

# Linguistics for Communication

Morphology  
(2023/2024)

**Lecturer**

Giovanni Urraci

[giovanni.urraci@unipd.it](mailto:giovanni.urraci@unipd.it)



# MORPHOLOGY

Morphology studies the internal **structure of words**,  
and the processes of **word formation**



Description of the meaningful parts of which words are comprised

# WORDS

Words are easy to identify, but difficult to **define**

boundaries between words

recurring patterns

lexical categories  
(parts of speech)



## WORDS (2)

In the Ancient Order of Grand Wizards a monesticant often demogulates the less important regulations.

In a recent lecture about the history of the Order, one of the monesticants drongly explained why an old splink should never be croodled.



## WORDS (2)

In the Ancient Order of Grand Wizards a **monesticant** often demogulates the less important regulations.

In a recent lecture about the history of the Order, one of the **monesticants** drongly explained why an old splink should never be croodled.

preceded by a determiner,  
plural marker -s

## WORDS (2)

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ending in -es

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ending in -ly

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## WORDS (2)

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In a recent lecture about the history of the Order, one of the monesticants drongly explained why an old splink should never be **croodled**.

ending in -ed,  
position in the sentence





# WORDS (3)

## What is a word?

Linguists struggle to frame a definition which is appropriate for all languages.

A few hypotheses. Words are...

- linguistic units separated by **spaces** when written → not applicable to unwritten languages, some writings are continuous
- linguistic units separated by **pauses** in spoken language → speech is continuous
- identifiable based on the position of the **stress** → not applicable to languages with lexical stress

# WORDS (4)

3 main properties of words:

- they **cannot be interrupted** by the insertion of new material;
- they can **stand alone** as an utterance;
- the **order** of the phonemes that comprise them can't be changed.

These parameters are not absolute and universal,  
but rather **general tendencies** that apply to most languages.



# WORDS (5)

## Non-interruptible

A word can usually be separated from its neighbors by inserting an additional word

*the dog runs fast* → *the brown dog runs fast* → *the brown dog usually runs fast* → *the brown dog usually runs very fast* ✓

However, words **cannot be interrupted** by the insertion of new material

*the dog runs fast* → *\*the dbrownog runs fast* ✗

## Independence

Given an appropriate context, words can be pronounced in isolation and form a sentence all by themselves.

✓ *What color is your dog? Brown*

✗ *What color is your dog? Br*

# WORDS (7)

## Non-fixed position

Words can appear in different contexts, and their order may be rearranged

*il gatto corre veloce*  
'the cat runs fast'

*corre veloce, il gatto*  
'runs fast, the cat'

*veloce corre il gatto*  
'fast runs the cat'



However, smaller linguistic elements must remain in their fixed positions

*il gatto corre veloce*  
'the cat runs fast'

*\*il gat corre veloce to*  
'the ca runs fast t'



# WORDS (8)

Words are the **smallest free form** found in language:  
they have a certain degree of independence



- can be **separated** from neighboring elements;
- are **not bound** to specific contexts;
- can appear in **isolation**.

**Is something missing?**

## Is something missing?

Words are commonly associated to a specific concept, action, or feeling, or they are thought of as having a single referent.

Meaning appears to be a fundamental property of words.

However, the relation between meaning and words is more complicated than it seems.



# WORDS AND MEANING

I saw a *dinosaur* at the museum.

*Dinosaurs* are extinct.

Are both *dinosaur* and *dinosaurs* words?



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Why *dinosaur* and *dinosaurs* have partially different meanings?



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*Dinosaurs* are extinct.

Are both *dinosaur* and *dinosaurs* words?

Is *-s* a word?

Why *dinosaur* and *dinosaurs* have partially different meanings?



*-s* contributes to the overall meaning, even though it is not a word itself:  
it means 'plural'



Meaning is not a unique characteristic of words, their subparts may convey a meaning too.

# WORDS AND MEANING (2)

Analysis of the structure of some words

**kills**

**builder**

**printers**



# WORDS AND MEANING (2)

Analysis of the structure of some words

**kills**



kill + -s

- kill action of killing
- -s done by someone or something in the third person singular

**builder**

**printers**

# WORDS AND MEANING (2)

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**builder**



build + -er

- **build** action of building
- **-er** the whole word functions as a noun

**printers**

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**builder**



build + -er

- **build** action of building
- **-er** the whole word functions as a noun

**printers**



print + -er + -s

- **print** action of printing
- **-er** the whole word functions as a noun
- **-s** plural



# MORPHEMES

Many words can be divided into smaller components that convey a distinct meaning:  
words are comprised of meaningful subparts.



**morphemes,**

the smallest units of language that carry meaning.

- Morphemes convey a **meaning**.
  - *walk* is a single morpheme: we can identify just one meaning;
  - *walked* contains two morphemes: *walk* and *-ed*;
  - *wal-* is not a morpheme: it doesn't carry any meaning.
- Morphemes **cannot be divided** into smaller meaningful parts
  - *read* is a morpheme;
  - *r* and *ead* are not morpheme: they are devoid of meaning;
  - *dogs* is not a morpheme: it can be broken down into two meaningful components, *dog* and *-s*.

# MORPHEMES (2)

Morphemes may refer to things, ideas, actions, and qualities

e.g. *table; honor; run; good*

They can also fulfill a grammatical function, such as defining the relationship between words and conveying information relating to various grammatical features (case, number, gender, tense, mood, etc.).

e.g. *tables = table + -s ; looked = look+ -ed ; and, but, not, the*

## Free morphemes

Can stand alone as words

e.g. *speaker = speak + -er*

e.g. *boys = boy + -s*

e.g. *il 'the', ieri 'yesterday'*

## Bound morphemes

Must be attached to another morpheme.

e.g. *speaker = speak + -er*

e.g. *boys = boy + -s*

e.g. *tavolo 'table' = tavol- + -o*

# SUMMARY

- Three properties outline the prototypical notion of **word** (general tendencies):
  1. words cannot be interrupted by the insertion of new material;
  2. they can stand alone as an utterance;
  3. the order of the phonemes that comprise them cannot be changed.
- **Morphemes** are the smallest units of language that carry meaning: they are an essential component of words and play a critical role in language acquisition and understanding.
  1. Morphemes may refer to things, ideas, and actions; or indicate the relationship between words, specify the lexical categories, and provide information such as number and gender.
  2. **Free** morphemes can occur in a sentence by themselves; **bound** morphemes need to be attached to another morpheme.
- Even if there is a bit of overlapping between words and morphemes, they refer to different entities.  
E.g.: -s is a morpheme but not a word, *cats* is a word but not a morpheme

# AFFIXES

Affixes are a common type of bound morphemes.

## Prefixes

On the left of the base

e.g. *unhappy* = **un-** + happy

e.g. *replay* = **re-** + play

e.g. *infelice* 'unhappy' =  
**in-** + felice

e.g. *ricadere* 'to fall again' =  
**ri-** + cadere

## Suffixes

On the right of the  
base

e.g. *sinful* = sin + **-ful**

e.g. *friendly* = friend + **-ly**

e.g. *felicità* 'happiness' =  
felic- + **-ità**

e.g. *lavor* 'safety' =  
sicur- + **-ezza**

## Infixes

Inside the base

Tagalog -um-: past tense

*tulong*                      ***tumulong***  
'help'                      'helped'

*bili*                              ***bumili***  
'buy'                              'bought'

*hanap*                          ***humanap***  
'search'                          'searched'

Ilocano -in-: 'infested with'

*kuton*                          ***kinuton***  
'ant'                              'ant-infested'

*kuto*                              ***kinuto***  
'lice'                              'lice-infested'

## Circumfixes

Around the base

German ge-t: past participle

**ge**kannt                      'known'

**ge**läut**et**                      'rung'

**ge**zeig**t**                      'shown'

# MORPHEMES AND LANGUAGE ACQUISITION

By the age of four, children begin to break down words into smaller components and to **identify patterns** in linguistic data



They associate recurring morphemes with specific meanings.

