or right edge of word)

Polish: always on penultimate syllable

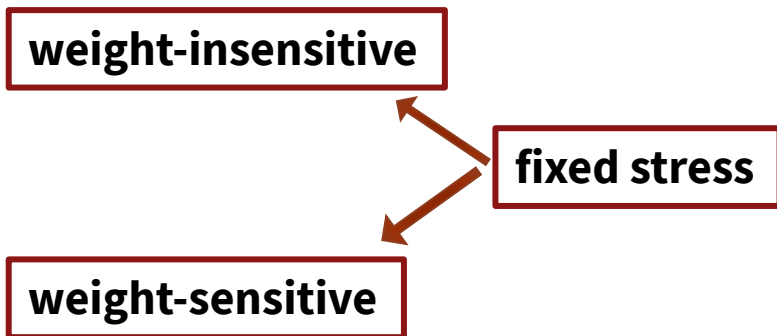
CVCVCVCV

- internal structure of syllables

French: on final syllable unless it contains /ə/

paradis /pa.ra.'di/ 'paradise'

dextre /'dɛks.tɾə/ 'right'



Unpredictable stress languages

- stress is lexically and/or morphologically determined

Russian: /mu.'ka/ 'flour' ~ /'mu.ka/ 'torture'

contrastive stress

- no stress

(many languages with tone)

What kind of language is English? (poll)

(slide intentionally left blank)

English

- contrastive stress

'con.vict *n.*

con.'vict *v.*

'pro.duce *n.*

pro.'duce *v.*

'de.sert *n.*

de.'sert *v.*

'ob.ject *n.*

ob.'ject *v.*

Fixed stress systems

σ = syllable

- calculated from the edge of a prosodic domain (\approx word)

- from the beginning (left edge): (counting from left edge)

- › first syllable

$\sigma_1\sigma_2\sigma_3\sigma_4$

- › second syllable

$\sigma_1\sigma_2\sigma_3\sigma_4$

- from the end (right edge):

(counting from right edge)

- › last syllable

$\sigma_4\sigma_3\sigma_2\sigma_1$

- › penultimate (second to last) syllable

$\sigma_4\sigma_3\sigma_2\sigma_1$

- › antepenultimate (third to last) syllable

$\sigma_4\sigma_3\sigma_2\sigma_1$

Fixed stress example

Macedonian (Slavic < Indo-European):

stress on antepenultimate (third-to-last) syllable

$\sigma_4 \sigma_3 \sigma_2 \sigma_1$

$\sigma_3 \quad \sigma_2 \quad \sigma_1$

vode**ni**tjar ‘miller (sg)’

vo. **de.** ni. tjar

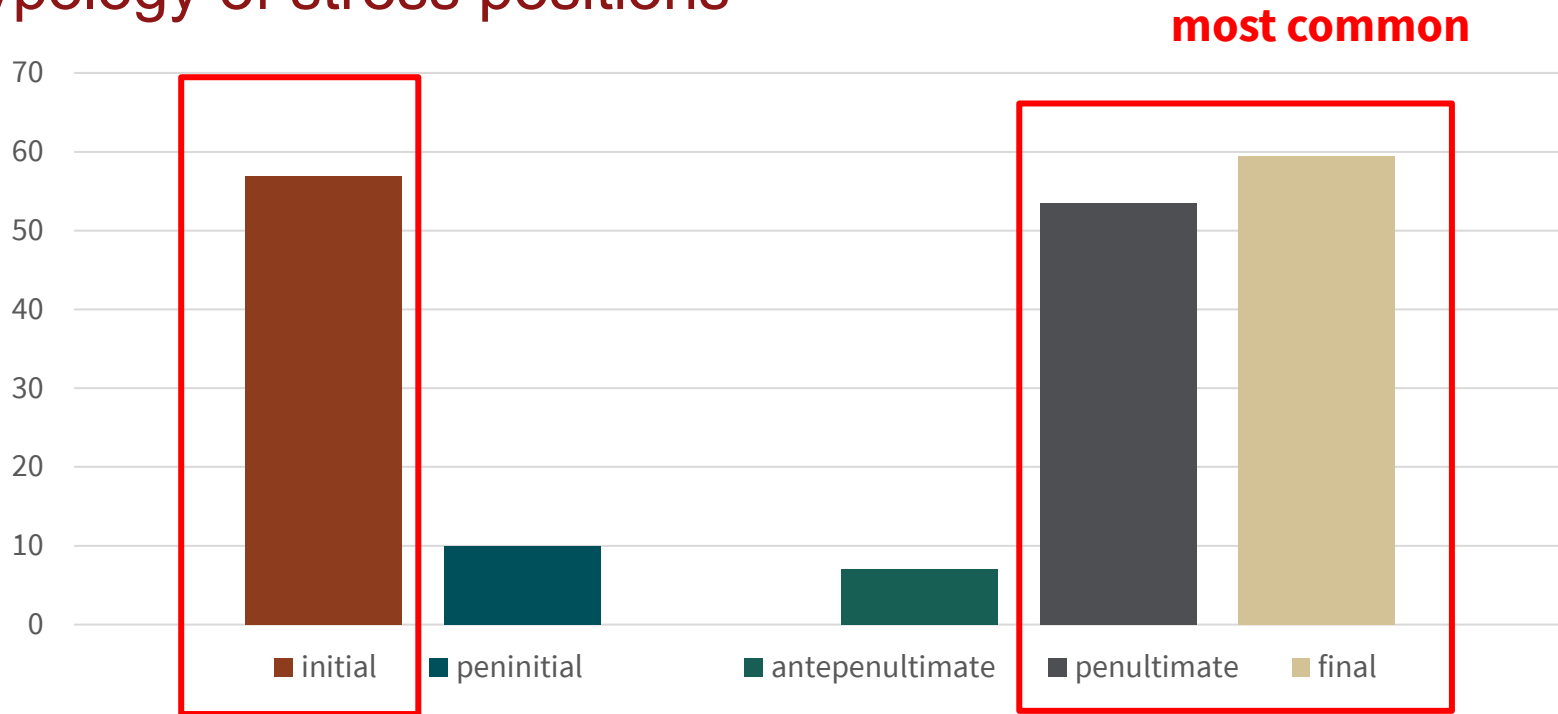
vode**ni**tjari ‘millers (pl)’

