

# (Non-)concatenative Morphology

Jochen Trommer

`jtrommer@uni-leipzig.de`

University of Leipzig  
Department of Linguistics

Concatenative Approaches to  
Nonconcatenative Morphology  
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# An Ideal World

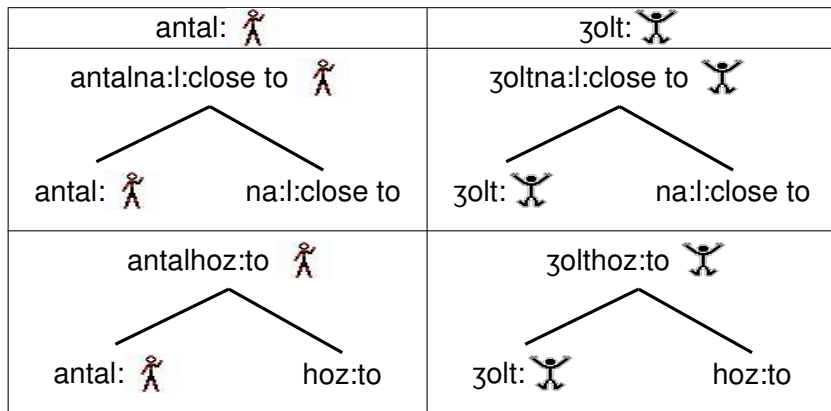
Morphology consists of

Concatenation

+

Alternation

# Concatenation

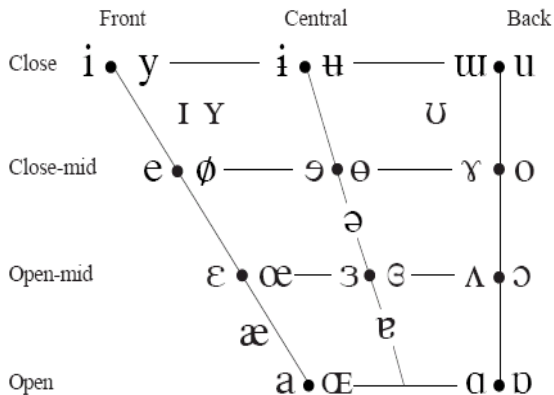


# Alternation

antal- <b>na:l</b>	‘to Antal’	pe:ter- <b>ne:l</b>	‘to Péter’
zolt- <b>na:l</b>	‘to Zsolt’	imi- <b>ne:l</b>	‘to Imi’
borba:la- <b>na:l</b>	‘to Borbála’	erzi- <b>ne:l</b>	‘to Erzsí’
antal- <b>hoz</b>	‘to Antal’	pe:ter- <b>hez</b>	‘to Péter’
zolt- <b>hoz</b>	‘to Zsolt’	imi- <b>hez</b>	‘to Imi’
borba:la- <b>hoz</b>	‘to Borbála’	erzi- <b>hez</b>	‘to Erzsí’

# Articulation of Vowels

## VOWELS



# Alternation

antal- <b>na:l</b>	'to Antal'	pe:ter- <b>ne:l</b>	'to Péter'
zsolt- <b>na:l</b>	'to Zsolt'	imi- <b>ne:l</b>	'to Imi'
borba:la- <b>na:l</b>	'to Borbála'	erzi- <b>ne:l</b>	'to Erzsí'
antal- <b>hoz</b>	'to Antal'	pe:ter- <b>hez</b>	'to Péter'
zsolt- <b>hoz</b>	'to Zsolt'	imi- <b>hez</b>	'to Imi'
borba:la- <b>hoz</b>	'to Borbála'	erzi- <b>hez</b>	'to Erzsí'

Back vowels get front vowels after front vowels

# Concatenation + Alternation

	antal na:l	imi na:l
<b>Concatenation</b>	antalna:l	imina:l
<b>Alternation</b>	antalna:l	imine:l

# German Noun Inflection

Rat	[Ra:t]	'advice'	Rat+es	[Ra:t+əs]	'advice (gen.)'
Stück	[ʃtyk]	'piece'	Stück+es	[ʃtyk+əs]	'piece' (gen.)