E.g. Being exposed to words like *books* and *tables*, they infer that the suffix -s denotes plurality.

How can we explain forms such as *foots*?

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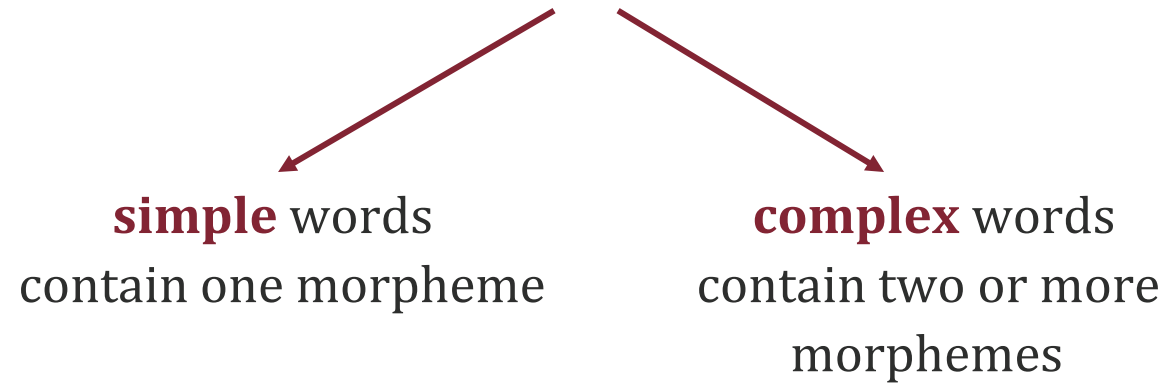
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E.g. Being exposed to words like *books* and *tables*, they infer that the suffix -s denotes plurality.

How can we explain forms such as *foots*? **Over-extension** of this knowledge

# SIMPLE AND COMPLEX WORDS

Words are composed of morphemes



English words are often simple. Italian words are mainly complex, typically containing at least two morphemes.

**What's the reason for that?**

## SIMPLE AND COMPLEX WORDS (2)

Italian: number and gender must be indicated for nouns and adjectives

English: adjectives are invariable, and only plural nouns are marked.



Italian morphemes are mostly **bound**  
they must be attached to a morpheme expressing gender and number.

Adjectives and nouns tend to be **complex**.

e.g. *table* VS *tavolo* ~ *tables* VS *tavoli* ~ *brown dog* VS *cane marrone*

Italian: all verb forms undergo inflection.

English: only third-person, past tense, and past participle markers exist.



Italian verbs are **complex**.

e.g. I *speak*, you *sing*, we *fall* VS io *parlo*, tu *canti*, noi *cadiamo*



# EXERCISE 1

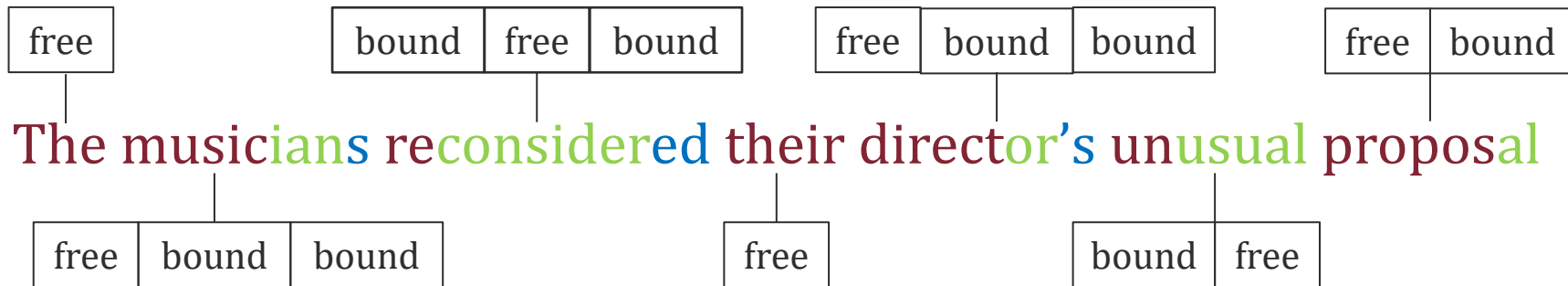
Can you identify all the morphemes in the following English sentence?

The musicians reconsidered their director's unusual proposal



# EXERCISE 1

Can you identify all the morphemes in the following English sentence?



## EXERCISE 2

- a) categorize the following words as **simple** or **complex**;
- b) identify all the **morphemes**;
- c) **describe** them as free (F) or bound (B).

1. and
2. reformers
3. cart
4. lids
5. actor
6. ranchers
7. lens
8. countess
9. rabbit
10. wiped
11. Spain

## EXERCISE 2

- a) categorize the following words as **simple** or **complex**;
- b) identify all the **morphemes**;
- c) **describe** them as free (F) or bound (B).

1. and	simple	<i>and</i> (F)
2. reformers	complex	<i>re-</i> (B) + <i>form</i> (F) + <i>-er</i> (B) + <i>-s</i> (B)
3. cart	simple	<i>cart</i> (F)
4. lids	complex	<i>lid</i> (F) + <i>-s</i> (B)
5. actor	complex	<i>act</i> (F) + <i>-or</i> (B)
6. ranchers	complex	<i>ranch</i> (F) + <i>-er</i> (B) + <i>-s</i> (B)
7. lens	simple	<i>lens</i> (F)
8. countess	complex	<i>count</i> (F) + <i>-ess</i> (B)
9. rabbit	simple	<i>rabbit</i> (F)
10. wiped	complex	<i>wipe</i> (F) + <i>-ed</i> (B)
11. Spain	simple	<i>Spain</i> (F)

# DERIVATIONAL AND INFLECTIONAL MORPHOLOGY

## Derivational morphology



Creates new words from existing ones, resulting in a **change in meaning** and often in the **lexical category** to which the word belongs.

## Inflectional morphology



Adds **grammatical information** to a word according to the morphological and syntactic requirements of a language.

# INFLECTION

Modification of a word's form to indicate **grammatical information**.

Conveys grammaticalized aspects of meaning.

E.g. tense, mood, and person of a verb; number, gender, and case.

English and Italian codify the category of number as **singular** vs **plural**.

Other languages (e.g. Gaelic and Slovene), include an additional category: **dual**, which refers to two entities.

syntactic role of a word in the context of a specific sentence (subject, direct object, etc.).

*Servī dominōs audiunt* 'the slaves hear the masters'  
slave-PL:SUB master-PL:OBJ hear-they:PRS

*Dominī servōs audiunt* 'the masters hear the slaves'  
master-PL:SUB slave-PL:OBJ hear-they:PRS

Case is present in numerous languages.

E.g. German, Farsi, Finnish, Russian, Tamil.

Inflection **varies** among different languages:  
each language selects a different set of grammatical meanings to convey.

# INHERENT AND CONTEXTUAL INFLECTION

## Inherent inflection



Decided by the **speaker**  
based on the intended meaning.

E.g. number in nouns (English and Italian).

E.g. verb tense (English and Italian).

