

LG105
Morphology

Morphology Across Languages

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Class outline

- Investigate cross-linguistic morphological features;
- Declension & conjugation classes
 - Cumulation, syncretism, inflectional allomorphy
- Case
- Gender
- Agreement
- Common morphological processes

Morphological Language types

- Isolating languages: Vietnamese, Chinese, West African languages
 - Have very few bound morphemes
- Agglutinating languages: Turkish, Finnish Hungarian, Bantu, Americas
 - Words consist of many morphemes
- Inflectional languages: Italian, Russian
 - Have regularity based on classes or paradigms

Morphological Language types

- The terms isolating, agglutinating and inflectional are not to be understood as strict labels that can be given to languages because;
- Many languages show different tendencies in different parts of grammar.
- A language cannot usually be characterised in a single way.

Isolating Processes

- Every morpheme is an independent word.
- Sentences consist of a series of free morphemes.
- Gbe (Benin, West-Africa, Aboh 2004)

(1) Mí tò kpá dó ná Yetì (jí)
1pl Prog fence plant give Yeti.Prt
'We are building a fence for Yeti'

Agglutinating Processes

- Words of great complexity are formed by a combination of many morphemes.
 - Turkish
- (2) çalış-tır-ıl-ma-malıy-mış
work-cause-passive-neg-obligation-inference
'Apparently, (they say) he ought not to be made to work'
- The root **çalış** is suffixed with morphemes that add their own component meaning.

Agglutinating Processes

- Yao (Bantu, Ngunga 2000)

(3) taam-	'sit'
taam-ik-	'seat'
taam-uk-ul-	'unseat'
taam-uk-ul-igw-	'be unseated'
taam-uk-ul-igw-aasy-	
'cause to be unseated'	
taam-uk-ul-igw-aasy-an-	
'cause each other to be unseated'	

Agglutinating Processes

taam-uk-ul-igw-aasy-an-il-a

'cause each other to be unseated for
(someone)'

- Give the impression that every morpheme has just one meaning.

-ik- impositive

-ul- reversive

-igw- passive

-aasy- causative

-an- reciprocal

-il- applicative

Agglutinating Processes

- In addition in Bantu languages inflectional information is also agglutinative:

(4) Bemba (Bantu)

ta-tu-aku-laa-ba-**bomb**-el-a

neg-subj₁pl-fut-prog-prn(obj)-**work**-appl-FV

'We will not be working for them'

Inflectional Processes

- Involve words organised in classes where one morpheme can have more than one function.
- This property is called **cumulation**; a morpheme cumulates different properties/functions of a word.
- We can distinguish **nominal paradigms** also called **declensions**,
- And **inflectional classes** also called **conjugation classes** (or verbal paradigms).

Inflectional Processes

- Italian is a language with inflectional classes.
- Italian verbs come in different moods that reflect the speakers attitudes.
- **Indicative mood**: ordinary statements
 - I'm going swimming
- **Subjunctive mood**: expresses doubt and possibility
 - Should I go swimming?

Italian: First conjugation

Parlare 'to speak'

Number	Person	present indicative	present subjunctive	past indicative
Singular	1	parlo	parli	parlai
	2	parli	parli	parlasti
	3	parla	parli	parlò
Plural	1	parliamo	parliamo	parliammo
	2	parlate	parliate	parlaste
	3	parlano	parlino	parlarono

Italian: Second conjugation

Creder 'to believe'

Number	Person	Present indicative	Present subjunctive	Past indicative
Singular	1	credo	creda	credei
	2	credi	creda	credesti
	3	crede	creda	credè
Plural	1	crediamo	crediamo	credemmo
	2	credete	crediate	credeste
	3	credono	credano	credarono

Italian: Third conjugation

Finire 'to finish'

Number	Person	Present indicative	Present subjunctive	Past indicative
Singular	1	finisco	finisca	finii
	2	finisci	finisca	finisti
	3	finisce	finisca	finì
Plural	1	finiamo	finiamo	finimmo
	2	finite	finiate	finiste
	3	finiscono	finiscano	finirono

Inflectional classes

- **Cumulation**: one inflectional formative carrying a set of morphological information.
- Italian -i- in *parli* cumulates number, person, mood and conjugation class.
- It indicates the 1st person singular present subjunctive in the first conjugation.

