

729G49 Språk och datorer (VT2024)

Morphology

Linguistics 3 – Morphemes and the structure of words

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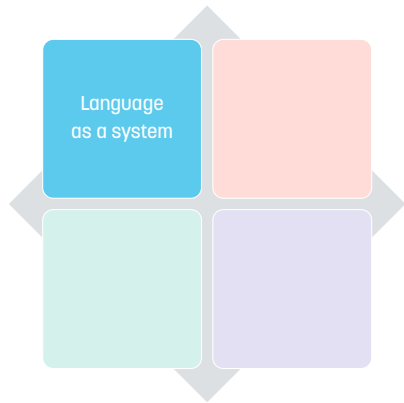
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Based on material from
Evelina Rennes.

Reminder: Language as a system

- **Phonology**: the study of sounds in a language and how they are organized
- **Morphology**: the study of how words are built up from “smallest meaningful units”
- **Syntax**: the study of how words combine to form phrases and sentences
- **Semantics**: the study of the meaning of linguistic expressions



“

Och på något magiskt sätt bidrar vissa av **morfemen** till att **göra vårt ordför-råd större och flexiblare**. Det är till exempel skillnad på avgå, ingå, pågå, utgå och framgå – där av-, in-, på-, ut- och fram- och gå alla är morfem. Men frågan är vad ‘gå’ egentligen betyder här, innerst inne. En del morfem har det jobbigt med självbilden.

”

— Lars Melin, [📄 Språktidningen](#)

This lecture

■ What are morphemes?

- Simple vs. complex words

■ Types of morphemes

- Free vs. bound
- Lexical vs. grammatical

■ Derivation and Inflection

- Affixes
- Stem vs. root
- Reduplication

■ Compounding

- Tree diagrams

What are morphemes?



Phonology and phonemes

- A **phoneme** (*fonem*) is the smallest unit that can distinguish one word from another.
 - “minsta **betydelseskiljande** enheten”
- /b/ and /p/ are phonemes in Swedish. → /bil/ vs. /pil/
- /s/ and /ʃ/ (sj-sound) are phonemes in Swedish. → /sy/ (sy) vs. /ʃy/ (sky)
- /z/ (voiced ‘s’) is **not** a phoneme in Swedish. ?? /sy/ vs. /zy/
 - But it is a phoneme in English: *seal* – *zeal*

Morphology and morphemes

- A **morpheme** (*morfem*) is the smallest meaningful unit of a language.
 - “minsta **betydelsebärande** enheten”

<i>hus</i>	One morpheme
<i>mun-spel</i>	Two morphemes
<i>o-drick-bar-t</i>	Four morphemes

- This definition is not unproblematic...
 - What is the meaning of **körs** in *körsbär*?
 - Is **-on** a meaningful unit? Since there is *hallon*, *nypon*, *päron*, *lingon*, *plommon*, ...

Source & more info: Josefsson, p.105

Morpheme \neq Syllable

- A morpheme can have many syllables (*stavelser*).

<i>hus</i>	One morpheme	One syllable
<i>elefant</i>	One morpheme	Three syllables
<i>kalabalik</i>	One morpheme	Four syllables

- A morpheme does not need to have *any* syllables.

<i>grön-t</i>	Two morphemes	One syllable
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↑
does not have
its own syllable

Simple vs. complex words

- Words with **one morpheme** are morphologically **simple**.
- Words with **two or more morphemes** are morphologically **complex**.

