

Morphology:

Cross-linguistic variation

Linguistics 200

Spring 2006

Word formation types

- How are new words created? What is the structure of existing words?
- Morphology we have discussed so far (sequential)
 - Affixation (prefixation, suffixation)
 - Compounding
 - Reduplication
- Non-sequential (simultaneous) types of morphology
 - Portmanteau morphemes
 - Consonant or vowel substitution
 - Other simultaneous morphology

Portmanteau morphemes

- Single phonological representation contains meanings from two (or more) semantic categories
 - Textbook equates *portmanteau* with *blend*—p. 99 (e.g. *smog* < *smoke* + *fog*)
 - Grammatical portmanteau morphemes do not have such transparent origins
- An example from Tsek'ene (McLeod Lake dialect)

Verbal time categories in Athabaskan languages

- Athabaskan family (includes Tsek'ene, Witsuwit'en)f
- Tense/aspect/mood categories
 - imperfective (aspect)
 - perfective (aspect)
 - future (tense)
 - optative (“mood”) (similar to subjunctive in Romance languages)

A portmanteau morpheme in Tsek'ene

[ɣ] = voiced velar fricative

		<i>imperfective</i>	<i>optative</i>
1 sg	s-	əs-ts ^h əɣ	w-əs-ts ^h əɣi
2 sg	in-	in-ts ^h əɣ	w-in-ts ^h əɣi
3 sg		əts ^h əɣ	w-əts ^h əɣi
1 pl	ts'-	ts'-əts ^h əɣ	ts'-uts ^h əɣi
2 pl	ah-	ah-ts ^h əɣ	w-ahts ^h əɣi
3 pl	ɣ-	ɣ-əts ^h əɣ	ɣ-uts ^h əɣi

[w]/[u]- optative prefix

[è] = low-toned [e]

	<i>impf/optv</i>		<i>perfective</i>
1 sg	s-	i-	ɣits ^h èɣ
2 sg	in-		ɣints ^h èɣ
3 sg			ɣəts ^h èɣ
1 pl	ts'-		ts'ats ^h èɣ
2 pl	ah-		ɣahts ^h èɣ
3 pl	ɣ-		ɣats ^h èɣ

/i/- 1s perfective: simultaneously marks *both* person/number and perfective (a portmanteau morpheme)

(ɣ/ɑ- allomorphy in this paradigm)

Consonant or vowel substitution

- Sahaptin consonant symbolism
 - larger/more important/more intense/permanent – smaller/less important/less intense/temporary
 - q - k
 - n – l
 - ʔ - š – s
 - č – ts

Related pairs of words

n - l

mjánaš	‘child’	mjálas	‘baby’
?iníit	‘house’	?ilíit	‘shack, shed’
wjáanak ^w	‘abandon’	wjáalak ^w	‘abandon temporarily’

q – k, χ - x

náq'it	‘boundary, end’	lák'it	‘very end, tip’
láqawχ	‘glow (hot)’	káwx	‘shiny, gleaming’

č – ts or š – s

č'ím	‘sharp (blade)’	ts'ím	‘sharp (point)’
k ^w 'íští-	‘be stubborn, spoiled’	k ^w 'ístí-	‘(child) is stubborn, spoiled’
kalúwaš	‘unfinished bag, basket’	kalúwas	‘unfinished top edge (of basket)’

ɬ - s

χáɬja	‘sunflower’	χásja	‘wild celery’
ʔaɬá	‘finger’	ʔasá	‘fingernail’

ɬ - š

χ ^w áɬχ ^w aj- pam	‘Klickitat (Sahaptin) people of Wind R. area’	χ ^w ašχ ^w aj	‘blue jay’
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Ablaut

= Root-internal vowel substitution

English

<i>present</i>	<i>past</i>	<i>past participle</i>
sing	sang	have sung
ring	rang	have rung
drink	drank	have drunk

Ablaut in Witsuwit'en

<i>verb root</i>	<i>impf/opt</i>	<i>perfective</i>	<i>future</i>
-/qes/ 'scratch hard'	–[qes]	–[qez]	–[q <u>e</u> s]
-/qəz/ 'do with arms'	–[q <u>i</u> s]	–[qəz]	–[qəs]

Ablaut pattern:

/ə/ → /i/ in the imperfective/optative

/e/ → /ə/ in the future

(Also some root-final consonant changes.)