vo. de. **ni.** tja. ri

vode**ni**tja**ri**te ‘the millers (pl)’

vo. de. ni. **tja.** ri. te

Typology of stress positions



Gordon, Matthew (2016) Phonological typology. OUP.
<https://searchworks.stanford.edu/view/11716369>

Weight-sensitive fixed stress

- Stress placement is determined by combination of:
 1. distance from the left or right edge
 2. weight of the syllable

Syllable weight

- light syllables:
 - › short vowel
 - › (usually) no coda
 - › (C)V
- heavy syllables:
 - › long vowel or diphthong and/or
 - › coda
 - › (C)VV
 - › (C)VC
 - › (C)VVC

parade

/pə. 'reɪd/

CV CVVC

light heavy

stationary

/'steɪ. ʃə. nə. ɹi/

CVV CV CV CV

heavy light

Weight-sensitive fixed stress

- Stress placement is determined by combination of:
 1. distance from the left or right edge
 2. weight of the syllable
- ~38% of 500 language sample have weight-sensitive stress
<https://wals.info/chapter/15>
- ~26% have weight-sensitive fixed (positionally determined) stress

Weight-sensitive stress placement in Aguacatec

In Aguacatec (Mayan):

- syllables with long vowels are heavy
- stress falls on final syllable, unless the penultimate syllable is heavy
- a heavy penultimate syllable attracts stress

Stress on final syllable:

ʔal. 'k'om	'thief'
wu. 'qan	'my foot'
pu. 'hul	'one who unties'

Stress on heavy penultimate syllable:

'mi:tu?	'cat'
'ʔe:q'um	'carrier'
'ʔa:ts'um	'salt'

Gordon, Matthew (2016) Phonological typology. OUP.

<https://searchworks.stanford.edu/view/11716369>

Activity

In Turkish Kabardian:

- a syllable is heavy if it contains a long vowel (CVV) or a coda consonant (CVC)
- stress is assigned to the final syllable if it is heavy
- and to the penultimate syllable otherwise

Which syllable should be marked as stressed in the following words?

sə.bən 'soap'

sa:.bi: 'baby'

?ə.da:.q'ə
'rooster'

pa:.sə 'early'

təp.ʃəg 'plate'

na:.nu: 'kid'

χər.zə.nə 'good'

mə.ʃə 'bear'

sa:.bə 'early'

Typology of stress: summary

- the majority of languages have **fixed stress**, weight-sensitive or weight-insensitive
- the position of fixed stress is determined relative to the right or left edge
- the most common positions are **initial, final, and penultimate**
- English has **contrastive stress**: it is not fully predictable, and stress functions to distinguish meaning between words

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Discussion questions

- reduplication – TBD
- individual morphological processes vs. languages as a whole
- correlation between morphology and word order
- correlation between phoneme inventory and morphology

calculating complexity

- fusion, exponence and other terminology

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Morphological typology: object of study

- Morpheme: the smallest meaningful unit of language

destabilized

de- 'reverse the effect of something'

stable (root)

-ize 'give something this property'

-ed 'past tense'

**meaningful
elements**

d st ab z



units of language?

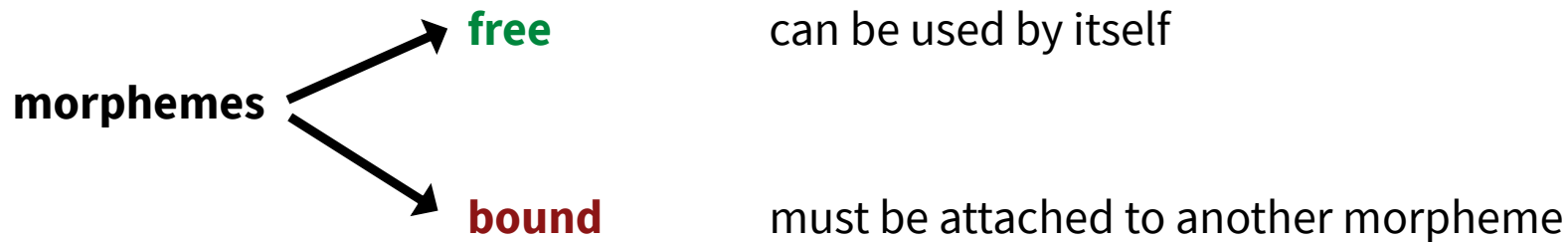


meaningful?

x

→ not morphemes

Types of morphemes



	AFFIXES	ROOT	AFFIXES
ducks		duck	s
smallest		small	est
increase	in	crease	

Bound morphemes

incompletenesses



derivational

significantly changes meaning

complete → **incomplete**

changes part-of-speech

incomplete (adjective) → **incompleteness** (noun)

inflectional

adds grammatical information

incompleteness (singular) → **incompletenesses** (plural)

*inflectional suffixes are sometimes called **endings**

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Dimensions of morphological typology

Bound morphemes:

- What types of bound morphemes?

prefixingsuffixing infixing suprafixing introfixing

- How much allomorphy (different forms of same morpheme)?

flexive ←————→ **nonflexive**

a lot of allomorphy

no allomorphy