

José Ignacio Hualde

University of Illinois at Urbana-Champaign
jihualde@illinois.edu

Oihana Lujanbio

Soziolinguistika Klusterra
oihana@soziolinguistika.org

Juan Joxe Zubiri

Universidad Pública de Navarra/
Nafarroako Unibertsitate Publikoa
jjzubiri@unavarra.es

Goizueta is a small town in northwestern Navarre, Spain, bordering Gipuzkoa. According to the most recent official figures, it has slightly over 800 inhabitants, about 95% of whom speak Basque (2001, Instituto de Estadística de Navarra). All inhabitants (except for young children) also speak Spanish. In the school system standard Basque and, to a lesser extent, Spanish are used. Older speakers (those born before 1970 or so) were educated exclusively in Spanish. The local Basque dialect, however, enjoys very high prestige among its speakers, and this is the linguistic variety that is most commonly used in everyday interaction within the town.

Consonants

	Labial	Apico-dental	Lamino-dental	Apico-alveolar	Post-alveolar	Palatal	Velar
Plosive (vl.)	p ⟨p⟩	t ⟨t⟩				c ⟨tt⟩	k ⟨k⟩
Plosive (vd.)	b ⟨b⟩	d ⟨d⟩					g ⟨g⟩
Fricative (vl.)	f ⟨f⟩		ʃ ⟨z⟩	ʃ ⟨s⟩	ʃ ⟨x⟩		x ⟨j⟩
Affricate (vl.)			tʃ ⟨tz⟩	tʃ ⟨ts⟩	tʃ ⟨tx⟩		
Nasal	m ⟨m⟩			n ⟨n⟩		ɲ ⟨ñ⟩	
Lateral				l ⟨l⟩		ʎ ⟨ll⟩	
Rhotic tap				r ⟨r-⟩			
Rhotic trill				r ⟨r-⟩, ⟨-rr-⟩			
Approximant						j ⟨y-⟩, ⟨-i-⟩	

Goizueta Basque has the consonantal inventory shown in the chart. For each consonantal phoneme, both its IPA symbol and its most common orthographic representation (inside grapheme brackets) are given. This is a typical, conservative, consonantal inventory for a Basque variety (see e.g. Hualde 2003).¹

These consonant phonemes are exemplified in word-initial, intervocalic and word-final positions. Regarding the phonemic inventory, it must be said that, in the speech of the younger generations, the palatal lateral is in the process of being delateralized, becoming a palatal approximant. In Goizueta Basque, words are contrastively stressed on either the first or the second syllable and the stressed syllable is additionally specified to bear either a high (rising) or a low (falling) tone. Indicating the tone makes stress marks redundant, i.e. all syllables marked for tone are also stressed.²

	INITIAL	INTERVOCALIC	FINAL
/p/	<i>pútzu</i> /pút̚su/ 'well'	<i>zápo</i> /ʒápo/ 'toad'	<i>xurrúp</i> /ʃurúp/ 'onom. of swallowing'
/t/	<i>tipùla</i> /tipùla/ 'onion'	<i>katé</i> /katé/ 'chain'	<i>bat</i> /bát/ 'one'
/c/	<i>ttíki</i> /ciki/ 'small'	<i>ittúrri</i> /icúri/ 'spring, fountain'	<i>polítt</i> /políc/ 'pretty'
/k/	<i>katú</i> /katú/ 'cat'	<i>páke</i> /páke/ 'peace'	<i>lúrretik</i> /lúretik/ 'from the land'
/b/	<i>burú</i> /burú/ 'head'	<i>alába</i> /alába/ 'daughter'	—
/d/	<i>dènbo</i> /dènbo/ 'time'	<i>adár</i> /adár/ 'branch'	—
/g/	<i>gizón</i> /giʒón/ 'man'	<i>garágar</i> /garágar/ 'barley'	—
/f/	<i>fiésta</i> /fiésta/ 'holiday'	<i>kàfe</i> /kàfe/ 'coffee'	<i>uf</i> /uf/ 'interj. of tiredness'
/ʒ/	<i>zakúr</i> /ʒakúr/ 'dog'	<i>azá</i> /aʒá/ 'cabbage'	<i>apèz</i> /apèʒ/ 'priest'
/ʃ/	<i>saré</i> /ʃaré/ 'net'	<i>usái</i> /uʃái/ 'smell'	<i>sós</i> /sósʃ/ 'money'
/f/	<i>xàuxar</i> /ʃàuxar/ 'bat'	<i>àixa</i> /àiʃa/ 'easily'	<i>erréx</i> /eréʃ/ 'easy'
/x/	<i>jìtu</i> /xìtu/ 'to circle'	<i>kéja</i> /kéxa/ 'complaint'	<i>aj</i> /ax/ 'interj. of disgust'

¹ In orthographic representations of Basque, we follow the usual conventions, with some modifications. First, the letter (j) may represent different consonants in Basque orthography, depending on the dialect. Following a certain tradition of dialectal writing, we reserve (j) for the velar fricative and use (y) for the palatal approximant. Secondly, consonants that have been historically lost in Goizueta are not represented. Finally, we include accent marks.