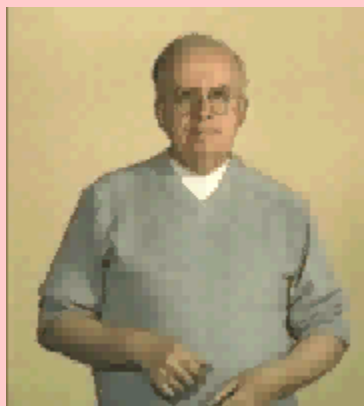
Simultaneous morphemes in ASL



MOTHER



GIRL



AUNT



WOMAN



FATHER



BOY



UNCLE



MAN

Some ASL morphemes

chin (location) ‘female’

forehead (location) ‘male’

Simultaneous morphemes in ASL

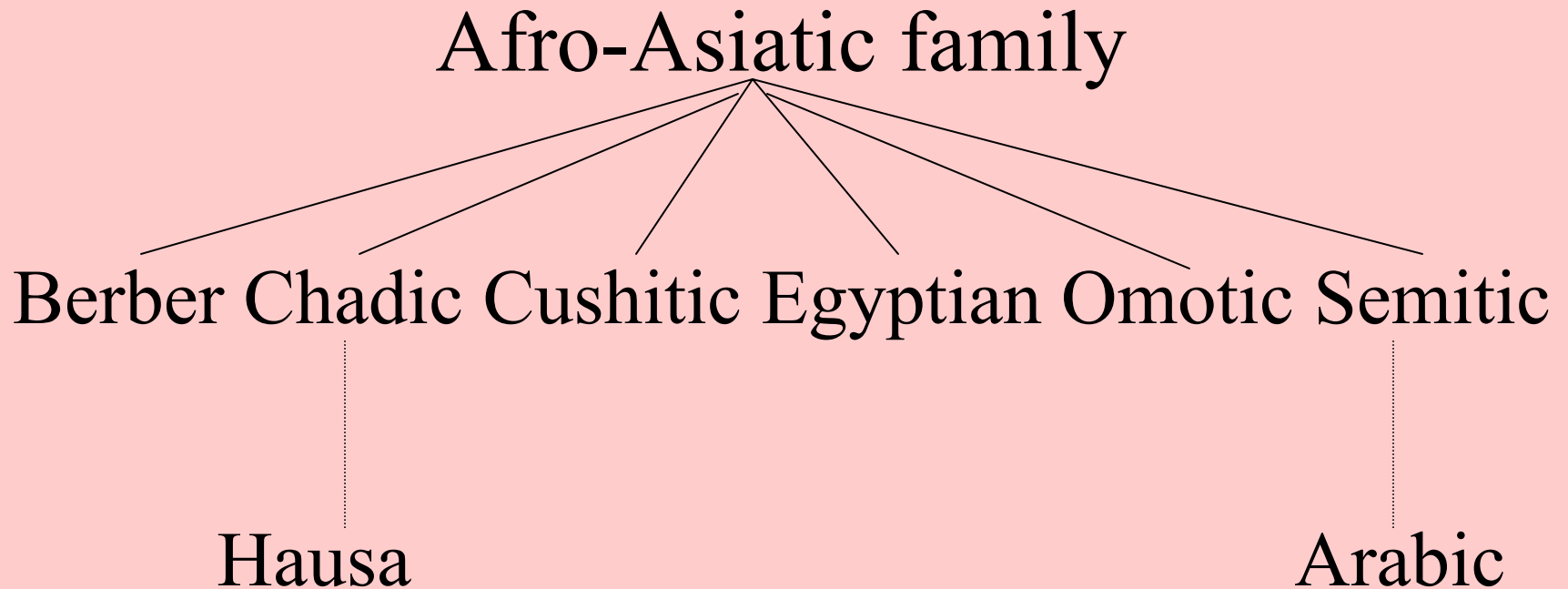
the morphemes in MOTHER:

chin (location) ‘female’



