

# Morphology

- Ling 105-

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(she/her)

Week 5, Class 1

# Roadmap for today's class

1. Morphology Lab 9
2. Inflection and inflectional values/features
3. Derivation and derivational meanings
  - 3.1 Derived nouns
  - 3.2 Derived verbs
  - 3.3 Derived adjectives

# Morphology Lab 9

-Observe the following dataset.

-In this language (Language A) something happen when a type of verb is derived by the adjective.

fikas	‘strong’	fumikas	‘he is becoming strong’
kilad	‘red’	kumilad	‘he is becoming red’
bato	‘strong’	bumato	‘he is becoming stone’
fusul	‘enemy’	fumusul	‘he is becoming an enemy’

- what type of morphological process is involved here?
- what is the Rule you would write?
- which formalism would you use?

TIP: it’s not reduplication!

# Inflection and Derivation

Main reference:  
Chapter 5 of the textbook

INFLECTION → Relevance for Syntax



DERIVATION

# Inflection *vs* Derivation? *OR* Inflection & Derivation?

- Inflection ***vs*** Derivation
  - ⇒ dichotomic approach: complex words can be analyzed based as being the outcome of inflection or the outcome of derivation
- Inflection ***&*** derivation
  - ⇒ continuum approach: morphological patterns are best understood as lying on a continuum ranging from the most clearly inflectional patterns to the most clearly derivational patterns

# Inflection and Inflectional (feature) values

# Inflectional (feature) values

inflectional (feature) values => different inflectional formations

- English verbs express the inflectional values 'present' and 'past'  
-e.g., present (he/she): *walks*, past: (he/she) *walked*
- English pronouns express the inflectional values of...? [Q1 for you]  
-let's work on the pronouns together!-

[Q2 for you] = do English verb express the value 'future'?



# Dimensions of variation of inflectional values

- world's languages vary quite dramatically in the amount of inflectional exponence that their lexical items exhibit:
  - what are examples of languages that have no (or virtually no) inflectional values?
  - what are examples of languages that have a high number of inflection values?
- despite all the diversity, the types of inflectional values that we find across languages are surprisingly uniform

# Common inflectional values and features

Most inflectional values fall into one of these classes :

**Inflectional values** are often naturally grouped together into categories that we will call **inflectional features**

For example:  
SINGULAR is an inflectional value of the FEATURE ‘number’;  
HABITUAL is an inflectional value of the FEATURE ‘aspect’

On nouns, pronouns	On verbs	On adjectives, demonstratives, relative pronouns, adpositions
<b>number</b> (SINGULAR, PLURAL,...)	<b>number</b> (SINGULAR, PLURAL,...)	<b>number</b> (SINGULAR, PLURAL,...)
<b>case</b> (NOMINATIVE, ACCUSATIVE,...)	<b>person</b> (1ST, 2ND, 3RD)	<b>case</b> (NOMINATIVE, ACCUSATIVE,...)
<b>gender</b> (MASCULINE, FEMININE,...)	<b>tense</b> (PRESENT, FUTURE, PAST, ...)	<b>gender</b> (MASCULINE, FEMININE,...)
<b>person</b> (1ST, 2ND, 3RD)	<b>aspect</b> (PERFECTIVE, IMPERFECTIVE, HABITUAL, ...)	<b>person</b> (1ST, 2ND, 3RD)
	<b>mood</b> (INDICATIVE, SUBJUNCTIVE, IMPERATIVE,...)	

# Let's zoom into the main values and features

- **Case**: nominative, accusative, genitive, dative, locative...
- **Number**: singular, plural, dual, paucal
- **Person**: 1st, 2<sup>nd</sup>, 3rd
- **Tense**: present, past, future
- **Aspect**: habitual, progressive, perfective...
- **Gender**: masculine, feminine, neuter...

# More on Case

(1)

*Suppletive forms for English pronouns:*

a. She loves him.

b. He loves her.

c. \*She loves he.

d. \*He loves she.