Inflectional classes

- **Syncretism**: one inflectional formative carrying more than one set of morphological functions.

- Italian ending -i-

2 nd per	sg.	pres.ind.	1 st conj
3 rd per	sg.	pres.subj.	1 st conj
2 nd per	sg.	pres.ind.	2 nd conj
1 st per	sg.	past.ind.	3 rd conj

Inflectional processes

- In Italian it is possible to separate the endings into distinct inflectional pieces.
- e.g. each conjugation is marked by a particular vowel in the present/past indicative.

conj		3 rd pl. past.ind.	2 nd pl. pres.ind.
1	a	parl- a -rono	parl- a -ste
2	e	cred- e -rono	cred- e -ste
3	i	fin- i -rono	fin- i -ste

Inflectional classes

- Italian also exemplifies a case where one morphological category is spread across more than one inflectional formative; -sc- in 3rd conjugation e.g. fin-i-sc-i 'you finish'.
- Although meanings can be associated to discrete inflectional endings the stem cannot function as a word independently.
- *parl *cred *fin are not possible words of Italian.

Declension classes

- Declension classes or nominal paradigms generally reflect case properties of nouns.
- **Case** indicates the role that a noun has in a sentence.
- Case plays the role that prepositions have in English.

Declension classes

■ Case

Nominative	subject
Accussative	direct object
Dative	recipient
Genetive	possessor
Locative	a place or locative
Instrumental	instrument
Ablative	direction away from somewhere

Russian Class I declension

Kod 'code':

Case	Singular	Plural
Nominative	kod	kodi
Accusative	kod	kodi
Genitive	koda	kodov
Dative	kodu	kodam
Instrumental	kodom	kodomi
Prepositional	kode	kodax

Russian Class IV declension

bl'udo 'dish'

Case	Singular	Plural
Nominative	bl'udo	bl'uda
Accusative	bl'udo	bl'uda
Genitive	bl'uda	bl'uda
Dative	bl'udu	bl'udam
Instrumental	bl'udom	bl'udami
Prepositional	bl'ude	bl'udax

Russian Class IV declension (Irr)

oblako 'cloud'

Case	Singular	Plural
Nominative	oblako	oblaka
Accusative	oblako	oblaka
Genitive	oblaka	oblak ov
Dative	obluku	oblakam
Instrumental	oblukom	oblakami
Prepositional	obluke	oblakax

Russian declension classes

- The irregular declension of *oblako* illustrates **inflectional allomorphy**.
- Inflectional allomorphy refers to an irregular paradigm that uses one form (or ending) from a different declension class.

Gender in nouns

- Gender is used to refer to kind.
- Many languages distinguish between feminine, masculine and neuter.
- In Russian for example Class I is masculine, Class II, III are feminine and class IV is neuter.
- In English we can see this in the pronoun system from **her**, **him** and **it**.

Bantu nominal gender classes

- Shona (Zimbabwe) noun classes (Fortune 1955)

Noun Class number	Prefix	Rough semantics
1/2	mu-/va-	humans
1a/2	∅/va-	terms denoting relatives, honorifics, public personalities
3/4	mu-/mi-	trees, plants, body parts
5/6	∅/-ma	fruits, pairs countries, liquids
7/8	chi-/zvi	languages, tools
9/10	N-/N-	animals, birds, loan words

Bantu nominal gender classes

- Shona noun classes

Noun Class number	Prefix	Rough semantics
11	ru-	long thin objects
12/13	ka-/tu-	diminutives/augmentatives
14	u-, hu-	abstract nouns
15	ku-	infinitives
16/17/18	pa- ku- mu-	locatives –'on' 'by, beside' 'in'