## Contextual inflection



Dictated by the syntactic context:  
**agreement.**

One word is inflected to match certain  
grammatical properties of another.

E.g. verbs undergo contextual inflection to agree  
with the subject (English and Italian).

E.g. adjectives must agree in number and gender  
with the noun they modify (Italian).

gatto rosso vs gatte rosse

Both are language-specific: what falls under each category differs between languages.

# INFLECTION – AFFIXATION

## Affixation

Inflection of a word through the addition of an **affix**: a bound morpheme.

**English** has a limited number of inflectional affixes, all suffixes.

- Plural marker: **-s**            *The pens are on the table*
- Possessive: **-'s**            *It was Andrew's car*
- 3rd pers. pres. sing.: **-s**    *He always comes home late*
- Progressive: **-ing**        *He is walking down the street*
- Past tense: **-ed**            *She arrived late*
- Past participle: **-en**       *Jim has beaten his opponents*
- Comparative: **-er**         *This milk is fresher than that*
- Superlative: **-est**         *This is the freshest milk*

Affixation is the main inflectional process in **Italian**.

E.g. *gatto* vs *gatte*. The **suffix** -o indicates singular and masculine, -e feminine and plural.



# INFLECTION – INTERNAL CHANGE

## Internal change

A non-morphemic segment is substituted for another to indicate a grammatical contrast.

The most common type is called **ablaut**, which refers to a vowel alternation within the **root**.

- **s**ing → **a**ng
- **s**ink → **a**nk
- **d**rive → **dr**ove
- **r**ise → **ro**se

There is no affix (e.g. -ed): the tense of the verb is modified by **swapping** one vowel for another.

# INFLECTION – INTERNAL CHANGE (2)

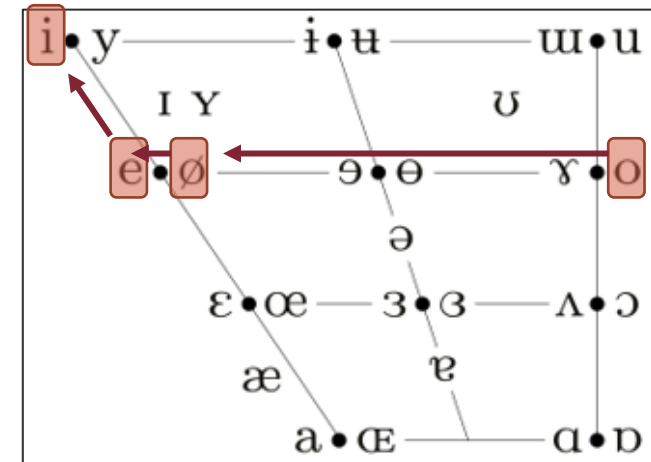
Internal change can affect not only verbs, but also nouns.

- foot → feet  
/fʊt/ → /fi:t/

The plural form is not created by adding the plural marker -s, but by changing the **root's vowel**.

Reflect regular uses of an earlier stage in the English's history.

1. Old plural form /fo:ti/
2. Umlaut (500 AD) /fø:ti/
3. Loss of the suffix /fø:t/
4. Un-rounding /fe:t/
5. Great vowel shift (from 1400 AD) /fi:t/



# INFLECTION – REDUPLICATION

## Reduplication

Marks a grammatical or semantic contrast by **repeating** all or part of the root.

- E.g. **Tagalog**: future tense, reduplication of the first syllable  
*pasok* ‘enter’ → *pa-pasok* ‘will enter’  
*alis* ‘leave’ → *a-alis* ‘will leave’  
*dalo* ‘attend’ → *da-dalo* ‘will attend’  
*lakad* ‘walk’ → *la-lakad* ‘will walk’
- E.g. **Indonesian**: plural, full reduplication of the noun  
*anak* ‘child’ → *anak-anak* ‘children’

# INFLECTION – SUPPLETION

*Io vado* ‘I go’ → *noi andiamo* ‘we go’

What do you notice?

# INFLECTION – SUPPLETION

*Io vado* 'I go' → *noi andiamo* 'we go'

What do you notice?

**Substitution** of the root to an apparently unrelated one.



# INFLECTION – SUPPLETION

## Suppletion

A morpheme is **replaced** with an entirely different one to indicate specific grammatical features.

*Io vado* 'I go' → *noi andiamo* 'we go'

The root **vad-** is swapped **and-** to form the first person plural.

*Vado* and *andiamo* come from two **different Latin verbs**: *vadere* 'to go fast' and *ambulare* 'to walk'.

# SUMMARY

- **Inflectional** morphology involves the modification of a word's form to convey grammatical information:
  - a) **inherent** inflection is employed by speakers to convey the information they choose to communicate;
  - b) **contextual** inflection is determined by the syntactic context and the grammatical rules.
- Inflectional **processes**:
  - a) **affixation** is the addition of a grammatical morpheme to a word;
  - b) **internal change** entails substituting a non-morphemic segment of a word (e.g. sing/sang);
  - c) **reduplication** is the repetition of all or part of the base;
  - d) **suppletion**: complete change of the root to indicate different grammatical features (e.g. vado/andiamo).

# EXERCISE 3

## Exercise on **Moodle**





# DERIVATION

Derivation is the creation of a new word by adding a derivational **affix** to an existing word.



Change in **meaning** and/or **lexical category**.

- *happy* + prefix *un-* → *unhappy*  
+ suffix *-ness* → *happiness*
- *felice* + prefix *in-* → *infelice*  
+ suffix *-ità* → *felicità*

# DERIVATION 2

Derivation is a widespread mechanism present in numerous languages.

What's the reason for its **success**?



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Derivation is a widespread mechanism present in numerous languages.

What's the reason for its **success**?

Derivation is highly **efficient**,  
it expands the vocabulary without the need for excessive memorization:  
the meaning can be deduced simply by recognizing the base and affix.



## EXERCISE 4

For each sentence, state whether the highlighted morphemes are inflectional or derivational

- a. *She is **playing** the piano*
- b. *She gave the boy's father a note*
- c. *The **painters** **arrived** late*
- d. *He **used** his phone to check the weather*
- e. *Her **happiness** was sincere*
- f. *She always **remembers** to call*
- g. *The **farmer's** cows **escaped***
- h. *She **quickly** **closed** the book*
- i. *Mark **needs** the **newer** copy*
- l. *The **strongest** **rower** **continued***
- m. *She **noted** his **impoliteness***

## EXERCISE 4

For each sentence, state whether the highlighted morphemes are **inflectional** or **derivational**

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- m. *She not**ed** his impolit**eness***

# ENGLISH DERIVATIONAL PREFIXES AND SUFFIXES

Affix	Change	Examples
<b>Suffixes</b>		
-al	V → N	refus-al, dispos-al, recit-al
-ant	V → N	claim-ant, defend-ant
-(at)ion	V → N	realiz-ation, assert-ion, protect-ion
-er	V → N	teach-er, work-er
-ing <sub>1</sub>	V → N	the shoot-ing, the danc-ing
-ment	V → N	adjourn-ment, treat-ment, amaze-ment
-able	V → A	fix-able, do-able, understand-able
-ing <sub>2</sub>	V → A	the sleep-ing giant, a blaz-ing fire
-ive	V → A	assert-ive, impress-ive, restrict-ive
-dom	N → N	king-dom, fief-dom
-ful	N → A	faith-ful, hope-ful, dread-ful
-(i)al	N → A	president-ial, nation-al
-(i)an	N → A	Arab-ian, Einstein-ian, Albert-an
-ic	N → A	cub-ic, optimist-ic, moron-ic
-ize <sub>1</sub>	N → V	hospital-ize, crystall-ize
-less	N → A	penni-less, brain-less
-ous	N → A	poison-ous, lecher-ous
-ish	A → A	green-ish, tall-ish
-ate	A → V	activ-ate, captiv-ate
-en	A → V	dead-en, black-en, hard-en
-ize <sub>2</sub>	A → V	modern-ize, national-ize
-ity	A → N	stupid-ity, prior-ity
-ness	A → N	happi-ness, kind-ness
<b>Prefixes</b>		
anti-	N → N	anti-abortion, anti-pollution
ex-	N → N	ex-president, ex-wife, ex-friend
de-	V → V	de-activate, de-mystify
dis-	V → V	dis-continue, dis-obey
mis-	V → V	mis-identify, mis-place
re-	V → V	re-think, re-do, re-state
un <sub>1</sub> -	V → V	un-tie, un-lock, un-do
in-	A → A	in-competent, in-complete
un <sub>2</sub> -	A → A	un-happy, un-fair, un-intelligible

