

Variability of Languages in Time and Space

Lecture 4

Variability in Morphology - 1

- Linguistic signs
- Grammatical meaning
- Structural typology
 - Parameters of variation
 - Types of morphology: agglutinating, fusional, isolating, polysynthetic
- Linguistic quiz

Anja Nedoluzhko

do not have their own meaning

speech sounds

p	b					t	d
m		ŋ				n	
ʙ						r	
		v				r	
ɸ	β	f	v	θ	ð	s	z
						ʃ	ʒ

phonemes

g, r, e, m, n, b.....

syllables

pro+fon.do
dic.ti.o.na.ry

morphemes

child + ish + ness

help + less

un + gentle + man + li + ness

lexemes (words)

understand

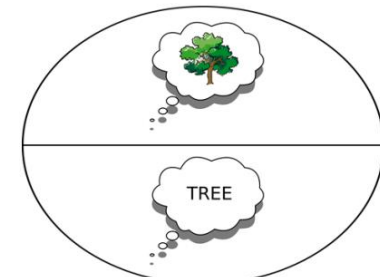
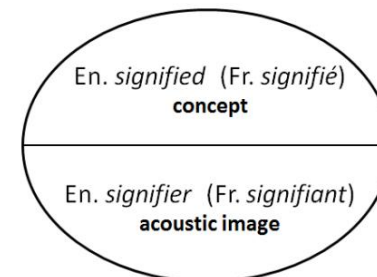
woman

selection

have their own meaning

Linguistic signs

- The term **linguistic sign** is used for pairing of a particular sound sequence (form) and a particular meaning
- A linguistic sign is composed of two elements:
 - signified* (= the **concept** associated with the acoustic image = **meaning**)
 - signifier* (= **acoustic image** of the word = **form**)



Basic features of linguistic signs

- **arbitrariness**
 - the relation between the signifier and signified is not motivated, given by convention
- **linearity** of the signifier (form)
 - in time for spoken texts
 - in space for written texts

morphemes

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help + less

un + gentle + man + li + ness

lexemes (words)

understand

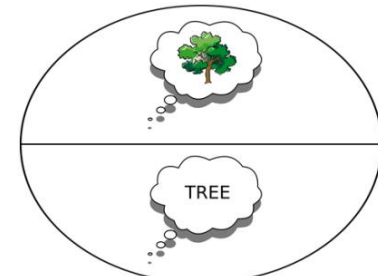
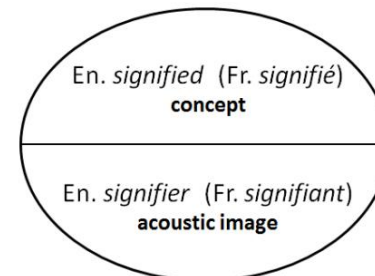
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Typology in Morphology

- Structural typology
 - How **grammatical meanings** are built in languages
- Typology of grammatical categories and meanings
 - Which **grammatical meanings** are possible
 - Which realizations they have in different languages
- Morphological typology receives relatively little attention
 - Of all the aspects of language, morphology is the most language-specific → least generalizable
 - Word classes are language-specific
 - Even the very presence of a meaningful morphological component is language-specific

Grammatical Meaning

Grammatical meaning

vs.

Component of meaning repeating in individual forms of different words

1. Regularly applied to different words

girls, tables, noses, computers – grammatical meaning of **plurality**

2. Does not change the basic lexical meaning

girl – girls



table - tables



Lexical meaning

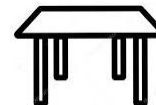
Basic meaning of the word which is listed in the dictionary

- individual meaning of the word

girl



table



nose



computer



Structural Typology

- How grammatical meanings are built in languages
- Approach to structural typology
 - Holistic approach: global characterization of the entire language according to a small number of typological characteristics
 - too ambitious
 - Partial typology:
 - moving away from classifying languages into ideal types
 - specific phenomena or individual grammatical constructions are studied
- Distribution of structures in the world
 - What's where why?
 - How are the facts interconnected?