Bantu nominal gender classes

- Some meanings are easily transferable but mainly membership to a particular class is **arbitrary**.

mukoma(1)	'boy'
vakoma(2)	'boys'
gokoma(5?)	'big boy'
makoma(6)	'big boys'
cikomana(7)	'short fat boy'
rukomana(8)	'short fat boys'
kakomana(12)	'tall thin boys'
hukomana(14)	'boyhood'

Bantu nominal gender classes

- The marking of noun classes results in a rich **agreement** system in Bantu languages.
- We can see agreement in English 3rd person singular marking on verbs: he eats * he eat.
- Agreement is more robust in other languages:

(5) Bemba (Bantu)

abantu abo twamweene bakafika mailo
2people 2who we-saw 2will-arrive tomorrow
'The people we saw will arrive tomorrow'

More morphological operations

- **Incorporation** is a special type of compounding involving the combination of a word (usually a noun) with a verb to form a compound verb.

Chuckchee (NE Siberia)

- | | |
|----------------------------|---------------------------|
| (6) Without incorporation | (7) With incorporation |
| Tə-pelarkən qoraŋə | Tə- qora -pelarkən |
| I-leave reindeer | I- reindeer-leave |
| 'I'm leaving the reindeer' | 'I'm reindeer-leaving' |

More morphological operations

- Incorporation in Ponapean (Micronesian)

(8) Without incorporation

I pahn pereki lohs

I will unroll mat

'I will unroll the mats'

(9) With incorporation

I pahn **pereki-los**

I will unroll-mat

'I will engage in mat unrolling'

More morphological operations

- **Infixation**: involves an affix that is inserted inside a stem.

Tagalog (Philippines): -um- and -in- are infixes used to mark a completed event or the infinitive.

(10)	takbuk	'run'	t-um-	akhbuh	'ran'
	lakad	'walk'	l-um-	akad	'walked'
	pili?	'choose'	p-in-	ili?	'chose'
	gradwet		gr-um-	adwet	'to graduate'

- Is -ish- in boy-**ish**-ness an infix?

More morphological operations

- **Reduplication**: duplicates all or part of the base to mark a grammatical or semantic function.
- Full/total reduplication:

Turkish

(11)	ʈʌbʌk	'quickly'	ʈʌbʌk ʈʌbʌk	'very quickly'
	iji	'well'	iji iji	'very well'

Indonesian

(12)	oraŋ	'man'	oraŋ ŋoraŋ	'all sorts of men'
	anak	'child'	anak anak	'all sorts of children'

More morphological operations

- Partial reduplication:

Tagalog (future)

(13)	takbuh	'run'	ta takbuh	'will run'
	lakad	'walk'	la lakad	'will walk'
	pili?	'choose'	pi pili?	'will choose'

More morphological operations

- **Consonant Mutation**: involves a change to a consonant in a base to indicate a grammatical or semantic function.
- Luo (Kenya)

(14)	Singular	Plural	
	kede	kete	'twig'
	got	gode	'hill'
	lu Θ	lu \check{o} e	'stick'
	buk	buge	'books'
	tfogo	tfoke	'bone'

Concatenative vs. Non-concatenative morphology

- To **concat** is to put morphemes together one after another as in English voice-less-ness.
- Morphology of this sort is usually referred to as **concatenative morphology**.
- Processes such as infixation, mutation, incorporation involve **non-concatenative morphology**.
- Some languages, mainly Semitic languages, generally tend to use non-concatenative morphology.

Morphology summary

- Morphology is the part of linguistics that is concerned with the structure of words and word-formation processes.
- Words can be divided into different classes defining lexical and function words but also declension and inflectional classes.
- Morphemes can be used to build words of varying complexity.
- Languages vary with respect to whether they employ isolating, agglutinating or inflectional processes.

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