## Suffixes

*-ify* A/N → V pur-ify, beaut-ify

*-ion* V → N detect-ion, discuss-ion

*-ist* N/A → N art-ist, active-ist

*-y* N → A water-y, snow-y

## Prefixes

*pre-* V → V pre-view, pre-digest

© Contemporary linguistic analysis. An introduction  
J. Archibald, W. O'Grady



# ITALIAN DERIVATIONAL PREFIXES

	N	A	V	Pre+N	Pre+A	Pre+V		N	A	V	Pre+N	Pre+A	Pre+V
a-/an-	+	+	-	asimmetria	a-politico		meta-	+	+	-	metalinguaggio	metagiuridico	
ante-	+	+	+	anteguerra	antelucano	anteporre	micro-	+	-	-	microclima		
anti- <sup>1</sup>	+	+	-	antitarlo	antigovernativo		mini-	+	-	-	miniappartamento		
anti- <sup>2</sup>	+	+	+	anticamera	antidatato	antivedere	multi-	+	+	-	multistrato	multidimensionale	
arci-	+	+	-	arcivescovo	arcinoto		neo-	+	+	-	neoformazione	neoclassico	
auto-	+	+	+	autobiografia	autosufficiente	autoconvincersi	oltre-	+	+	+	oltretomba	oltremarino	oltrepassare
avan-	+	-	-	avanguardia			paleo-	+	+	-	paleografia	paleocristiano	
circum-	-	+	+		circumterrestre	circumnavigare	para-	+	+	-	parastato	paramilitare	
cis-	-	+	-		cisalpino		pluri-	+	+	-	plurilingue	pluricentrico	
co-	+	+	+	coinquilino	coassiale	coabitare	poli-	+	+	-	poliambulatorio	policentrico	
con-	+	+	+	condirettore	connazionale	convivere	post-	-	+	+		postmoderno	postdatare
contro-	+	+	+	controcanto	controfattuale	controbattere	pre-	+	+	+	preguerra	prematrimoniale	prevedere
de-	-	-	+			deumidificare	pro-	+	+	-	proaborto	proamericano	
dis-	+	+	+	disarmonia	disabile	disfare	re-/ri-	-	-	+			ridiscutere
ex-	+	-	-	exmoglie			retro-	+	+	+	retrobottega	retroattivo	retrodatare
extra-	+	+	-	extrasistole	extralucido		s-	+	+	+	sblocco	sfortunato	sbalzare
in- <sup>1</sup>	-	-	+			immettere	semi-	+	+	-	semicerchio	semideserto	
in- <sup>2</sup>	+	+	-	inesperienza	incapace		sopra-	+	+	+	sopraddote	sopraesposto	sopraeccitare
infra-	+	+	-	infrastruttura	infrarosso		sovra-	+	+	+	sovraccarico	sovrastutturale	sovrapporre
inter-	+	+	+	interregno	internazionale	intercorrere	sotto-	+	+	+	sottocommissione	sottostimato	sottoutilizzare
intra-	-	+	+		intramolecolare	intraprendere	stra-	-	+	+		stragrande	stravedere
iper-	+	+	+	ipermercato	iperattivo	ipernutrire	sub-	+	+	+	subappalto	subalpino	subaffittare
ipo-	+	+	+	ipoalimentazione	ipocalorico	iponutrirsi	super-	+	+	+	superburocrate	supermodesto	supervisionare
macro-	+	-	-	macroeconomia			sur-	+	+	+	survoltaggio	surreale	surriscaldare
maxi-	+	-	-	maxischermo			trans-	+	+	+	transcodifica	transalpino	transfondere
mega-	+	-	-	megaconcerto			ultra-	+	+	-	ultrasuono	ultravioletto	
							vice-	+	-	-	viceré		

# ITALIAN DERIVATIONAL SUFFIXES

V → N	<b>Nominali deverbali</b>		V → A	<b>Aggettivali</b>	
-zione	anima(re) →	animazione	-bile:	altera(re) →	alterabile
-aggio	ingrassa(re) →	ingrassaggio	-tivo:	collabora(re) →	collaborativo
-mento	allena(re) →	allenamento	-torio:	consola(re) →	consolatorio
-tura	pota(re) →	potatura	-evole:	cede(re) →	cedevole
-tore	lavora(re) →	lavoratore			
N → N			A → N	<b>Nominali deaggettivali</b>	
-aio:	giocattolo →	giocattolaio	-ezza:	sicuro →	sicurezza
-ista:	Dante →	dantista	-anza:	abbond(ante) →	abbondanza
-ismo:	Calvino →	calvinismo	-enza:	intellig(ente) →	intelligenza
-ura:	magistrato →	magistratura	-aggine:	stupido →	stupidaggine
			-ità/-età:	semplice →	semplicità
N → V	<b>Verbali denominali</b>			vario →	varietà
-izzare:	periodo →	periodizzare	A → V	<b>Verbali deaggettivali</b>	
-are/-ire:	film →	filmare, fiore → fiorire	-are/-ire:	calmo →	calmare
-eggiare:	favola →	favoleggiare		snello →	snellire
-ificare:	pietra →	pietrificare	-ificare:	beato →	beatificare
			-eggiare:	bianco →	biancheggiare
N → A	<b>Aggettivali denominali</b>		-izzare:	impermeabile →	impermeabilizzare
-oso:	gloria →	glorioso			
-ario:	confusione →	confusionario	A → Adv	<b>Avverbiali deaggettivali</b>	
-ico:	ciclo →	ciclico	-mente:	geloso → gelosamente, veloce → velocemente	
-ese:	Genova →	genovese			
Rara la derivazione deavverbiale (indietro > indietro)					



# PREFIXATION AND SUFFIXATION

## Prefixation



Typically, do not change  
the lexical category of the base word.  
The meaning is substantially modified

E.g. un- + *kind* (A) → *unkind* (A).

E.g. in- + *capace* 'able' (A) → *incapace* 'unable' (A).

## Suffixation



Can change the lexical category  
of the base word.  
The meaning is partially affected.

E.g. *kind* (A) + -ness → *kindness* (N).

E.g. *capace* 'able' (A) + -ità → *capacità* 'ability' (N).

Italian: no exceptions.

English: some exceptions.

E.g. en- + *slave* (N) → *enslave* (V)

a- + *blaze* (N) → *ablaze* (A)

de- + *cipher* (N) → *decipher* (V)

# PREFIXATION AND SUFFIXATION (2)

How do these **suffixes** affect the base?