<i>motor</i>	simple	
<i>motorer</i>	complex	<i>motor-er</i>
<i>bilmotor</i>	complex	<i>bil-motor</i>

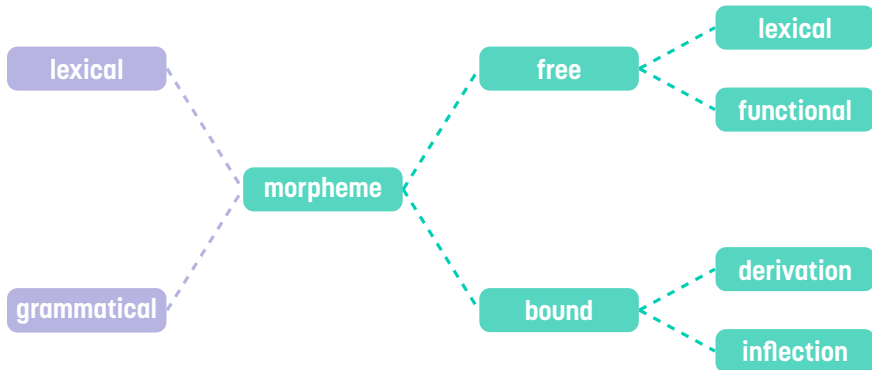
- **Simple or complex?**

<i>polisen</i>	complex	<i>polis-en</i>
<i>svårväckt</i>	complex	<i>svår-väck-t</i>
<i>kvinna</i>	simple	

Types of Morphemes

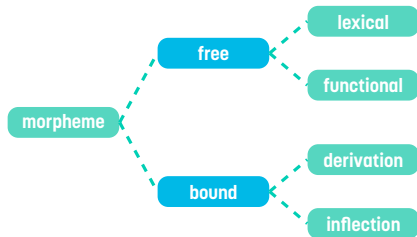


Types of morphemes



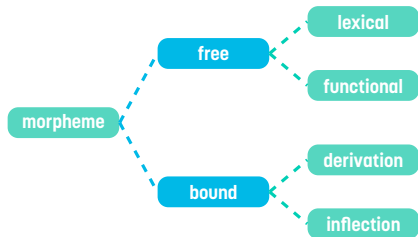
Free vs. bound morphemes

- **Free morphemes** (*fria morfem*) can form a word on their own.
 - *bil, jord, motor*
- **Bound morphemes** (*bundna morfem*) always need another morpheme to attach to.
 - *-ar, -ning, -s, -a, o-*



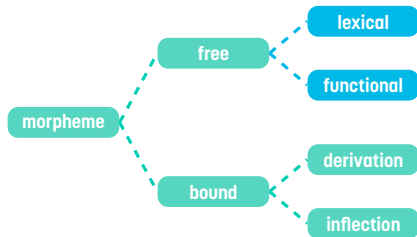
Free vs. bound morphemes: Examples

- *Bil*
 - Simple word with **one free** morpheme
- *Bilar*
 - Complex word with **one free** morpheme *bil* and **one bound** morpheme *-ar*
- *Lastbilar*
 - Complex word with **two free** morphemes *last* and *bil* and **one bound** morpheme *-ar*



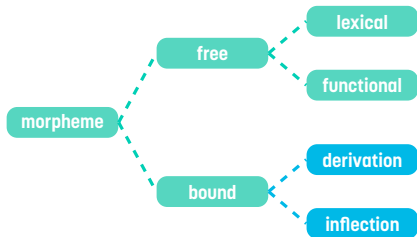
Free morphemes: lexical vs. functional

- **Lexical** (*lexikala*) morphemes carry the main semantic “content.”
 - *flicka, hus, sitta, lång, ledsen*
 - **Open class** words
- **Functional** (*funktionella*) morphemes perform grammatical functions.
 - *en, och, på, mig*
 - **Closed class** words



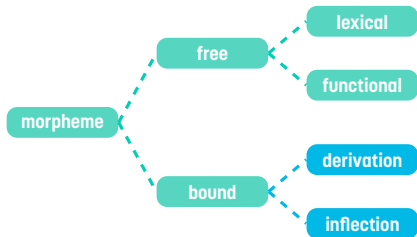
Bound morphemes: derivation vs. inflection

- **Derivation** (*avledning*) creates new meanings or changes the part-of-speech.
 - *-het, -bar, -lig*
 - *av-, in-, fram-, o-*
- **Inflection** (*böjning*) signals grammatical properties.
 - *-a, -ar, -en, -et, -na*