(2)

*Affixal casemarking:*

a. Der *Hund* *beisst* den *Mann*(German)  
the.MASC.SG.NOM dog bites the.MASC.SG.ACC man

‘the dog bites the man’

b. Den *Hund* *beisst* der *Mann*  
the.MASC.SG.ACC dog bites the.MASC.SG.NOM man

‘the man bites the dog’

# More on Case

(3)

*Adpositional case marking:*

a. *hasan-Ø ol-du* (Turkish)  
hasan-NOM die-PAST

‘Hasan died’

b. *ali-Ø hasan-i ol -dur -du*  
ali-NOM hasan-ACC die-CAUSE-PAST

‘Ali killed Hasan’

c. *mudur-Ø mektub-u imzala-di*  
director-NOM letter-ACC sign-PAST

‘The director signed the letter’

d. *ali-Ø mektub-u hasan-e imzala-t -ti*  
ali-NOM letter-ACC hasan-DAT sign -CAUSE-PAST

‘Ali got Hasan to sign the letter’

# More on Case

## Suprasegmental Case markers

(4)

(Maasai, Nilo-Saharan; Kenya)

- a. *E- t- nyrr-á en-kínè áŋ* (nominative *goat*)  
3SG-PERF-love-PERF FEM.SG-goat\NOM home.ACC  
'The goat has loved home'
- b. *E- t- nyrr-á en-kíné âŋ* accusative *goat*  
3SG-PERF-love-PERF FEM.SG-goat\ACC our  
'he/she has loved our goat'

(5)

Somali (Afro-Asiatic; Somalia)

- a. *libàax* 'absolute'  
b. *libaax* 'subject'  
c. *libááx* 'genitive'



# How many Case values in Finnish?

14!

Finnish (Finno-Ugric, Uralic)

(6)

Name	Affix	Example	Translation
<i>nominative</i>	Ø	<i>talo</i>	‘house’
<i>genitive</i>	<i>-n</i>	<i>talo-n</i>	‘of( )a house’
<i>essive</i>	<i>-na</i>	<i>talo-na</i>	‘as (a) house’
<i>inessive</i>	<i>-ssa</i>	<i>talo-ssa</i>	‘in (a) house’
<i>adessive</i>	<i>-lla</i>	<i>talo-lla</i>	‘at/in (a) house’
<i>abessive</i>	<i>-tta</i>	<i>talo-tta</i>	‘without a house’
<i>partitive</i>	<i>-(t)a</i>	<i>talo-a</i>	‘house’ (as object)
<i>translative</i>	<i>-ksi</i>	<i>talo-ksi</i>	‘to a house’
<i>ellative</i>	<i>-sta</i>	<i>talo-sta</i>	‘from a house’
<i>illative</i>	<i>-an, -en</i>	<i>talo-on</i>	‘into a house’
<i>allative</i>	<i>-lle</i>	<i>talo-lle</i>	‘to (a) house’
<i>ablative</i>	<i>-lta</i>	<i>talo-lta</i>	‘from (a) house’
<i>comitative</i>	<i>-ne-</i>	<i>talo-ne-ni</i>	‘with my house’
<i>instrumental</i>	<i>-n<sup>1</sup></i>	<i>talo-n</i>	‘with (aide of) a house’

# More on Case: morpho-syntactic agreement

- Dependent elements may agree in case with the things that they depend on.
- This is often called concord or morpho-syntactic agreement between the noun and its dependents:

## LATIN

(7)

	Case	'master' (masc)	'mistress' (fem)
Singular	nominative	<i>domin-us</i>	<i>domin-a</i>
	vocative	<i>domin-e</i>	<i>domin-a</i>
	accusative	<i>domin-um</i>	<i>domin-am</i>
	genitive	<i>domin-ī</i>	<i>domin-ae</i>
	dative	<i>domin-ō</i>	<i>domin-ae</i>
	ablative	<i>domin-ō</i>	<i>domin-ā</i>
Plural	nominative	<i>domin-ī</i>	<i>domin-ae</i>
	vocative	<i>domin-ī</i>	<i>domin-ae</i>
	accusative	<i>domin-ōs</i>	<i>domin-ās</i>
	genitive	<i>domin-ōrum</i>	<i>domin-ārum</i>
	dative	<i>domin-īs</i>	<i>domin-īs</i>
	ablative	<i>domin-īs</i>	<i>domin-īs</i>