*mano* 'hand' + -ina → *manina* 'little hand'  
+ -ona → *manona* 'big hand'  
+ -uccia → *manuccia* 'little/cute hand'  
+ -accia → *manaccia* 'big/ugly hand'

# EVALUATIVE SUFFIXATION

Evaluative suffixation does not alter the lexical category or meaning of the base word:  
it allows the speaker to express an **opinion** (evaluation).

Not common in English, even if a few **diminutive** suffixes can be identified.

E.g. *pig* + *-y* → *piggy*  
*duck* + *-ling* → *duckling*  
*book* + *-let* → *booklet*

Words containing an evaluative suffix may undergo **lexicalization**:  
loss of connection between the base and derived word.

E.g. *spago* 'string' + evaluative suffix *-etto* → *spaghetto* 'little string'



Nobody thinks of it like that:  
it is no longer perceived as a derived form.

# PREFIXATION AND SUFFIXATION (3)

Words can undergo multiple derivational processes:  
they can contain several derivation affixes.

Affixes are added **one at a time**: derivation is a linear processes.

E.g. *faith* → *faithful* → *unfaithful* ✓  
*faith* → *unfaithful* ✗

# COMPLEX WORDS

## Analysis of **complex** words

1. Identify the **root**  lexical morpheme responsible for conveying the main meaning.

E.g. *rewrite* → write ~ *teacher* → teach ~ *unhappiness* → happy.

2. Divide the word into **morphemes**.

E.g. *rewrite* → re- + write ~ *teacher* → teach + er ~ *unhappiness* → un- + happy + -ness.

3. Determine the affixation **order**.

Only prefixes or suffixes:  
the affix closer to the root is added first.

E.g. *help* → *helpful* → *helpfulness*

Both prefixes and suffixes.

*happy* → *unhappy* → *unhappiness* ?

*happy* → *happiness* → *unhappiness* ?

## COMPLEX WORDS (2)

The order of affixation is determined by the **selective nature** of the derivational affixes.



Affixes usually attach to words belonging to a single lexical category

**Un-** primarily attaches to adjectives and can't be added to nouns.

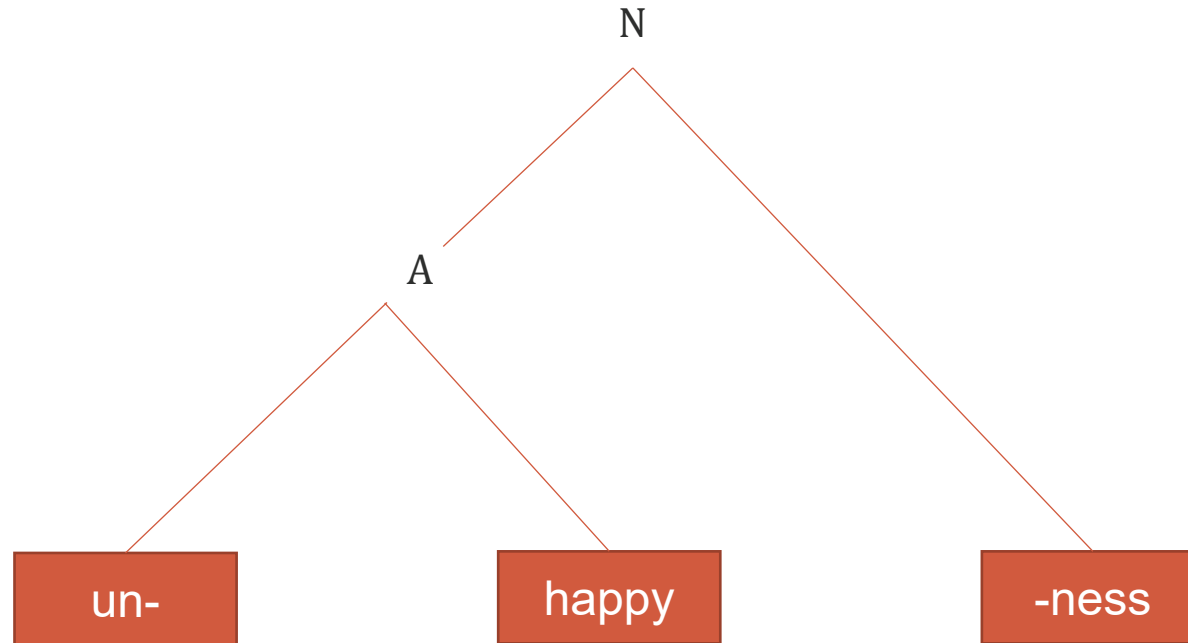
*happiness* → *unhappiness* ✗

*happy* → *unhappy* ✓



*happy* → *unhappy* → *unhappiness*

# COMPLEX WORDS (3)

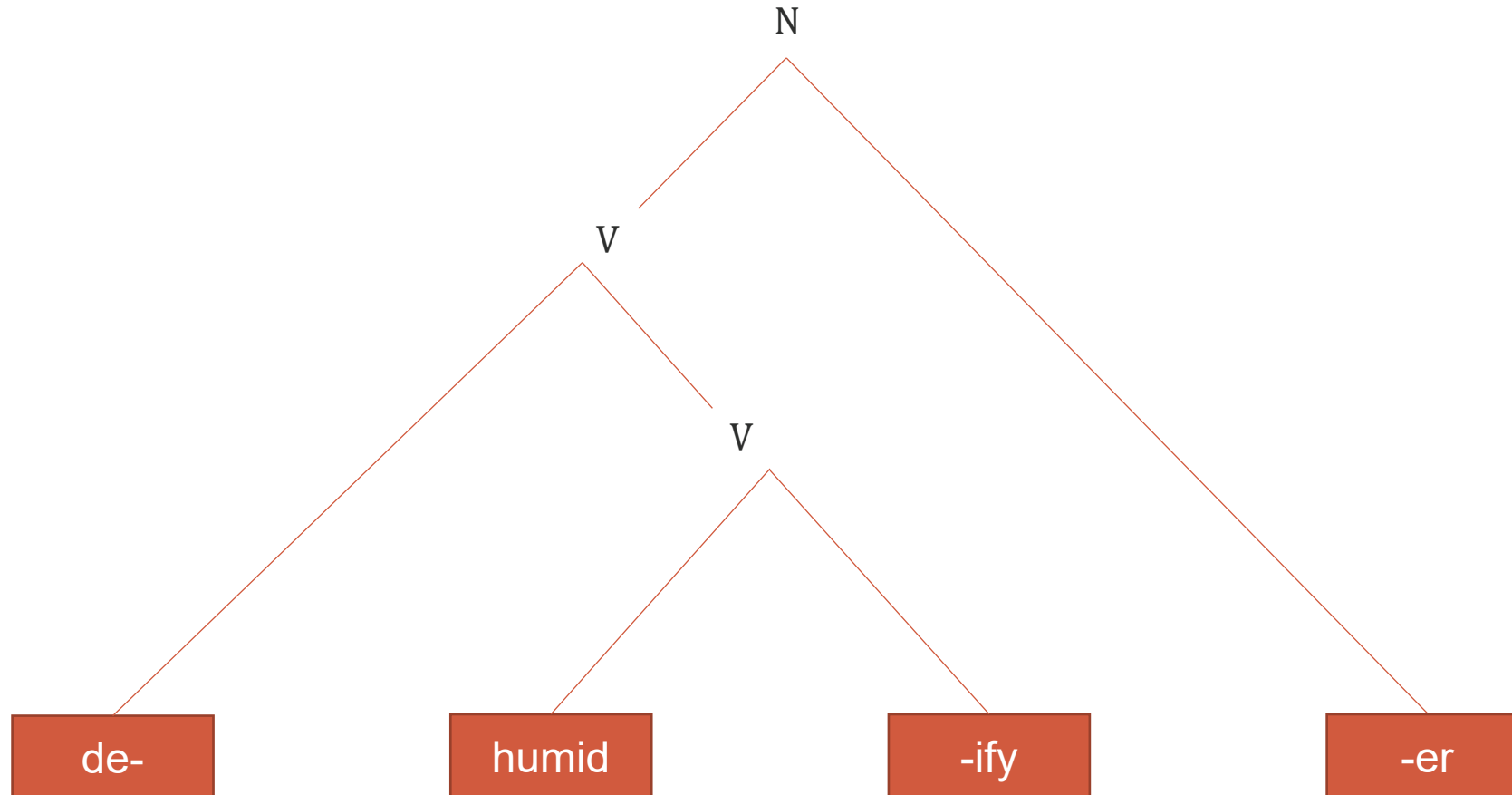


## Dehumidifier

**De-** applies only to verbs, so...



# COMPLEX WORDS (5)



# EXERCISE 5

Analyze the following words.

