## Some thoughts on Oaxaca Chontal morphophonology and historical phonology

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The 17th Sergei Starostin Memorial Conference on Comparative-Historical Linguistics (Moscow, HSE University, March 25, 2022)

# Highland Chontal (San Matías Petacaltepec) phonology [Turner & Turner 1971: 319-320]

	CONSONANTS						VOWELS			
		C	Central			Lateral		Front	Central	Back
Voiceless		_					High	i		u
Obstruent	р	t, c	č	k			Mid	e		0
Glottalic	f'	c'	۲,	k'	9	1'	Low		a	
Continuant	f	s, N	š	W	h	1				
Voiced										
Obstruent	b	d		g						
Continuant	m	n	У	$\eta$ , w		İ				

#### Stop voicing

Voiceless stops /p/, /t/, /k/ are mainly found after voiceless fricatives, /k/ also word-finally. In other positions, voiceless consonants are rare and are found mostly in loans.

According to Turner and Waterhouse, there is much variation in voicing of stops between HCh dialects. SIL orthography does not distinguish voiced and voiceless stops.

I reconstruct only voiceless stops for for Proto-Chontal: \*p, \*t, \*k.

Their morphophonemic reflexes in Highland Chontal are |p|, |t|, |k|

#### Phonotactics

Stops /p/, /t/, /k/, /b/, /d/, /g/ are not found in preconsonantal position, except clusters /kw/ and /gw/: *i-škwá-hma?* 'empty', *ł-á-gwi* 'rain'.

These may be viewed as unitary phonemes  $/k^w/$  and  $/g^w/$ , also Turner's /W/ can be viewed as  $/h^w/$ .

/p/, /t/, /b/, /d/, /g/ are also banned word-finally.

/k/ is possible word-finally, but corresponds in this position to Lowland Chontal /h/: HCh *al-?ek* 'tree', LCh *?eh* 'tree'.

#### Spirantization

The ban on preconsonantal /k/ and /g/ results in the alternation of prevocalic /g/ with preconsonantal /h/:

```
|k| > g /_V
|k| > h /_C
```

a-mág-e? 'five (inanimate)' ~ a-máh-ši 'five (animate)' < |-mak-| al-?óg-ay 'below, under' ~ al-?óh-ga 'a little below' < |-nak-| di-máh-?ma 'it will get ripe' ~ di-mág-i 3 sg. pres. < |-mak-| di-f'áh-?ma 'he will go up' ~ ga-f'ág-i 1 sg. pres. < |-fak-|

#### Glottalization: plural suffix |-?| in nouns

```
PL.
SG.
l-á-?u 'eye' < |?u|
                                                     1-a-7ú7 < |7u-7|
l-á-?ay 'tooth' < |?ay|
                                                     l-a-?áy? < |?ay-?|
l-á-bof 'arrow' < |pof|
                                                     1-a-bóf' < |pof-7|
al-?ek 'tree, wood' < |?ek|
                                                     |lan-?\acute{e}k'| < |?ek-?|
l-á-š?mas 'ear' < |š?mac|
                                                     ł-a-šʔmác′ < |šʔmac-ʔ|
gál-moł 'sheep' < | moł |
                                                     láη-moł′ < |moł-ʔ|
```

```
di-bí-?ma 'it will burn' < |-pi-|
di-bi?é-?ma 'he will burn it' < |-pi-?e-|
di-škáy-?ma 'he will hurt himself' < |-škay-|
di-škay?é-?ma 'he will hurt it' < |-škay-?e-|
di-škáf-?ma 'it will lightning' < |-škaf-|
di-škaf'é-?ma 'he will cause him to blink' < |-škaf-?e-|
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```
di-dóh-?ma 'it will grow', ał-dóg-i pres 1 sg < |-dok-|
di-dok'é-?ma 'he will make it grow' < |-dok-?e-|
```

di-máh-?ma 'it will get ripe; it will be well cooked', di-mág-i pres 1 sg < |-mak-|
di-mak'-é-?ma 'he will cook it, bake it' < |-mak-?e-|

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d-enás-2ma 'he will point to it, point it out with his finger' < |-enac| d-enac'é-2ma 'he will point it out' < |-enac-2e|
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```
di-húł-?ma 'it will dry out' < |-huł-|
di-huł'é-?ma 'he will dry it out' < |-huł-?e-|
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```
i-fén-a 'loose, wiggly' < |-fen-|

di-fe?né-?ma 'it will shake, tremble, be loose' < |-fen-?e-|
```

It would be more elegant to posit glottalized nasals /m'/ and /n'/ instead of Turner's clusters /?m/ and /?n/:

```
|Vn?V| > /Vn'V/ is just another case of |VC?V| > /VC'V/
```

Some fixed collocations of two nouns have a morpheme |k| prefixed to the second noun.

It replaces definite articles *l-, \tau\_-, al-, gal-*.

Before vowels it is realized as /g/

Before consonants other than glottal stop it is realized as /h/ (this /h/ is written as part of a previous word in Turner's orthography)

Before a glottal stop, it merges with it as /k'/

All these are regular realizations of morphophonemic |k|.

Turner does not recognize it as a morpheme, treating it as a purely phonetic phenomenon, which is clearly wrong.

łibíba **g**-abóne 'the prickly pear cactus flower'

*l-abóne* 'the prickly pear cactus'

*líba-h múniš* 'the orange or lemon flower'

gal-múniš 'the lemon'

*líba k'-áwa* 'the squash flower'

gal-?áwa 'squash'

gal-bocáde **g-**agá?no 'widow'

*ł-agá?no* 'woman'

gal-bocáde-**h** šans 'widower'

gál-šans 'the man, male'

gal-bocáde-**h** gúwe 'widower'

a-gúwe? 'old, male'

*łébi k'-ék* 'the sawdust'

al-?ek 'the tree, the wood'

*łébi g-úŋa* 'the ashes'

*ł-úŋa* 'fire'

łinnéha 'animal'

łinnéha **g**-ahá? 'the fish'

*l-áha?* 'the water'

łinneha-h šimálo 'the wild animal'

gal-šimálo 'the wild one'

#### Stems in |-nk-|

```
|VnkV| > /V\eta V/ - this is where velar nasal comes from |VnkC| > /VNC/ - this is where voiceless nasals come from <math>|Vnk?V| > /V\eta k'V/
```

```
di-báM-?ma 'he will live at; he will be, exist' < |ti-pank-?ma|
ga-báŋ-a pres 1 sg < |ka-pank-a|
di-baŋk'é-?ma 'he will stay just a little while' < |ti-pank-?e-?ma|</pre>
```

#### Stems in |-nk-|

```
di-láM-?ma 'it will become solid, firm' < |ti-lank-?ma|
i-láM-ba 'fixed' < |i-lank-pa|
i-láŋ-e? 'it is firm, secure, fixed in place' < |i-lank-e?|
di-laŋk'é-?ma 'he will make/repair/fix/construct it' < |ti-lank-?e-?ma|
```

#### Stems in |-nk-|

no need to reconstruct \*ŋ
no need to reconstruct voiceless nasals

both go back to \*nk

### Thank you!