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Rad	[Ra:t]	'wheel'	Rades	[Ra:d+əs]	'wheel' (gen.)
Tag	[ta:k]	'day'	Tages	[ta:g+əs]	'day' (gen.)

Voiced stops get voiceless at the end of a word



# German Noun Inflection: Concatenation + Alternation

## Affixation

	Ra: <b>d</b> əS	Ra: <b>t</b> əS
<b>Concatenation</b>	Ra: <b>d</b> əS	Ra: <b>t</b> əS
<b>Alternation</b>	—	—

## No Affixation

	Ra: <b>d</b>	Ra: <b>t</b>
<b>Alternation</b>	Ra: <b>t</b>	Ra: <b>t</b>

# An Ideal World

Morphology consists of

Concatenation

+

Alternation

# An Ideal World

Morphology consists of

Syntax

+

Phonology

# Phonological Suppletion: Zuni

**Monosyllabic Stems:** → **-ʔleʔ**

**Polysyllabic Stems:** → **-nne**

ʔí-ʔleʔ “sinew”

ʃí-ʔleʔ “piece of meat”

hóma-**nne** “juniper leaf”

téna-**nne** “song”

# Infixation: Ulwa

**'N'**

**'his/her N'**

su:lu  
asna

su:**-ka**-lu  
as**-ka**-na

'dog'  
'clothes'

kululuk  
ana:la:ka  
karasmak

kulu**-ka**-luk  
ana:**-ka**-la:ka  
karas**-ka**-mak

'woodpecker'  
'chin'  
'knee'

# Infixation: Ulwa

su:lu	'dog'
su: <b>-ki</b> -lu	'my dog'
su: <b>-ma</b> -lu	'thy dog'
su: <b>-ka</b> -lu	'his/her dog'
su: <b>-ni</b> -lu	'our (incl.) dog'
su: <b>-kina</b> -lu	'our (excl.) dog'
su: <b>-mana</b> -lu	'your dog'
su: <b>-kana</b> -lu	'their dog'

# Arabic Root- & Pattern- Morphology

	'write'		'wug'	
	Perfective Active	Perfective Passive	Perfective Active	Perfective Passive
<b>X</b>	k <b>ab</b>	k <b>ut</b> ib	l <b>ag</b> at	l <b>ug</b> it
<b>cause to X</b>	k <b>at</b> ab	k <b>ut</b> tib	l <b>ag</b> gat	l <b>ug</b> git
<b>X each other</b>	k <b>aa</b> tab	k <b>uu</b> tib	l <b>aa</b> gat	l <b>uu</b> git

# Reduplication: Warlpiri

<b>singular</b>	<b>plural</b>	
kurdu	<b>kurdu</b> -kurdu	'child'
kamina	<b>kamina</b> -kamina	'girl'
mardukuja	<b>mardukuja</b> -mardukuja	'woman'



# Truncating Reduplication: Tohono O'odham

ʔum	<b>ʔu</b> -um	'a thigh'
hon	<b>ho</b> -hon	'the body'
bawi	<b>ba</b> -bawi	'the tepary bean (dist.)'
podoni	<b>po</b> -podoni	'to thump'

# Truncation: Spanish Hypocoristic Formation

Isabél	→	Í.sa
Federíco	→	Fé.de
Gertrúdis	→	Gér.tru

(Roca & Feliu, 2003:188)

# Consonant Mutation in Fula (Paradis, 1992)

	'healthy'	'alive'	'stunted'	'small'	'white'
<b>Class 2</b>	jam <b>be</b>	jeetu <b>be</b>	wuddu <b>be</b>	famar <b>be</b>	ranne <b>be</b>
<b>Class 1</b>	jam <b>o</b>	geet <b>o</b>	gudd <b>o</b>	pamar <b>o</b>	dannej <b>o</b>
<b>Class 6</b>	ɲjam <b>on</b>	ɲgeet <b>on</b>	ɲgudd <b>on</b>	mbamar <b>on</b>	ndanne <b>on</b>

# The Research Program

Reduce all problematic patterns to concatenation + alternation

# Theories Introduced in this Course

- ▶ Autosegmental Morphology
- ▶ Prosodic Morphology
- ▶ Optimality Theory

# Phenomena Discussed in this Course

Everything discussed above

except mutation

(last week's course)