Identify the **root**, and all derivational affixes, then classify them as either **prefixes** or **suffixes**.

a. *privatize*

b. *happily*

c. *player*

d. *amoral*

e. *unfriendly*

f. *untie*

g. *lovable*

h. *devalue*

i. *unbelievable*

n. *unresourceful*

o. *disinvestment*

p. *reseller*

q. *pretreatment*

r. *unimportantly*

s. *disobey*

t. *unsuccessfully*

u. *disrespectful*

v. *dislike*

# EXERCISE 5

Analyze the following words.

Identify the **root**, and all derivational affixes, then classify them as either **prefixes** or **suffixes**.

- |                        |                       |                          |                            |
|------------------------|-----------------------|--------------------------|----------------------------|
| a. <i>privatize</i>    | private + -ize        | n. <i>unresourceful</i>  | un- + resource + -ful      |
| b. <i>happily</i>      | happy + -ly           | o. <i>disinvestment</i>  | dis- + invest + -ment      |
| c. <i>player</i>       | play + -er            | p. <i>reseller</i>       | re- + sell + -er           |
| d. <i>amoral</i>       | a- + moral            | q. <i>pretreatment</i>   | pre- + treat + -ment       |
| e. <i>unfriendly</i>   | un- + friend + -ly    | r. <i>unimportantly</i>  | un- + important + -ly      |
| f. <i>untie</i>        | un- + tie             | s. <i>disobey</i>        | dis- + obey                |
| g. <i>lovable</i>      | love + -able          | t. <i>unsuccessfully</i> | un- + success + -ful + -ly |
| h. <i>devalue</i>      | de- + value           | u. <i>disrespectful</i>  | dis- respect + -ful        |
| i. <i>unbelievable</i> | un- + believe + -able | v. <i>dislike</i>        | dis- + like                |

# WORD FORMATION

- *donation*
- *editor*
- *resurrection*
- *sculptor*



# WORD FORMATION – BACK FORMATION

Affixation is a common process,  
speakers can recognize it even in words where affixes are not actually present.

- french *donation* > *donation* > *donate*
- latin *ēditor* > *editor* > *edit*
- french *resurrection* > *resurrection* > *resurrect*
- latin *sculptor* > *sculptor* > *sculpt*

-ion and -or are **not** suffixes,  
but speakers interpreted them as such



## **Back-formation:**

creation of a new word by removing a  
supposed affix from an existing one.

# WORD FORMATION – COMPOUNDING

**Compounds** combine **two or more** words.

E.g. *head* (n.) + *strong* (adj.) > *headstrong*

*soft* (adj.) + *ball* (n.) > *softball*

*toe* (n.) + *nail* (n.) > *toenail*

*bitter* (adj.) + *sweet* (adj.) > *bittersweet*

*over* (prep.) + *sight* (n.) > *oversight*

*over* (prep.) + *grown* (adj.) > *overgrown*

*draw* (verb) + *bridge* (n.) > *drawbridge*

*swear* (verb) + *word* (n.) > *swearword*

E.g. *portare* (verb) 'carry' + *ombrelli* (n.) 'umbrellas'  
*portaombrelli* 'umbrella stand'

*portare* (verb) 'bring' + *lettere* (n.) 'letters'  
*portalettere* 'mailman'

*lavare* (verb) 'wash' + *piatti* (n.) 'dishes'  
*lavapiatti* 'dishwasher'

*scolare* (verb) 'strain' + *pasta* (n.)  
*scolapasta* 'strainer'

*ferro* (n.) 'iron' + *via* (n.) 'way'  
*ferrovia* 'railway'

*cassaforte* 'safe'  
*cassa* (n.) 'case/box' + *forte* (adj.) 'strong'

*agro* (adj.) 'sour' + *dolce* (adj.) 'sweet'  
*agrodolce* 'sweet and sour'

## WORD FORMATION – COMPOUNDING (2)

- *greenhouse*
- *moonlight*
- *coffee table*
- *coast guard*
- *man-made*
- *made-up*
- *apribottiglie* ‘bottle opener’
- *sempreverde* ‘evergreen’
- *giallo limone* ‘lemon yellow’
- *verde bottiglia* ‘bottle green’

Regardless of their written form, they are all **compounds**

**Recursive** nature of compounding:

in Germanic languages compounds can act as bases for **further** compounding,  
in Italian it is usually not allowed.





What's the difference between  
**milk chocolate** and **chocolate milk**?

# WORD FORMATION – COMPOUNDING (5)

## Internal structure of compounds

### Head:

determines the **main meaning**

In English, typically on the **right**

E.g. *milk chocolate*

*chocolate milk*

*windmill*

*coffee table*

*caveman*

*finance committee secretary election*

### Modifier(s)

In Italian, typically on the **left**

E.g. *pescecane* (fish dog) 'shark'

*cassaforte* (case/box strong) 'safe'

*viaggio lampo* (journey lightning) 'very fast journey'

Compounds denote specific **subtypes** of the broader concept indicated by their head

To identify the head of a compound,  
ask “**what is it?**”

Is a *living room* a “living” or a “room”? It’s a room —————→ *room* is the head

What’s *seafood*? A type of food —————→ *food* is the head

The head determines the **lexical category** of the entire compound.

- *board* (noun) → *blackboard* (noun)
- *cold* (adj.) → *ice-cold* (adj.)
- *cassa* (noun) → *cassaforte* (noun)
- *giallo* (adj.) → *giallo limone* (adj.)

The head of a compound not only conveys the main **meaning**,  
but also determines the **part of speech**.

What's the head of *redneck*?

And what about *saber-tooth*?

What's the head of *redneck*? A redneck is not a neck

And what about *saber-tooth*? A saber-tooth is not a tooth

## Endocentric compounds



Have a clearly identifiable **head** that conveys the core meaning of the compound. The overall meaning is often **compositional**.

E.g. *moonlight*

E.g. *windmill*

## Exocentric compounds



Do not have a component that provides the bulk of their meaning. There is **no head**, and meaning cannot be deduced from their components alone: it is often necessary to know the context in which the word was created.

E.g. *redneck* The term denoted farmers, who had a red neck caused by sunburn from working in the fields. The current meaning stems from the association of farmers with uneducated people.

E.g. *saber-tooth*

# SUMMARY

- A compound is the combination of **two or more** lexical morphemes.
- **Endocentric** compounds: their internal structure consists of a **head** and one or more modifiers, with the head determining the main meaning of the entire compound and its lexical category.
- **Exocentric** compounds lack a head, and have a non-compositional meaning.
- Compounding in Germanic languages has a **recursive** property.
- In English, the head of a compound tends to be the rightmost lexical morpheme; in Italian it's typically on the left.



