

Week 2

Phonology of Basque

October 27, 2009

1 Review

	Labial	Lamino-dental	Apico-alveolar	Palatal or postalveolar	Velar	Glottal
Nasal	m		n	ɲ		
Plosive	p b	t d		c ç	k g	
Affricate		tʃ	tʃ	tʃ		
Fricative	f	s	s	ʃ	(j)/x	h
Lateral			l	λ		
Trill			r			
Tap			ɾ			

Table 1: consonants of Basque

i		u
	e	o
	a	

Table 2: Vowels of Basque

2 Diphthongs and hiatuses

Diphthongs only occur when the first vowel is lower than the second.¹

- (1)
- a. *aita* 'father' → [ajta]
 - b. *behi* 'cow' → [bej]
 - c. *ohitura* 'habit' → [ojtura]

¹There are no words for [ow]

- d. *suin* 'son-in-law' → [s̺ujn]
- e. *jaun* 'lord' → [xawn]
- f. *euskara* 'Basque language' → [ew̺skara]

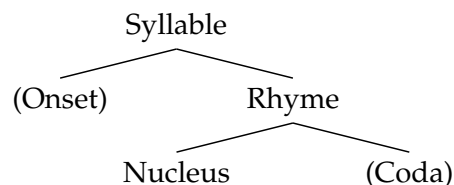
Hiatus occurs when the first vowel is either [i] or [u]...

- (2) a. *mendia* 'mountain' → [men.di.a]
- b. *mendien* 'of the mountains' → [men.di.en]
- c. *nazio* 'nation' → [na.ɟi.o]
- d. *ziur* 'sure' → [ɟi.ur]
- e. *burua* 'the head' → [bu.ru.a]
- f. *buruen* 'of the heads' → [bu.ru.en]
- g. *zuok* 'you guys' → [s̺u.ok]

... or when both vowels are identical:

- (3) a. *ahate* 'duck' → [a.a.te]
- b. *behe* 'below' → [be.e]
- c. *mihi* 'tongue' → [mi.i]
- d. *zoologiko* 'zoo' → [s̺o.o.lo.xi.ko]
- e. *zuhur* 'smart' → [s̺u.ur]

3 Syllable structure



3.1 Nuclei

Only vowels can be nuclei.

3.2 Onsets

On top of single consonants, onsets can only be a combination of [b p t d k g f] plus [r l], except [dl] and [tl]. Nonetheless, most cluster onsets are borrowings from French or Spanish.

- (4) a. *pobre* 'poor'
- b. *prakak* 'trousers'
- c. *triste* 'sad'
- d. *andre* 'woman'
- e. *krabelin* 'carnation'
- f. *gris* 'gray'
- g. *fresko* 'fresh/cool'
- h. *kable* 'cable'

- i. *plater* 'plate'
- j. *klarki* 'clearly'

k. *gladiatore* 'gladiator'

3.3 Codas

A consonant can only be interpreted as the coda of a syllable if

- (5) a. it is followed by another consonant, or
- b. it is the last sound of the word

Otherwise, a consonant followed by a vowel is interpreted as the onset of a new syllable.

- (6) a. A nasal, assimilating the place of articulation of the following consonant.
ka[m]po 'outside'; *a[n]dre* 'woman'; *a[ŋ]ka* 'leg'
- b. A liquid or rhotic
alde 'side'; *arto* 'corn'
- c. A fricative sibilant
esne 'milk'; *ehti* 'honey'; *ixtorio* 'story'
- (7) a. Nasal + sibilant fricative.
mendiranz-ko 'bound for the mountain'
- b. Liquid + sibilant fricative
belz-tu 'to make/become black'

Constraint on word-internal codas: stops and affricates cannot appear in word-internal codas. If they do, they are dropped or replaced with fricatives:

- (8) *aberats* 'rich' + *-tu* 'verbalizer' → *aberas-tu* 'to become rich'

Word-finally, we can have all the codas so far plus:

- (9) a. Affricates
hotz 'cold'; *amets* 'dream'; *apatx* 'hoof'
- b. The stops [t k]
zenbat 'how many'; *neskak* 'the girls'
- c. The cluster sibilant fricative + [t]
bost 'five'

4 Phonological processes

4.1 Conditioned palatalization

Especially in Western dialects (Bizkaia and Gipuzkoa area):

- (10) a. [in] → [ɲ]
baina 'but (aber)' [baɲa]

- b. [il]→[λ]
mutila 'boy' [mutiλa]
- c. [it]→[c]
menditik 'from the mountain' [mendicik]

4.2 Affective palatalization

Occasionally, a consonant can be palatalized to create a diminutive or affective version of the same word. The most common cases are

- (11) a. [s̺ s̺]→[ʃ]
sagu 'mouse' → *xagu* 'little mouse'
- b. Word initially, [s̺ s̺]→[ʃ tʃ]
zuri 'wite' → *xuri/txuri*

4.3 Voicing of inflectional affixes

The following inflectional affixes get voiced after [n l]

- (12) a. *-tu*, perfective
sartu 'to enter'; *galdu* 'to lose'
- b. *-ko* futurate
ikusi-ko 'will see'; *esan-go* 'will say'
- c. *-ta* adjectival participle
ikusi-ta 'seen'; *esan-da* 'said'
- d. *-tik* 'from'
gaur-tik 'from today'; *hemen-dik* 'from here'
- e. *-ki* adverbializer
on-gi 'well'; *eder-ki* 'beautifully'

4.4 Processes affecting negation

The [s̺] sound negative marker *ez*

- (13) a. disappears if the following word begins with [n l]
ez naiz 'I'm not' → [enajs̺]
ez luke 'he wouldn't have' → [eluke].
- b. turns to [ts̺] if the following word begins with [s̺]
ez zen 'he wasn't' → [ets̺en]
ez zara 'you aren't' → [ets̺ara]
- c. causes the devoicing of a following voiced obstruent
ez gara 'we aren't' → [es̺kara]
ez dut 'I don't' → [es̺tut]

These three processes are not reflected in writing.

5 Accentuation

In Standard Basque (*batua*), stress placement is not contrastive: primary stress typically falls on the second syllable, with secondary stress in the last syllable (when permitted by the OCP) .

- (14) a. *lagúna* 'friend'
b. *lagúnarì* 'to the friend'

Various dialects have a tonal system. For instance, in Northern Bizkaian:

- (15) a. Most words lack lexical accent
b. On the second syllable of phrases, there is a tonal raise that lasts until the last syllable.
- (16) a. *ni↗re laguná↘* ('my friend')
b. *ni↗re lagunen amá↘* ('my friend's mother')
c. *ni↗re lagunen txakur ederrarí↘* ('to my friend's pretty dog')

In dialects like this, accent is contrastive –e.g., plurality on nouns is realized via a tonal fall.

- (17) a. *Ni↗re lagunen lén↘gusua*
(‘the cousin of my friend’)
b. *Ni↗re lagú↘nen↗lén↘gusua*
(‘the cousing of my friends’)