² In the accompanying sound files, the speaker added the copula *da* 'is' at the end of most examples. Also, most nouns were recorded with the article *-a* added, as uninflected nouns in Basque cannot occur without a modifier. The speaker is in her late twenties and the palatal lateral occurs variably in her speech.

	INITIAL	INTERVOCALIC	FINAL
/tʂ/	<i>tzitzí</i> /tʂitʂí/ ‘gut, fat’	<i>atzó</i> /atʂó/ ‘yesterday’	<i>ítz</i> /ítʂ/ ‘word’
/tʂ/	—	<i>atsó</i> /atʂó/ ‘old woman’	<i>améts</i> /améts/ ‘dream’
/tʃ/	<i>txokòlte</i> /tʃokòlte/ ‘chocolate’	<i>itxúra</i> /itʃúra/ ‘aspect’	<i>bakótx</i> /bakótx/ ‘each’
/m/	<i>mendí</i> /mendí/ ‘mountain’	<i>áma</i> /áma/ ‘mother’	—
/n/	<i>neská</i> /neská/ ‘girl’	<i>anáí</i> /anáí/ ‘brother’	<i>láun</i> /láun/ ‘friend’
/ɲ/	<i>ñáñu</i> /ɲáɲu/ ‘dwarf’	<i>sóñu</i> /sóɲu/ ‘sound’	<i>záñ</i> /sáɲ/ ‘vein’
/l/	<i>lekú</i> /lekú/ ‘place’	<i>zelái</i> /ʂelái/ ‘meadow’	<i>ostiel</i> /oʂtiel/ ‘Friday’
/k/	<i>llabèro</i> /kabèro/ ‘keychain’	<i>ollàsco</i> /oʎàsco/ ‘chicken’	<i>záll</i> /sáʎ/ ‘difficult’
/r/	—	<i>pàre</i> /pàre/ ‘pair’	—
/ɾ/	<i>roéri</i> /roéri/ ‘drug store’	<i>arrái</i> /arái/ ‘fish’	<i>amár</i> /amár/ ‘ten’
/j/	<i>yábe</i> /jábe/ ‘owner’	<i>aió</i> /ajó/ ‘bye’	—

In the next subsections we comment on the phonetic realization and distribution of each class of consonantal phonemes separately.

Plosives

In utterance-initial position, the voiceless plosives /p t c k/ are realized as unaspirated (short positive VOT) and the voiced plosives /b d g/ most frequently as prevoiced (negative VOT).

Although nowadays all Basque dialects have a firm phonological contrast between voiced and voiceless word-initial plosives, it appears that in earlier times the contrast between the two series tended to be neutralized in this position. In the native lexicon we find very few words starting with voiceless plosives and in the borrowed vocabulary a tendency to neutralize the contrast is also apparent. It seems that the original tendency was to adapt Latin (Lat.) word-initial voiceless plosives as voiced, e.g. Lat. CORPUS > *gorputz* ‘body’ (Michelena 1977: 238–239, Trask 1997: 126). Nevertheless, we also find changes in the opposite direction and considerable variation is found among local dialects in the treatment of old borrowings from Latin and Romance (Michelena 1977: 241–242). In Goizueta Basque (GB), we find initial voiceless plosives in a number of words where variants with voiced consonants have been preferred in the standard language (St. Bq.) (Zubiri 2000: 89): *patáio* ‘baptism’ (St. Bq. *bataio* < Lat. BAPTIZARE), *pizár* ‘beard’ (St. Bq. *bizar*), *kolkó* ‘bosom’ (St. Bq. *golko*), etc. An initial plosive has tended to assimilate to the voicing of a plosive on the onset of the next syllable. This has mostly resulted in the devoicing of the initial consonant, as in *bukatu* > GB *bukátu* ~ *pukátu* ‘finish’ and some of the other examples just cited, but sometimes in its voicing, as in Spanish (Sp.) *cambio* > GB *kànbio* ~ *ganbio* ‘change’. In our data we have in fact found some cases of word-initial /b/ without prevoicing, as in the example *berè* [b̥erè] ‘his’ in the rendition of ‘The North Wind and the Sun’ that we are including with this article. Without context, these tokens are indeed perceptually ambiguous. The phonetic conditions