5 (handshape) ‘parent’

Simultaneous morphemes in Arabic



(SIL classification of Afro-Asiatic)

“Arabic”

- ‘Formal’
 - Classical Arabic
 - Modern Standard Arabic
- ‘Colloquial’ varieties

Classical Arabic

- variety spoken 7th-8th century A.D.
- spoken over wide area of Middle East
- used as ‘lingua franca’ (language of communication by speakers of other languages)

Modern Standard Arabic

- a.k.a. High Arabic, (Modern) Literary Arabic, Educated Spoken Arabic
- learned at school
 - experience of speaker from Abu Dhabi (United Arab Emirates)
 - grew up speaking Gulf Arabic
 - started learning MSA at age 10
 - all middle, high school classes taught in MSA
- what is taught at UW

Modern Standard Arabic

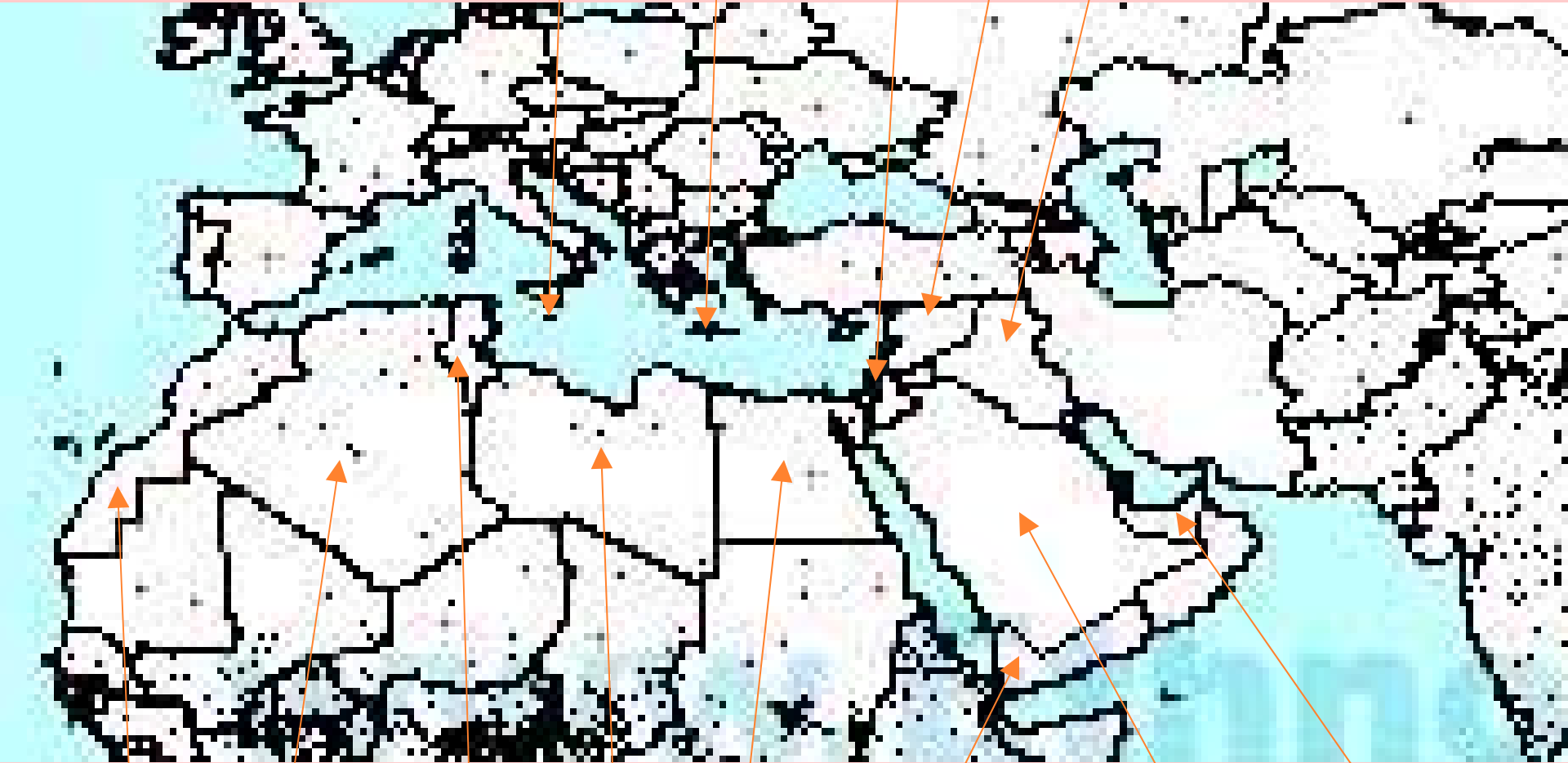
- ‘high’ functions, e.g.
 - broadcasting
 - giving a lecture
 - associated with religion (Islam)
- needed to succeed in government
- generally regarded as superior to colloquial
- not universally known in Arabic world
(varies with literacy rates)