Parameters of Variation

- Stems and Affixes
 - What combinations of stems and affixes are possible in a language?
- Separatist vs. cumulative affixes
 - Does an affix has one or more meaning at the same time?
- The form of morphemes
 - Segmental morpheme (different types), operations (e.g. reduplication), suprasegmentals – see plural notation in different languages:

Reduplication

Indonesian

rumah	<i>house</i>	rumah-rumah	<i>houses</i>
perubahan	<i>change</i>	perubahan-perubahan	<i>changes</i>

Special word

Hawaiian

'elua	a'u	mau	i'a
<i>two</i>	<i>my</i>	<i>pl</i>	<i>fish</i>
<i>my two fishes</i>			

Tones

ngiti (Sudan)

kamà	<i>chief</i>	kámá	<i>chiefs</i>
màlàyikà	<i>angel</i>	màlàyíká	<i>angels</i>
màlimò	<i>teacher</i>	màlímó	<i>teachers</i>

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- Monosemous vs. polysemous affixes

SINGULAR			PLURAL			German	} Monosemous vs. polysemous affixes
	MASC	NEUT	FEM	MASC	FEM		
NOM	der	das	die	die	die	die	
ACC	den	das	die	die	die	die	
GEN	des		der	der	der	der	
DAT	dem		der	den	den	den	

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- Monosemous vs. polysemous affixes
- Invariance vs. variance of affixes
 - Declination classes

Finnish

	'cupboard'	'Matti'	'school'
NOMINATIVE:	<i>kaappi-0</i>	<i>Matti-0</i>	<i>koulu-0</i>
GENITIVE: ('of')	<i>kaapi-n</i>	<i>Mati-n</i>	<i>koulu-n</i>
ELATIVE: ('from')	<i>kaapi-sta</i>	<i>Mati-sta</i>	<i>koulu-sta</i>
ADESSIVE: ('at')	<i>kaapi-lla</i>	<i>Mati-lla</i>	<i>koulu-lla</i>
INESSIVE: ('in')	<i>kaapi-ssa</i>	<i>Mati-ssa</i>	<i>koulu-ssa</i>

	'woman'	'student'	'money'
NOMINATIVE:	<i>žèn-a</i>	<i>student-0</i>	<i>nòvac-0</i>
ACCUSATIVE:	<i>žèn-u</i>	<i>student-a</i>	<i>nòvac-0</i>
GENITIVE:	<i>žèn-e</i>	<i>student-a</i>	<i>nòvc-a</i>
DATIVE:	<i>žèn-i</i>	<i>student-u</i>	<i>nòvc-u</i>
INSTRUMENTAL:	<i>žèn-om</i>	<i>student-om</i>	<i>nòvc-em</i>

Serbo-Croatian

Parameters of Variation

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- Invariance vs. variance of affixes
 - Declination classes
- Overt vs. zero affixes
 - What kind of affixes have overt forms and what kinds are zero?

	SINGULAR	PLURAL
LATIN:	<i>uxor</i> 'wife'	<i>uxor-es</i> 'wives'
SOUTHERN BARASANO:	<i>kahe-a</i> 'eye'	<i>kahe</i> 'eyes'
SWAHILI:	<i>ki-su</i> 'knife'	<i>vi-su</i> 'knives'
MANDARIN:	<i>ren</i> 'man'	<i>ren</i> 'men'

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 - What kind of affixes have overt forms and what kinds are zero?
- The order of morphemes
 - e.g. *stem – deriv – number – case*

Isolating

Agglutinating

Fusional

Polysynthetic

Analytic

Thai

Khǎw nân lɔŋ.

He sit down

'He sat down.'

Synthetic

Turkish

Gít-me-di-m

go-no-PST-pers1

'I didn't go.'

Types of morphology

- Stems and Affixes
 - What combinations of stems and affixes are possible in a language?
- Separatist vs. cumulative affixes
 - Does an affix has one or more meaning at the same time?