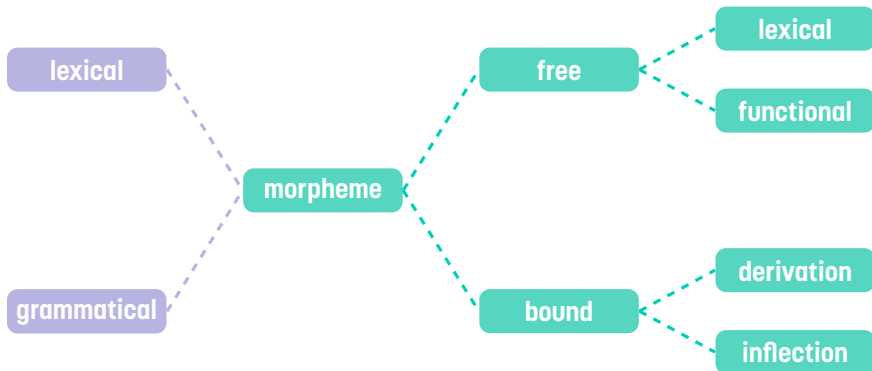


Bound morphemes: derivation vs. inflection

- *bekväm* → *obekväm*
 - *o-* is a **derivational prefix** (*avledningsprefix*)
 - Creates new meaning
- *bekväm* → *bekväma*
 - *-a* is an **inflectional suffix** (*böjningssuffix*)
 - Signals plural agreement with a noun

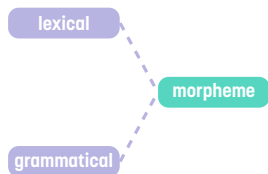


Lexical vs. grammatical morphemes



Lexical vs. grammatical morphemes

- **Lexical** (*lexikala*) morphemes are rich in meaning.
 - *flicka, hus, sitta, lång, ledsen*
- **Grammatical** (*grammatiska*) morphemes perform grammatical functions.
 - *en, att, till, -dom, -het, o-, av-*
 - They modify and structure the lexical content.

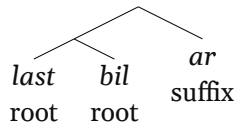
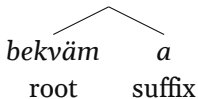


Derivation and Inflection



Roots and affixes

- A **root (rot)** is a free morpheme that can stand on its own.
 - e.g. *bil*, *gå*, *bekväm*
- An **affix** is a bound morpheme that must be combined with a root.
 - e.g. *-ar* in *bilar*



Some special cases

⚡ **Bound roots?** Some roots “lack” a vowel when they are combined with affixes.

– *flickv*än, *häm*tmat, *odr*ickbart; but *flick*a, *häm*ta, *drick*a

🦷 A **fossilized morpheme** (*restmorfem*) is a root that can no longer stand on its own.

– e.g. *körs* in *körs*bar

– Also called “cranberry morpheme” because *cran* in *cranberry* is an English example.

🔗 An **interfix** (*fogemorfem*) is a morpheme that goes between **two** morphemes.

– *dag*s*kass*a, *kyrk**o*gård, *gat**u*kök

Prefix and suffix

Reminder: An **affix** is a **bound morpheme** that must be combined with a root.

- A **prefix** attaches before the root.
 - *olik*, *avgå*, *utbilda*
- A **suffix** attaches after the root.
 - *bilar*, *huset*, *likhet*, *avhämtning*
- A **simulfix** changes vowels within the root.
 - *broder* → *bröder*
 - This is a bit of a tricky one; we won't look at this in detail...

