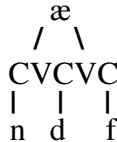# Autosegmentalism in Chaha

Afro-Asiatic, Ethiopia, 130,00 speakers; Data from McCarthy 1983, Petros Banksira 2000.

Instructions
- Develop an autosegmental analysis in OT of the following three morphemes of Chaha and how they're realized: propose underlying forms for each affix and account for whether and where they are realized
- You can assume that consonant features and vowel features are on different tiers.

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        æ
       / \
| [nædæf] might look like CVCVC, where, e.g., æ abbreviates [+low, +front…].
       |  |  |
       n  d  f
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- [nædæf] might look like CVCVC, where, e.g., æ abbreviates [+low, +front…].
- This will seem weird for labial and palatal secondary articulations on consonants (C^w, C^j), which are typically treated as adding the vowel-ish features [+round] and [+hi] (or [+front], or both): how can you add features from one tier to the other tier? For purposes of this assignment, pretend that features come in vowel and consonant versions, so labialization actually involves adding [+round$_C$], and palatalization [+hi$_C$].
- Additional pointers can be found below.

3rd person singular masculine object affix

he Ved	he Ved him	
dænæg	dænæg^w	'hit'
nædæf	nædæf^w	'sting'
k'ænæf	k'ænæf^w	'knock down'
nækæb	nækæb^w	'find'
nækæs	næk^{w}æs	'bite'
kæfæt	kæf^{w}æt	'open'
bækær	bæk^{w}ær	'lack'
k'æt'ær	k'^{w}æt'ær	'kill'
bænær	b^{w}ænær	'demolish'
mæsær	m^{w}æsær	'seem'
æræs	æræs	'build'
sædæd	sædæd	'chase'
næt'ær	næt'ær	'separate'

- Assume that the 'he Ved' form is the same as the underlying form of the verb root. That is, past tense and 3rd-person-singular-masculine <u>subject</u> don't add any affixes.
  - (The above can't really be true, because the vowels seem to constitute a morpheme; but we'll ignore that.)
- Assume the difference between C and C^w is that C^w is [+round$_C$].

Feminine subject (imperative) affix

V! (masc. subject)	V! (fem. subject)	
nəmæd	nəmædʲ	'love'
nək'ət'	nək'ət'ʲ	'kick'
nəkəs	nəkəsʲ	'bite'
gəræz	gəræzʲ	'be old'
wət'æk'	wət'æk'ʲ	'fall'
fəræx	fəræxʲ	'be patient'
bənær	bənær	'demolish'
k'ət'ær	k'ət'ær	'kill'
nəkəb	nəkəb	'find'
bəkər	bəkər	'lack'
sənæb	sənæb	'spin'

- Assume that the 'V!' form is the same as the underlying form of the verb root. Imperative and masculine-subject don't add any affixes.
  - (Again, this is not totally true, as you can see from the vowels.)
- Assume the difference between C and C^j is that C^j is [+hi$_C$].
- Assume a constraint *{rʲ, bʲ}, arbitrary as it seems.

A wrinkle to account for

V! (masc. subject)	V! (fem. subject)	
gʲækʲæt	gʲækʲætʲ	'accompany'
sʲəgær	sʲəgær	'change'
tʲəfʷær	tʲəfʷær	'scratch & mark'
gʲəkʲær	gʲəkʲær	'straighten out'

he Ved	he Ved him	
mækʲær	mʷækʲær	'burn'
sʲæfær	sʲæfʷær	'cover'

Impersonal affix

he Ved	impersonal V	
kæfæt	kæfʷætʲ	'open'
nækæs	nækʷæsʲ	'bite'
t'æbæs	t'æbʷæsʲ	'fry'
dæmæd	dæmʷædʲ	'join'
tæzrabæt'	tæzrabʷæt'ʲ	'have hope for'
bænær	bʷænær	'demolish'
k'æt'ær	k'ʷæt'ær	'kill'
sʲægær	sʲægʷær	'change'
nækæb	nækæbʷ	'find'
sænæb	sænæbʷ	'spin'
tʲæfʷær	tʲæfʷær	'scratch & mark'
gʲækʲær	gʲækʲær	'straighten out'
bætæx	bætæxʷ	'dig out'
axʷænæk'	axʷænæk'ʷ	'take off the clothes'
dænæg	dænægʷ	'hit'

- Again, assume that the 'he Ved' form is the same as the underlying form of the verb root.

Another wrinkle to account for

V! (masc. subject)	*V! (fem. subject)*	
bætət	bætʲətʲ	'be wide'
fætət	fætʲətʲ	'be partial'
nəzæz	nəzʲæzʲ	'dream'
nək'ək'	nək'ʲək'ʲ	'take apart'
ædəd	ædʲədʲ	'cut peas/lentils'
æsəs	æsʲəsʲ	'sweep'
səkək	səkʲəkʲ	'plant in the ground'

he Ved	*he Ved him*	
akæk	akʷækʷ	'scratch'

he Ved	*impersonal V*	
sækæk	sækʷækʷ	'plant in the ground'
gæmæm	gæmʷæmʷ	'chip the rim'
məræqæq	məræqʷæqʷ	'scratch in a straight line'
bərægæg	bərægʷægʷ	'be startled'
k'ak'a	k'ʷak'ʷa	'tie tightly'
gərædæd	gʷərædʲædʲ	'cut in big pieces'
k'əmamær	k'əmʷamʷær	'cheat'
tægmæmæt'	tægmʷæmʷæt'ʲ	'rinse'
tata	tʲatʲa	'twist a rope'
at'at'a	at'ʲat'ʲa	'rinse'
dæmæd	dæmʷædʲ	'join'