Agglutinating morphology

- A word may consist of more than one morpheme, mostly many morphemes
- The boundaries between morphemes in the word are always clear-cut
- One morpheme designates one grammatical meaning
- Just a few exceptions (almost no “irregular” verbs in Japanese, Turkish)

Turkish

	Singular	Plural	<i>adam</i> ‘man’
Nominative	<i>adam</i>	<i>adam-lar</i>	
Accusative	<i>adam-ı</i>	<i>adam-lar-ı</i>	
Genitive	<i>adam-ın</i>	<i>adam-lar-ın</i>	
Dative	<i>adam-a</i>	<i>adam-lar-a</i>	
Locative	<i>adam-da</i>	<i>adam-lar-da</i>	
Ablative	<i>adam-dan</i>	<i>adam-lar-dan</i>	

- Frequent in Turkish, Indonesian, Eskimo, Hungarian, Japanese, Basque, etc.

Isolating

Agglutinating

Fusional

Polysynthetic

Analytical



(flective, inflective)

Fusional morphology

Czech

- no clear-cut boundaries between morphemes
 - alternations
- the expression of different categories within the same word is fused together to give a single unsegmentable morpheme
- restrictions to morpheme combinations
 - affix variance

ruk-a 'hand'

ruc-e 'hand' (N.Pl, Lok&Dat. Sg)

ruč-n-í 'hand' (adj.)

Marie *sp - í*

'Mary'

'sleep' – 3.pers.+SG+present

'*Mary is sleeping.*'

přátel-é

'friends'

politic-i

'politicians'

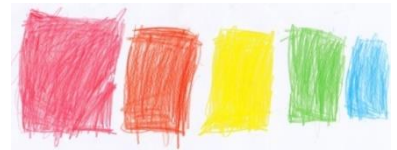
vítěz-ové

'winners'

Nom+Plural

Isolating and Analytical morphology

- Grammatical meanings are expressed with function words
 - One word – one morpheme
- More of isolation → Less of morphology
- Very important word order
- Many compound words



Vietnamese

Khi tôi đến nhà bạn tôi, chúng tôi bắt đầu làm bài.

when I come house friend I plural I begin do lesson

“When I came to my friend’s house, we began to do lessons.”

English?

I am a student

We are students.

You are a student

You are students.

He/she/it is a student

They are students.

EN. The dog of my father is barking.

def.

Gen. poss.

praes. actual

CZ. Tatínkův

farther+poss

pes

dog+NomSg

štěká.

bark+praes.

Polysynthetic morphology



- Lexical morphemes are combined together into a single word
- Words are composed of many morphemes that have independent meaning
- Long "sentence-words"
- High morpheme-to-word ratio
- Morpheme and word boundaries are not clear cut
- Subject may be separated, but the rest stays very close

Isolating

Agglutinating

Fusional

Polysynthetic

Analytical

Polysynthetic morphology



In Paleosiberian Eskimo-Aleut languages:

Chukchi

tameŋəlevtəpəytərkən

tə/meŋə/levtə/pəyt/ərkən
1.SG -'big'-'head'-'ache'-IMPF
'I have a fierce headache'

Yupik

tuntussuqatarniksaitengqiggtuq

'He had not yet said again that he was going to hunt reindeer.'



Greenlandic



Aliikusersuillammassuaanerartassagaluarpaalli.

aliiku-sersu-i-llammas-sua-a-nerar-ta-ssa-galuar-paal-li
entertainment-provide-SEMITRANS-one.good.at-COP-say.that-
REP-FUT-sure.but-3.PL.SUBJ/3SG.OBJ-but

'However, they will say that he is a great entertainer, but ...'

Turkish – Latin – English

Given Turkish word forms and their translations into Latin and English

yazmışım	—	I've probably written
yazmışsın	—	You _{_sg} have probably written
yazmış	—	He has probably written
yazmışsınız	—	You _{_pl} have probably written
yazar	—	(he) writes
yazarlar	—	(they) write

çalışırım	—	laboro
çalışır	—	laborat
çalışırsın	—	laboras
çalışırlar	—	laborant
çalışırsınız	—	laboratis
yazarsın	—	scribis

Translate:

into Turkish: scribo, They have probably written

into Latin: (he) writes, yazarsınız

into English: scribitis, yazmışlar