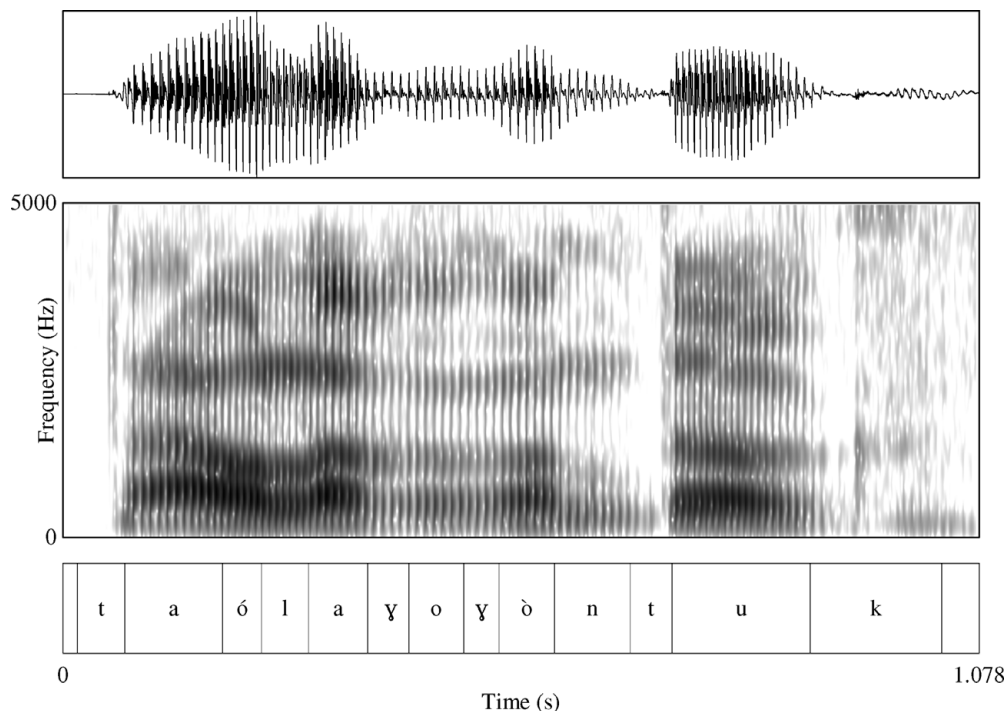


Figure 1 /ta ólako kòntuk/ ‘and those things’. Notice that both instances of intervocalic /k/ (the second one across a word boundary) are realized as voiced approximants.

for the occasional transfer between phonological categories are thus still present, at least for the labials.

As in Spanish, /b d g/ are systematically realized without full occlusion (as approximants) after a vowel and in most postconsonantal contexts: *alába* /alába/ [aláβa] ‘(the) daughter’, *adarra* /adára/ [aðára] ‘the branch’, *garágarra* /garágara/ [garáyara] ‘the barley’. (Since there is no contrast between voiced fricatives and approximants, in the remainder of the paper we will omit the ‘lowered’ subscript.)

In addition, as noted by Salaburu (1984: 236) for the Baztan dialect, /p t k/ are sometimes realized as voiced approximants in intervocalic position (and some postconsonantal contexts) – see *ta ólako kòntuk* [taólayoyòntuk] ‘and those things’ in figure 1, *baràtzatikan e(r)e* [baràtʂaðiγane] ‘from the garden too’ in figure 2, and *bóst kòtxe* [bóʒyòtʂe] ‘five cars’ in figure 3. Word-final /t/ and /k/, when followed by a vowel, may also be voiced and spirantized – see *txistularik e(r)e bái* [tʃiʂtulariγeβái] ‘the flutists too’ in figure 4. The optional weakening of intervocalic /p t k/ has also been reported for several Peninsular Spanish varieties (for Bilbao, see Lewis 2001). This weakening phenomenon may result in the surface neutralization of both series of plosives, although speakers are not aware of this neutralization, since the contrast is preserved in careful speech.

The voiced velar /g/ is relatively rare in intervocalic position in Goizueta. As comparison with standard Basque shows, this is because /g/ has undergone systematic deletion in the intervocalic context: *ogi* > /ui/ ‘bread’, *egun* > /eún/ ‘day’, *egia* > /èia/ /èja/ ‘truth’, *igitai* > /itti/ /ici/ ‘scythe’, Sp. *castigado* > *kastitu* /kaʂtítu/ ‘punish’. Intervocalic /g/ is found only in recent borrowings from either Spanish or standard Basque, including proper names. Intervocalic /d/ and /b/ have also been lost in some words: Lat. AUDITU > *aditu* *[aðícu] > *[áícu] > [áícu] /áicu/ ‘listen’, *hilabete* > /ikáte/ ‘month’.