Infix and circumfix

- An **infix** attaches within the root.
- Common in Austronesian languages, e.g. Bontoc (Philippines):
 - *kilad* ‘red’ + *-um-* ‘to become’ → *kumilad* ‘to become red’
- “**Expletive infixation**” in English
 - e.g. *abso-bloody-lutely*
- A **circumfix** attaches around the root (i.e. both before and after).
 - e.g. English *enlighten*

Stem vs. root

- **Inflection** modifies words based on their **stem** (*stam*).

stem \neq root

- A stem can consist of several roots, or root + affixes.
 - *avslutade* = *av* (prefix) + *sluta* (root) + *de* (suffix)
= *avsluta* (stem) + *de* (inflectional suffix, past tense)
 - *brandbilar* = *brand* (root) + *bil* (root) + *ar* (suffix)
= *brandbil* (stem) + *ar* (inflectional suffix, plural)

Reduplication

- **Reduplication** is the process of duplicating the stem.
- Indonesian uses reduplication to mark the plural.
 - *buku* ‘book’ (singular) – *bukubuku* ‘books’ (plural)
- In Swedish, reduplication is used more in a syntactic sense.
 - *Det här är **mycket, mycket** farligt!*
 - ***Tackar tackar!***
 - *Vi **gick och gick** och kom **längre och längre** in i skogen.*

Root, inflection, or derivation?

- *kraftig*

kraft + ig

root + derivation

- *bluffakturorna*

bluff + faktur(a) + or + na

root + root + infl. + infl.

- *översvämmades*

över + svämma + de + s

root + root + infl. + infl.

Compounding



Compounding

- A **compound** (*sammansättning*) is a word that consists of more than one root.
- The morphological **head** (*huvudet*) determines the “basic meaning” of the compound.
 - *skoklack* = en sorts klack
 - *klacksko* = en sorts sko
- **Exocentric** compounds have meanings that are “outside” of their parts.
 - *rödstrumpa* ≠ en sorts strumpa, utan kvinnorrättskämpar

Principles for compounding in Swedish

- Only the last part of a compound inflects.
 - *biltvätt – biltvättar – biltvätten*
 - **bilartvätt, *bilentvätten*
- Final vowels often disappear in compounds.
 - *skjuta + bana → skjutbana, not *skjutabana*
 - *blomma + doft → blomdoft, not *blommadoft*
- Compounding sometimes introduces an interfix (*fogemorfem*).
 - *dagskassa, kyrkogård, gatukök*

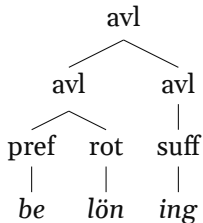
Lexical vs. compositional

- The meaning of compounds is usually **compositional** (*kompositionell*).
 - compositional: derived from (or ‘composed of’) its parts
 - e.g. *pepparkaksgubbe*
- Frequently used compounds may become **lexicalized** (*lexikaliserad*).
 - lexicalized: have become part of the lexicon (vocabulary)
 - e.g. *jordgubbe*

Tree diagrams

- We can use **tree diagrams** to describe the **internal structure** of complex words.

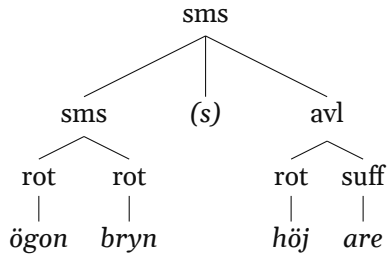
belöning
[[[be] [lön]] [ing]]



Tree diagrams

ögonbrynshöjare

[[[ögon] [bryn]] [(s)] [[höj] [are]]]



Wrapping Up



Morphology

- Morphology explains **how morphemes combine** to form words.
- Misspellings can sometimes be explained by the speaker assuming a wrong morphological structure.
 - *vägren* spelled as **väggren* assuming *väg + gren*
 - *nattduksbord* spelled as **nattuksbord* assuming **nattuk + s + bord*
- “Overgeneralization” of morphological rules often happens in children.
 - *Mamman: Det här blir väl rättvist. — Dottern: Nä, det blir felvist.*

Wrapping up

Before the seminar

Do the following exercises:

- *Övningsuppgifter* from the website
- Josefsson övningsbok chapter 3 (*ordbildning*)

Next time: Syntax - Phrases and constituents

Reading:

- Yule chapter 7–8, Josefsson chapter 6 (*ord – fraser*)