## GERMAN

- (8)
- Den                      lieben                      Mann  
the.M.SG.ACC    dear.M.SG.ACC    man
- hat die                      Ente gegessen*  
has the.F.SG.NOM    duck    eaten
- 'the duck ate the dear man'
- Die                      Ente    des                      lieben                      Mannes    *hat*  
the.F.SG.NM    duck    the.M.SG.GEN    dear.M.SG.GEN    man    has
- das Telefon    gegessen*  
the    telephone    eaten
- 'the dear man's duck ate the telephone'
- Dem                      lieben                      Mann(e)  
the.M.SG.DAT    dear.M.SG.DAT    man
- habe ich eine                      Ente gegeben*  
have I    a.F.SG.ACC    duck    given
- 'I gave the dear man an duck'



## More on Case:

### Case can interact with other aspects of the syntactic structure

- “Genitive of Negation” Construction (Russian, Polish, Lithuanian)

- (9)
- a. *mam*      *czas*  
have.1SG time.ACC  
‘I have time’
- b. *nie mam*      *czas-u*  
not have.1SG time-GEN  
‘I have no time’

- Case and Modality in Japanese

- (10)
- a. *john-ga*    *nihongo-{o / \*ga}*    *hanas-(r)u*  
John-NOM Japanese-{ACC/ NOM} speak-(r)u  
‘John speaks Japanese’
- b. *john-ga*    *nihongo-{o / ga}*    *hanas-(r)e-ru*  
john-NOM Japanese-{ACC/NOM} speak-can-(r)u  
‘John can speak Japanese’
- c. *john-ni*    *nihongo-{\*o / ga}*    *hanas-(r)e-ru*  
John-DAT Japanese-{ACC/NOM} speak-can-(r)u  
‘John can speak Japanese’

# Passive | Dependent verbs

- Passive: some languages have passive voice inflection, which indicates an unusual association of semantic roles and syntactic functions
- Dependent verb forms: many languages display special verb forms that are confined to dependent clauses
  - verb forms marking relative clauses are called **participles**
  - verb forms marking adverbial clauses are called **converbs**
  - verb forms marking complement clauses are called **infinitives** or **masdars**

# participle | converb | infinitive

- (11) Korean participle  
*Hankwuk-ul pangmwunha-nun salam-i nul-ko iss-ta.*  
Korea-ACC visit-PTCP person-NOM increase-ing be-DECL  
'Those who visit Korea are increasing.'  
(S.-J. Chang 1996: 148)

- (12) Hindi/Urdu converb  
*Banie ke bete ne ciṭṭhii likh-kor ḍaak mẽ ḍaal-ii.*  
grocer POSS son ERG letter(F).SG write-CVB box in put.PST-F.SG  
'The grocer's son wrote and posted a letter.'  
(lit. 'having written a letter, posted (it).')

- (13) Mparntwe Arrernte infinitive  
*Re lhe-tyeke ahentyene-ke.*  
she go-INF want-PST  
'She wanted to go.'

# Derivational meanings

- Derivational meanings are much more diverse than inflectional values.
- Derivational patterns change the **word-class** of the base lexeme:
  - nouns can be derived from verbs
  - adjectives from nouns

## Key terms

- denominal ('derived from a noun')
- deverbal ('derived from a verb')
- deadjectival ('derived from an adjective')

# Derived nouns

*How do we form nouns?*

languages generally have more means for deriving nouns than for deriving verbs and adjectives