Colloquial Arabic

- ‘low’ functions, e.g.
 - language of home
 - used among friends
- large number of dialects. major dialect areas:
 - Arabian peninsula, Persian Gulf, Jordan
 - Mesopotamia (Iraq, except south)
 - Syria-Lebanon-Palestine-Cyprus (‘Levantine’)
 - Egypt, Sudan
 - Maghrib (Maghrebi) (west of Egypt)
 - eastern (E. Algeria, Tunisia, Libya, Malta)
 - western (Morocco, W. Algeria)
 - Chad
- varieties at geographical extremes may be mutually unintelligible

Some predominantly Arabic speaking nations

Malta Cyprus Israel Syria Iraq



Morocco Algeria Tunisia Libya Egypt Yemen Saudi Arabia UAE

Consonant inventory

generalized colloquial Arabic inventory

	lab	lab- dent	inter- dent	dent	alv	pal	vel	uvu	phar	glot
stop	b			t d tʰ dʰ			k g	q		ʔ
fric		f	θ ð ðʰ	s z sʰ zʰ		š		χ ʁ	ħ ʕ	h
aff						č ĵ				
nasal					n					
lat				l						
trill					r					
glide	w					j				

upper articulator

lower articulator

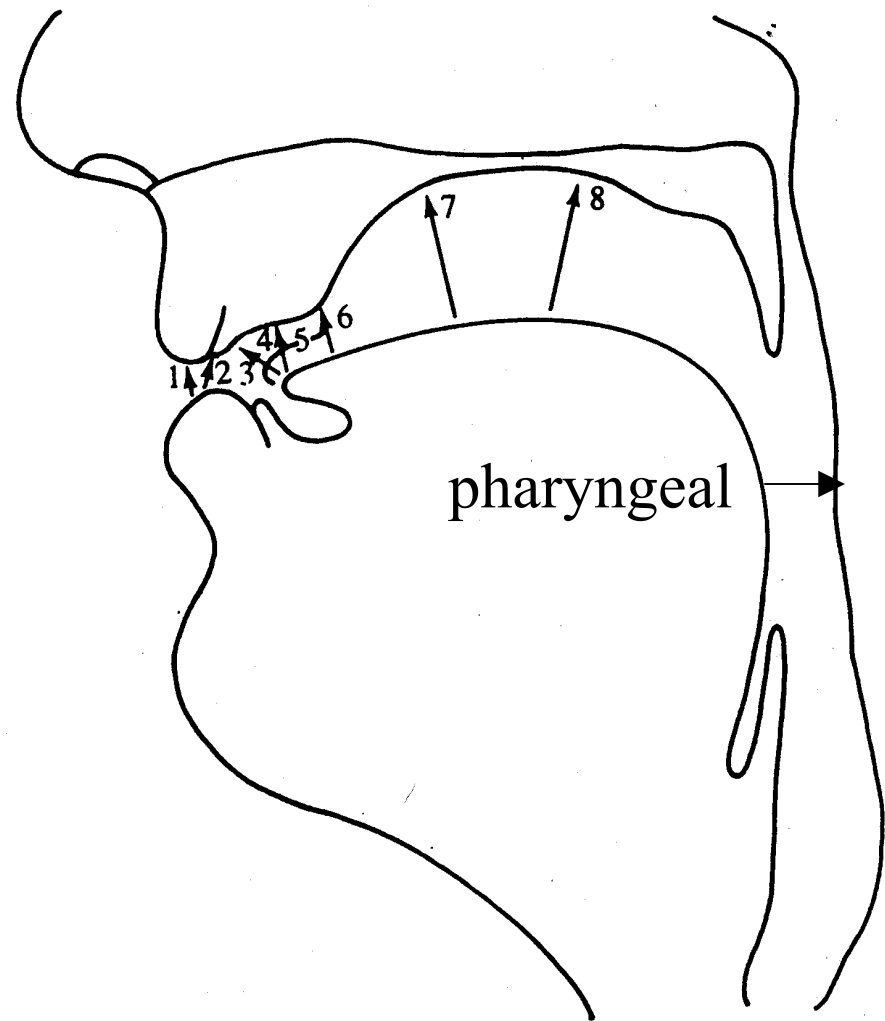






Figure 1.4 *Places of articulation: 1 Bilabial; 2 Labiodental; 3 Dental; 4 Alveolar; 5 Retroflex; 6 Palato-Alveolar; 7 Palatal; 8 Velar.*

Phonetic descriptions of some Arabic consonants

- [ħ] = voiceless pharyngeal fricative
- [ʕ] = voiced pharyngeal fricative
- [tʰ] = pharyngealized voiceless alveolar stop

