
Arabic Morphology

Rudy Khalil

Morphology

- Derivational Morphology
- Inflectional Morphology
- Morphological Ambiguity

Reference : Semitic Linguistic Phenomena by Nizar Habash

Morphology

- Derivational Morphology
- Inflectional Morphology
- Morphological Ambiguity

Derivational Morphology

- Templatic Morphology

- Root

ك ت ب

k t b

- Pattern

ma12uw3

written

1A2i3

writer

- Word

مكتوب

maktuwb

written

كاتب

kAtib

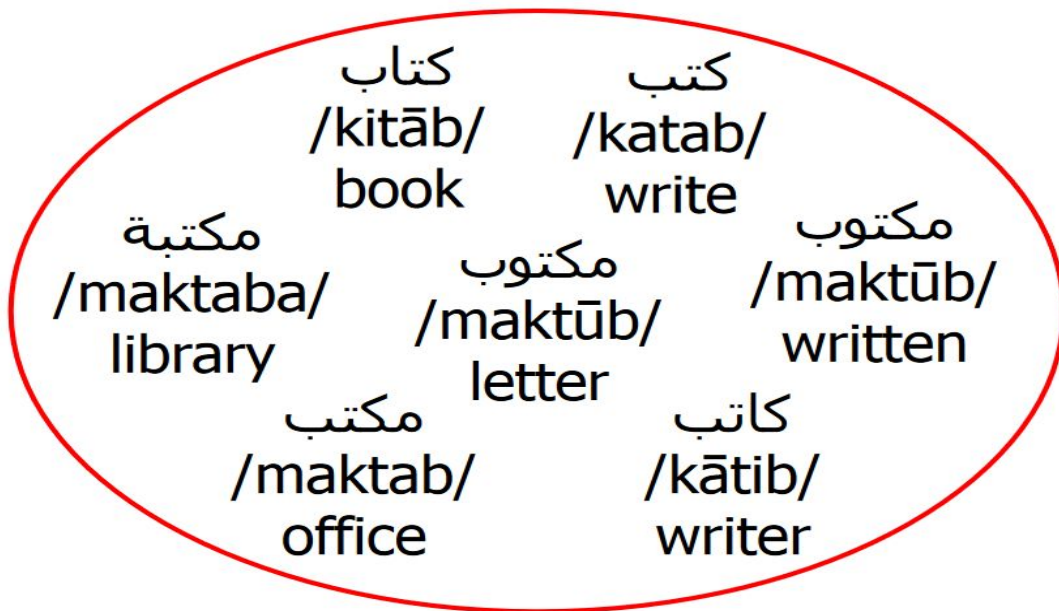
writer

Lexime Meaning = Root Meaning + Pattern Meaning

Derivational Morphology

Root Meaning

- ك ت ب KTB = “writing”