<b>I. Deverbal nouns (V → N)</b>				
agent noun <sup>3</sup>	English	<i>drink<sub>V</sub></i>	→	<i>drink-er<sub>N</sub></i>
	Arabic	<i>ḥamala<sub>V</sub></i> 'carry'	→	<i>ḥammaal<sub>N</sub></i> 'carrier'
patient noun	English	<i>invite<sub>V</sub></i>	→	<i>invit-ee<sub>N</sub></i>
instrument noun	Spanish	<i>pica<sub>V</sub></i>	→	<i>pica-dora<sub>N</sub></i>
		'mince'		'meat grinder'
action noun	Russian	<i>otkry-t'<sub>V</sub></i>	→	<i>otkry-tie<sub>N</sub></i>
		'discover'		'discovery'
<b>II. Deadjectival nouns (A → N)</b>				
quality noun	Japanese	<i>atarasi-i<sub>A</sub></i>	→	<i>atarasi-sa<sub>N</sub></i>
		'new'		'newness'
person noun	Russian	<i>umn-yj<sub>A</sub></i>	→	<i>umn-ik<sub>N</sub></i>
		'smart, clever'		'clever guy'
<b>III. Denominal nouns (N → N)</b>				
diminutive noun	Spanish	<i>gat-o</i>	→	<i>gat-it-o</i>
		'cat'		'little cat'
augmentative noun	Russian	<i>borod-a</i>	→	<i>borod-išča</i>
		'beard'		'huge beard'
status noun	English	<i>child</i>	→	<i>child-hood</i>
inhabitant noun	Arabic	<i>Miṣr</i>	→	<i>miṣr-iyyu</i>
		'Egypt'		'Egyptian'
female noun	German	<i>König</i>	→	<i>König-in</i>
		'king'		'queen'



# Derived verbs

*How do we form verbs?*

Derived verbs are less common than derived nouns

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<b>I. Deverbal verbs (V → V)</b>				
causative verb (see Section 11.1.4)	Korean	<i>cwuk-</i> 'die'	→	<i>cwuk-i-</i> 'kill'
applicative verb (see Section 11.1.5)	German	<i>laden</i> 'load'	→	<i>be-laden</i> 'load onto'
anticausative verb (see Section 11.1.2)	Swedish	<i>öppna</i> 'open (tr.)'	→	<i>öppna-s</i> 'open (intr.)'
desiderative verb	Greenlandic	<i>sini-</i> 'sleep'	→	<i>sini-kkuma-</i> 'want to sleep'
repetitive verb	English	<i>write</i>	→	<i>re-write</i>
reversive verb	Swahili	<i>chom-a</i> 'stick in'	→	<i>chom-o-a</i> 'pull out'
<b>II. Denominal verbs (N → V)</b>				
'act like N'	Spanish	<i>pirat-a</i> 'pirate'	→	<i>pirat-ear</i> 'pirate'
'put into N'	English	<i>bottle<sub>N</sub></i>	→	<i>bottle<sub>V</sub></i>
'cover with N'	Russian	<i>sol'</i> 'salt'	→	<i>sol-it'</i> 'salt'
<b>III. Deadjectival verbs (A → V)</b>				
factitive	Russian	<i>čern-yj</i> 'black'	→	<i>čern-it'</i> 'make black'
inchoative	Spanish	<i>verde</i> 'green'	→	<i>verde-ar</i> 'become green'

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# Derived adjectives

*How do we form adjectives?*

Derived adjectives are even less common than derived verbs.

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<b>I. Deverbal adjectives (V → A)</b>					
facilitative	Basque	<i>jan</i>	→	<i>jan-garri</i>	
		'eat'		'edible'	
agentive	Spanish	<i>habla-r</i>	→	<i>habla-dor</i>	
		'talk'		'talkative'	
<b>II. Denominal adjectives (N → A)</b>					
relational (= 'related to N')	Russian	<i>korol'</i>	→	<i>korol-evskij</i>	
		'king'		'royal'	
propriative (= 'having N')	Ponapean	<i>pihl</i>	→	<i>pil-en</i>	
		'water'		'watery'	
privative (= 'lacking N')	Russian	<i>vod-a</i>	→	<i>bez-vod-nyj</i>	
		'water'		'waterless'	
material	German	<i>Kupfer</i>	→	<i>kupfer-n</i>	
		'copper'		'made of copper'	
<b>III. Deadjectival adjectives (A → A)</b>					
attenuative	Tzutujil	<i>kaq</i>	→	<i>kaq-koj</i>	
		'red'		'reddish'	
intensive	Turkish	<i>yeni</i>	→	<i>yep-yeni</i>	
		'new'		'brand new'	
negative	German	<i>schön</i>	→	<i>un-schön</i>	
		'beautiful'		'ugly'	

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I will see you on Thursday 5/3:  
what can we do in the meanwhile?

- review the lecture slides
- do reading from the textbook
- the guidelines for assignment #2 (Midpoint development of the paper) are ready for you to see

**STAY SAFE**