Pharyngeal fricatives

- Gulf Arabic speaker
- [ħ] = voiceless pharyngeal fricative
 - [ħabb] ‘to kiss’ 
 - [s^ħaħan] ‘plate’ 
- cf. [h] = voiceless glottal fricative
 - [habb] ‘to blow’ 
 - [sahal] ‘meadow’ 

Pharyngeal fricatives

■ [ʕ] = voiced pharyngeal fricative

■ [ʕa:f] ‘to feel disgust’



■ [kaʕab] ‘heel’











■ cf. [ʔ] = glottal stop

■ [ʔakal] ‘(he) ate’



Pharyngealized consonants ([C^ʕ])

- Syrian Arabic speaker
- Plain vs. pharyngealized consonants:

■ [ti:n] ‘figs’		[t ^ʕ i:n] ‘mud’	
■ [dal] ‘he pointed’		[d ^ʕ al] ‘he stayed’	
■ [tal] ‘hill’		[t ^ʕ al ^ʕ] ‘he peeped’	
■ [su:s] ‘licorice’		[s ^ʕ u:s ^ʕ] ‘chick’	

Arabic verbal morphology

forms of ‘write’

	<i>perfective</i>		<i>imperfective</i>		<i>participle</i>	
	<i>active</i>	<i>passive</i>	<i>active</i>	<i>passive</i>	<i>active</i>	<i>passive</i>
<i>I</i>	katab	kutib	aktub	uktab	kaatib	maktuub
<i>II</i>	kattab	kuttib	ukattib	ukattab	mukattib	mukattab
<i>III</i>	kaatab	kuutib	ukaatib	ukaatab	mukaatib	mukaatab
<i>IV</i>	ʔaktab	ʔuktib	uʔaktib	uʔaktab	muʔaktib	muʔaktab
<i>V</i>	takattab	tukuttib	atakattab	utakattab	mutakattib	mutakattab
<i>VI</i>	takaatab	tukuutib	atakaatab	utakaatab	mutakaatib	mutakaatab
<i>VII</i>	nkatab	nkutib	ankatib	unkatab	munkatib	munkatab