# WORD FORMATION – CONVERSION

Conversion assigns a word to a **different lexical category** without any change in its form.

**No affix** is added.

In **English**, it is particularly common from nouns to verbs.

E.g.: *e-mail* (n.) > *to e-mail* (verb) ~ *eye* (n.) > *to eye* (verb) ~ *bottle* (n.) > *to bottle* (verb) ~ *lure* (n.) > *to lure* (verb)

The reverse process is also well established.

E.g.: *to run* (verb) > *run* (n.) ~ *to drink* (verb) > *drink* (n.) ~ *to drive* (verb) > *drive* (n.) ~ *to call* (verb) > *call* (n.)

In **Italian**, conversion from verbs and adjectives to nouns is more frequent (**nominalization**).

E.g.: *mangiare* (verb) ‘to eat’ > *il mangiare* (n.) ‘food’ ~ *pesto* (verb/adj.) ‘mashed’ > *il pesto* (n.) ~

*abitato* (verb/adj.) ‘inhabited’ > *l’abitato* (n.) ‘residential area’ ~ *vicino* (adj.) ‘near’ > *il vicino* (n.) ‘neighbor’

See also:

*ferrovia* (n.) *metropolitana* (adj.) ‘railway urban’ > *metropolitana* ‘subway’

*telefono* (n.) *cellulare* (adj.) ‘telephone cellular’ > *cellulare* ‘cellphone’

# WORD FORMATION – CLIPPING

Clipping involves **shortening** a word by removing a section of it.

It is commonly used in English, particularly in **casual speech**.

E.g. *prof* 'professor' ~ *bot* 'robot' ~ *doc* 'doctor'.

Some other commonly used clipped words.

E.g. *app* 'application' ~ *ad* 'advertisement' ~ *auto* 'automobile' ~ *lab* 'laboratory' ~ *phone* 'telephone'.

In some cases, many speakers may **no longer recognize** the original word.

E.g. *zoo* 'zoological garden' ~ *fax* 'facsimile' ~ *fan* 'fanatic' ~ *pub* 'public house' ~ *flu* 'influenza' ~  
*gym* 'gymnasium'

# WORD FORMATION – BLENDING

**Blending** combines parts of two existing words, **shortening** them and **merging** them together to create a new word with combined meanings.

E.g. **breakfast** + **lunch** → *brunch*

**situation** + **comedy** → *sitcom*

**cybernetic** + **organism** → *cyborg*

**motor** + **hotel** → *motel*

**smoke** + **fog** → *smog*

Blending is rare in Italian.

E.g. **cantante** ‘singer’ + **autore** ‘author’ → *cantautore* ‘singer-songwriter’

**aperitivo** ‘aperitif’ + **cena** ‘dinner’ → *apericena* ‘aperitif accompanied by samples of various dishes and eaten instead of dinner’

# WORD FORMATION – ACRONYMS

An **acronym** is formed by using the first letter of each word in a phrase.



**Effective** way to condense phrases into shorter, more manageable terms.

## Word acronyms

are pronounced as single words.

E.g. *NASA* (National Aeronautics and Space Administration)

*UNESCO* (United Nations Educational, Scientific, and Cultural Organization)

*AIDS* (Acquired Immune-Deficiency Syndrome)

Can turn into ordinary words over time:  
speakers become unaware of their origin.

E.g. *laser* (light amplification by stimulated emission of radiation)

*radar* (radio detecting and ranging)

## Spelling acronyms

are pronounced as sequences of letters.

E.g. *EU*

European Union

*PR*

Public Relations

*DVD*

Digital Versatile Disc

# SUMMARY

- **Back-formation** is the process of creating a new word by removing a supposed affix.
- **Compounding** is the combination of two or more lexical morphemes to create a new word.
- **Conversion** assigns an existing word to a different lexical category, without changing its form.
- **Clipping** shortens a word by removing a section of it.
- **Blending** creates new words by merging together the shortened parts of two existing words.
- **Acronyms** are formed by using the first letter of each word in a phrase.

## EXERCISE 6

Identify the word formation processes involved (prefixation, suffixation, compounding, conversion, clipping, blending, and acronym formation); more than one process may be present.

*photo*

*remake*

*scuba*

*blackbird*

*radar*

*mishap*

*party hat*

*babysitter*

*armchair*

*RAM*

*infotainment*

*app*

*Eurasia*

*to butter*

*unhappier*

*to comb*

*deactivate*

## EXERCISE 6

Identify the word formation processes involved (prefixation, suffixation, compounding, conversion, clipping, blending, and acronym formation); more than one process may be present.

*photo* clipping (from photograph)

*remake* prefixation (re - + make)

*scuba* acronym (self-contained under-water breathing apparatus)

*blackbird* compounding (black + bird)

*radar* acronym (radio detection and ranging)

*mishap* blending (mistake + happening)

*party hat* compounding (party + hat)

*babysitter* compounding (baby + sitter) + suffixation (sit + -er)

*armchair* compounding (arm and chair)

*RAM* acronym (Random Access Memory)

*infotainment* blending (information and entertainment)

*app* clipping (application)

*Eurasia* blending (Europe and Asia)

*to butter* conversion (butter, n.)

*unhappier* prefixation (un- + happy) + suffixation (unhappy + -er)

*to comb* conversion (comb, n.)

*deactivate* prefixation (de- + activate) + suffixation (active + -ate)

# ALLOMORPHS

**Morphemes** are the smallest meaningful linguistic unit.

They possess

form

meaning

However, they can be **pronounced** in multiple different ways.

**Allomorphs**: different realizations of a same morpheme, often associated with specific phonetic contexts.

- The indefinite article has 2 allomorphs: **a** before vowels, **an** before consonants. There is a single morpheme conveying this grammatical meaning, realized by two distinct allomorphs.
- The prefix -in has 4 allomorphs: **in-** (*inactive*), **im-** (*impossible*), **il-** (*illegal*), **ir-** (*irregular*). The variation occurs due to phonetic reasons (assimilation).
- The Italian prefix in- has 4 allomorphs: **in-** (*inattivo*), **im-** (*impossibile*), **il-** (*illegale*), **ir-** (*irregolare*).



## ALLOMORPHS (2)

Although it may appear that the **plural morpheme** is simply represented by the suffix -s, three distinct **allomorphs** are actually used: [s], [z], and [əz]. E.g.: *cats* ~ *dogs* ~ *judges*.



The selection depends on the **phonetic context**.

Can you predict these contexts?

What's the reason behind this complementary distribution?

# ALLOMORPHS (3)

The meaning of plural is conveyed by three allomorphs that occur in **complementary distribution** (phonologically conditioned).

**[s]** after voiceless sounds.

E.g.: *cats* ~ *tops* ~ *pots* ~ *packs* ~ *cliffs*.

**[z]** after voiced sounds.

E.g.: *dogs* ~ *tabs* ~ *bags* ~ *clothes* ~ *rails*.

**[əz]** after sibilants (alveolar and post-alveolar fricative consonants: /s, z, ʃ, ʒ, tʃ, dʒ/).

E.g.: *judges* ~ *classes* ~ *cages*.

Motivation: tendency to minimize **articulatory effort** while maximizing **perceptual distinctness**.



Words need to be easy to pronounce while still being clearly recognizable.

- [s]/[z] after voiceless/voiced sounds: the vocal folds don't need to change their configuration.
- [əz] after [s ]/[z]: ensures clarity, making the plural forms easier to perceive.