Derivational Morphology

Root Meaning

- LHM-1
- Notion of “meat”
 - لحم /laħm/
 - Meat
 - لحام /laħhām/
 - Butcher

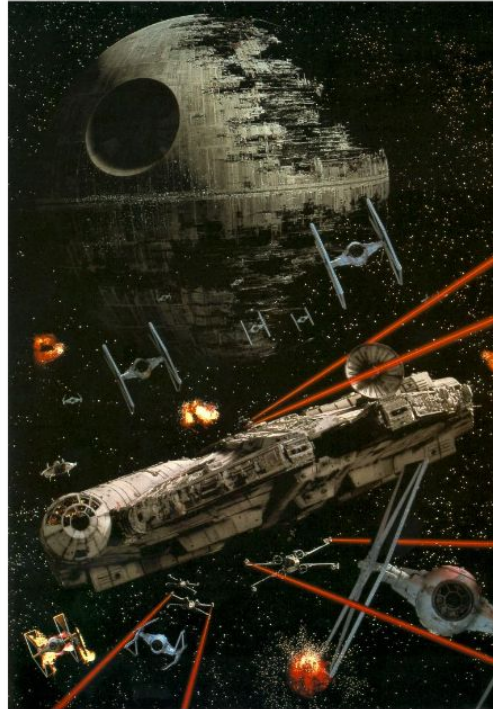
لحم
laħm



Derivational Morphology

Root Meaning

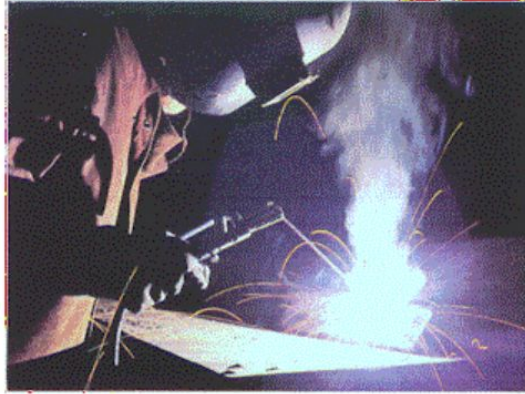
- LHM-2
- Notion of “battle”
 - ملحمة /malhama/
 - Fierce battle
 - Massacre
 - Epic



Derivational Morphology

Root Meaning

- LHM-3
- Notion of “soldering”
 - لحم /laḥam/
 - Weld, solder, stick, cling
 - التحم /iltaḥam/
 - Be welded/soldered/fused
 - ملتحم /multaḥim/
 - Welded, soldered, fused



Derivational Morphology

Root Meaning

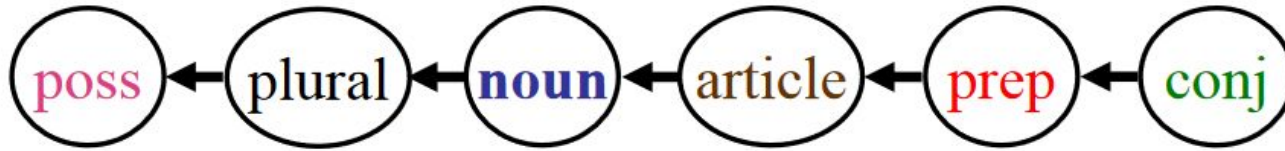
- **Same Root** of **different words** doesn't mean they have the **same meaning**
- You definitely need the *pattern meaning*
- This is why Arabic text is difficult to segment by a software

Morphology

- Derivational Morphology
- **Inflectional Morphology**
- Morphological Ambiguity

Inflectional Morphology

Nouns



وكبيوتنا

/wakabiyūtinā/

و + ك + بيوت + نا

wa+ka+biyūt+nā

and+like+houses+our

And like our houses

وللمكتبات

/walilmaktabāt/

و + ل + ال + مكتبة + ات

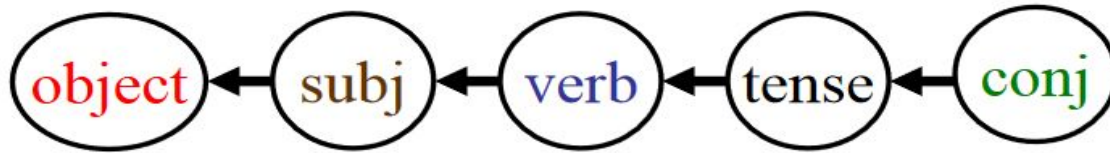
wa+li+al+maktaba+āt

and+for+the+library+plural

And for the libraries

Inflectional Morphology

Verbs



فقلناها

/faqulnāhā/

ف + قال + نا + ها

fa+qul+na+hā

so+said+we+it

So we said it.

وسنقولها

/wasanaqūluhā/

و + س + ن + قول + ها

wa+sa+na+qūl+u+hā

and+will+we+say+it

And we will say it

Morphology

- Derivational Morphology
- Inflectional Morphology
- Morphological Ambiguity

Morphology Ambiguity

- عقد Necklace
- عقد Decade
- عقد Contract
- عقد Held
- عقد Complicated (verb)
- عقد Knots

What is really going on here?!!!

Reference: Who knows!

Morphology Ambiguity

The rule of Diacritical marks (ء َ ِ ُ ْ ِ ْ ِ ْ):

- عُودُ o'qd Nicklace
- عِدَّةٌ i'qd Decade
- عَقْدٌ a'qd Contract
- عَقْدٌ a'qada Held
- عَقْدٌ a'kkada Complicated (verb)
- عُودٌ o'kad Knots

Morphology Ambiguity

In Arabic texts, mostly you won't see diacritics. You need to know them with the help of context.

Morphology Ambiguity

In Arabic texts, mostly you won't see diacritics. You need to know them with the help of context.

لإتقان البرمجة تحتاج إلى عقد من التدريب

To master programming you need a **decade** of practice

Thanks