	<i>perfective</i>		<i>imperfective</i>		<i>participle</i>	
	<i>active</i>	<i>passive</i>	<i>active</i>	<i>passive</i>	<i>active</i>	<i>passive</i>
<i>VIII</i>	ktatab	ktutib	aktatib	uktatab	muktatib	muktatab
<i>IX</i>	ktabab		aktabib		muktabib	
<i>X</i>	staktab	stuktib	astaktib	ustaktab	mustaktib	mustaktab
<i>XI</i>	ktaabab		aktaabib		muktaabib	
<i>XII</i>	ktawtab		aktawtib		muktawtib	
<i>XIII</i>	ktawwab		aktawwib		muktawwib	
<i>XIV</i>	ktanbab		aktanbib		muktanbib	
<i>XV</i>	ktanbay		aktanbiy		muktanbiy	

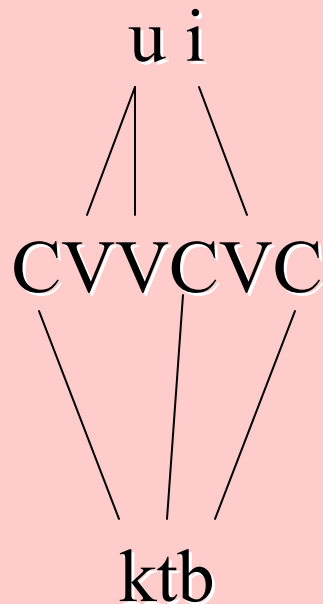
Morphemes

Each Arabic verb contains 3 intercalated morphemes:

<i>phonological component</i>	<i>semantic component</i>
1. consonants	verb root: lexical verb meaning
2. vowels (portmanteau morphemes)	tense (aspect) (imperfective, perfective)/ voice (active, passive)/ participle or non-participle
3. syllable structure (arrangement of consonants and vowels)	(<i>al-</i>) <i>awzaan</i> : causative, reciprocal, reflexive, etc.

Simultaneous morphology

Morphological structure of [kuutib] ‘was corresponded with’



perfective passive

III *wazn*: ‘to direct, strive to, act in conjunction with’

‘write’

Verb root (consonants)

# of Cs	example	
3	/ktb/	‘to write’
	/ksb/	‘to earn’
	/ʕlm/	‘to know’
2	/sm/	‘to poison’
4	/dħrǰ/	‘to roll’
1	/j/	‘to write the letter y’

[ħ] = voiceless pharyngeal fricative; [ʕ] = voiced pharyngeal fricative

Tense/voice/participle (vowels)

/a/	perfective active
/u i/	perfective passive
/a/-, /a i/, /a u/, /a/	imperfective active
/u/-, /a/	imperfective passive

Sample *awzaan*

causative, reciprocal, reflexive, etc.

			/ktb/
I	CVCVC		‘write’
II	CVCCVC	‘to do frequently or intensively, to consider somebody as...’ (causative) (frequently overlaps with Form IV)	‘cause to write’
III	CVVCVC	‘to direct, strive to, act in conjunction with...’	‘correspond’
IV	?VCCVC	‘to shape into..., induce, cause to do...’ (causative)	‘cause to write’
V	tVCVCCVC	‘to become..., to do to oneself, to claim to be...’	

Morphology summary

- Morphological competence. Native speakers know
 - which words are well-formed
 - meanings of multi-morphemic words
 - other properties of words (e.g. lexical category)
- Morphological analysis
 - proceeds by comparing related words
- Various strategies for forming words in different languages
- Types of morphology (word formation)
 - sequential
 - affixation
 - simultaneous