# EXERCISE 7

## Exercise on **Moodle**



## EXERCISE 8

Irarutu, an Austronesian language spoken in West Papua, Indonesia.

*adena* 'my mother'

*odena* 'your mother'

*idena* 'his/her mother'

*ambamba* 'my elder brother'

*ombamba* 'your elder brother'

*imbamba* 'his/her elder brother'

*afrag* 'my hand'

*ofram* 'your hand'

*ifra* 'his/her hand'

*atgrag* 'my ear'

*otgram* 'your ear'

*itgra* 'his/her ear'

*aftag* 'my stomach'

*oftam* 'your stomach'

*ifta* 'his/her stomach'

---

1. Irarutu has different strategies for expressing possession in the case of kinship and possession in the case of body parts. Based on the data above, identify the morphemes used to express each type of possession.

My (body part):

Your (body part):

His/her (body part):

My (kinship):

Your (kinship):

His/her (kinship):

2. Given that *mce* means 'eye' and that *nfut* means 'younger sibling', how would you say each of the following?

his/her younger sibling:

my eye:

his/her eye:

## EXERCISE 8

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*atgrag* 'my ear'

*otgram* 'your ear'

*itgra* 'his/her ear'

*aftag* 'my stomach'

*oftam* 'your stomach'

*ifta* 'his/her stomach'

---

1. Irarutu has different strategies for expressing possession in the case of kinship and possession in the case of body parts. Based on the data above, identify the morphemes used to express each type of possession.

My (body part): **a-g**

Your (body part): **o-m**

His/her (body part): **i-**

My (kinship): **a-**

Your (kinship): **o-**

His/her (kinship): **i-**

2. Given that *mce* means 'eye' and that *nfut* means 'younger sibling', how would you say each of the following?

his/her younger sibling: **infut**

my eye: **amceg**

his/her eye: **imce**

## EXERCISE 9

The following data are from Cebuano, a Philippine language.

*[bisaya]* ‘a Visayan’

*[iŋlis]* ‘an Englishman’

*[tagalog]* ‘a Tagalog person’

*[ilokano]* ‘an Ilocano’

*[sibwano]* ‘a Cebuano’

*[binisaya]* ‘the Visayan language’

*[iniŋlis]* ‘the English language’

*[tinagalog]* ‘the Tagalog language’

*[inilokano]* ‘the Ilocano language’

*[sinibwano]* ‘the Cebuano language’

---

How is the name of a language derived from the name of an ethnic group?

## EXERCISE 9

The following data are from Cebuano, a Philippine language.

[*bisaya*] 'a Visayan'

[*iŋlis*] 'an Englishman'

[*tagalog*] 'a Tagalog person'

[*ilokano*] 'an Ilocano'

[*sibwano*] 'a Cebuano'

[*binisaya*] 'the Visayan language'

[*ininlis*] 'the English language'

[*tinagalog*] 'the Tagalog language'

[*inilokano*] 'the Ilocano language'

[*sinibwano*] 'the Cebuano language'

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How is the name of a language derived from the name of an ethnic group?

To derive the name of the language, **in** is added to the name of the ethnic groups.

- a) If the name of the ethnic group begins with a consonant, it is added as an **infix** after the first consonant.
- b) If the name ethnic group begins with a vowel, it is added as a **prefix**.

# EXERCISE 10

Consider the following data from Kwakum, a Bantu language spoken in Cameroon.

/sɛbɔmmɛ/ 'we bought (a long time ago)'

/ɔbɔmmɛ/ 'you (sg) bought (a long time ago)'

/sɛbɔmkɔ/ 'we bought (recently)'

/yɛbɔmkɔ/ 'they bought (recently)'

/sɛbɔmkowɛɛ/ 'we did not buy (recently)'

/nɛbɔmkɔ/ 'you (pl) bought (recently)'

/nyɛbɔmmɛ/ 'I bought (a long time ago)'

/abɔmmɛwɛɛ/ 's/he did not buy (a long time ago)'

---

1. What are the Kwakum morphemes for each of the following concepts?

Buy:

Negation:

He/she:

They:

Recent past:

I:

We:

Remote past:

You (sg):

You (pl):

2. How would you say the following in Kwakum?

I bought (recently):

I didn't buy (recently):

They bought (a long time ago):





# EXERCISE 10

Consider the following data from Kwakum, a Bantu language spoken in Cameroon.

/sɛbɔmmɛ/ 'we bought (a long time ago)'

/sɛbɔmko/ 'we bought (recently)'

/sɛbɔmkowɛɛ/ 'we did not buy (recently)'

/nyɛbɔmmɛ/ 'I bought (a long time ago)'

/ɔbɔmmɛ/ 'you (sg) bought (a long time ago)'

/yɛbɔmko/ 'they bought (recently)'

/nɛbɔmko/ 'you (pl) bought (recently)'

/abɔmmɛwɛɛ/ 's/he did not buy (a long time ago)'

---

1. What are the Kwakum morphemes for each of the following concepts?

Buy: **bɔm**

Negation: **-wɛɛ**

He/she: **a-**

They: **ye-**

Recent past: **-ko**

I: **nye-**

We: **sɛ-**

Remote past: **-mɛ**

You (sg): **ɔ-**

You (pl): **nɛ-**

2. How would you say the following in Kwakum?

I bought (recently): **nyɛbɔmko**

I didn't buy (recently): **nyɛbɔmkowɛɛ**

They bought (a long time ago): **yɛbɔmmɛ**



# EXERCISE 11

Consider the Indonesian reciprocal forms below. (Reciprocal denotes an action that two or more people or things do to each other)

## ROOT

*tolong* 'help'

*pukul* 'hit'

*kunjung* 'visit'

*peluk* 'embrace'

*telpon* 'telephone'

## RECIPROCAL

*tolong-menolong* 'help each other'

*pukul-memukul* 'hit each other'

*kunjung-menjunjung* 'visit each other'

*peluk-memeluk* 'embrace each other'

*telpon-menelpon* 'telephone each other'

---

1. Given these data, can you derive the rule for forming the reciprocal in Indonesian? Hint: pay attention to the places of articulation.

2. Given this rule, how would you form the reciprocal form of the following roots?

Tikam 'stab':

pinjam 'borrow':

tawar 'bargain':



# EXERCISE 11

Consider the Indonesian reciprocal forms below. (Reciprocal denotes an action that two or more people or things do to each other)

## ROOT

*tolong* 'help'

*pukul* 'hit'

*kunjung* 'visit'

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## RECIPROCAL

*tolong-menolong* 'help each other'

*pukul-memukul* 'hit each other'

*kunjung-menjung* 'visit each other'

*peluk-memeluk* 'embrace each other'

*telpon-menelpon* 'telephone each other'

---

1. Given these data, can you derive the rule for forming the reciprocal in Indonesian? Hint: pay attention to the places of articulation.

The root is **reduplicated**, then a prefix **meN-** is added to it. The capital N here means that there is a nasal which **assimilates** to the place of articulation of the first consonant of the root, which is then **dropped**.

Tolong: the initial t- is replaced by the prefix **men-** (/t/ and /n/ are alveolars). Pukul: p- is replaced by **mem-** (/p/ and /m/ are bilabials). Kunjung: /k/ is replaced by **meŋ** (/k/ and /ŋ/ are velars).

2. Given this rule, how would you form the reciprocal form of the following roots?

Tikam 'stab': **tikam-menikam**

pinjam 'borrow': **pinjam-meminjam**

tawar 'bargain': **tawar-menawar**