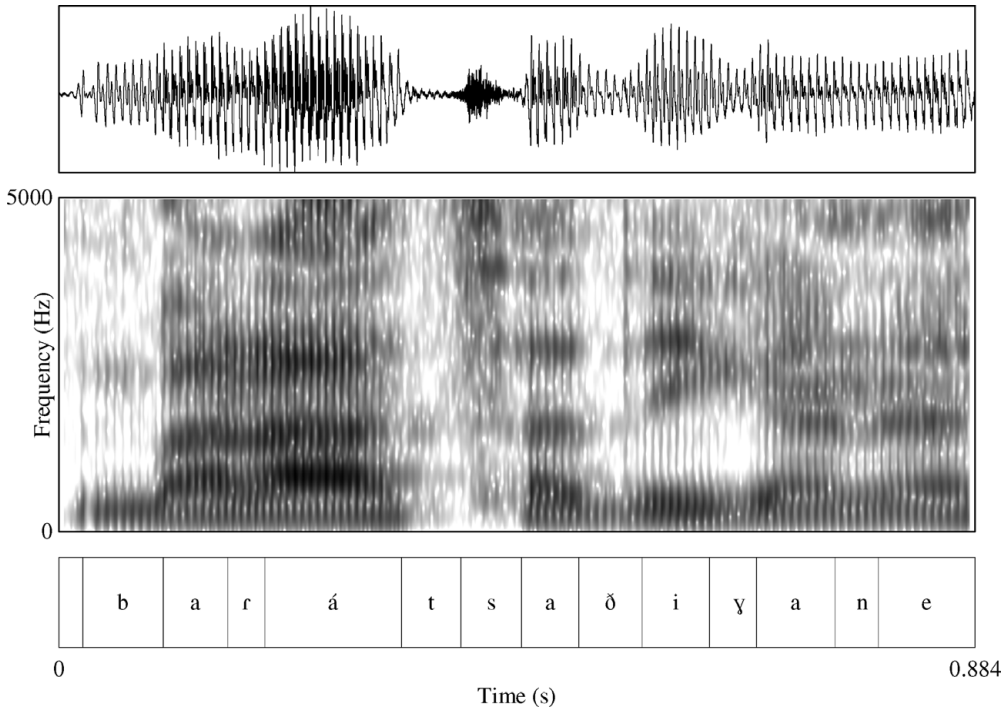


Figure 2 /barátʂatikan e(r)ɐ/ ‘from the garden too’. In this example both intervocalic /t/ and intervocalic /k/ have been realized as voiced approximants.

Word-finally, there is no contrast in voice in Basque. Very few words end in a plosive, although word-final /t/ and /k/ are common in discourse (often realized as voiced approximants, see figure 4), since they are found in some common items. Final /t/ is found only in a few but very high frequency items: *bat* ‘one’, *zénbat* [sémbat] ~ [sémat] ‘how much, how many’, and verbal forms ending in the first person singular agreement suffix /t/. There are no stems ending in /k/, but this is a common word-final segment, since it is found in the absolutive plural suffix /k/ (e.g. *gizónak* ‘the men’), ergative /k/ (e.g. *gizónak* ‘the man, erg.’), partitive /(r)ik/ (e.g. *gizónik* ‘men, part’) and ablative /tik/ (e.g. *menditik* ‘from the mountain’), as well as second person masculine singular agreement marker /k/ (e.g. *duk* ‘thou (male) hast it’). As for /p/, it is only found in onomatopoeic words and interjections: *xurrúp* /ʃurúp/, *ttarráp* /caráp/, both onomatopoeias of swallowing.

The distribution of the voiceless palatal stop /c/ has developed in Basque from /t/ in two contexts: (i) by conditioned palatalization after /i/, and (ii) in diminutive and affective forms. These are also the main historical origins of other palatal and prepalatal segments in Basque (see Michelena 1977: 179–202, Oñederra 1990). Both sources of /c/ are found in Goizueta (see /ʃ/, /ɲ/ and /k/ in the sections below):

(1) Historical sources of /c/

a. Historical palatalization of /t/ after /i/

/t/ > [c] / i____ (where /i/ may be a vowel [i] or a glide [j])

Examples: *ittó* /icó/ ‘drown’, *ittúrri* /icúri/ ‘spring, fountain’, *politta* /polica/ ‘pretty’, *ermitta* /ermica/ ‘chapel’, *geldittu* /geldícu/ ‘stay’ (and other participles in *-ittu*)

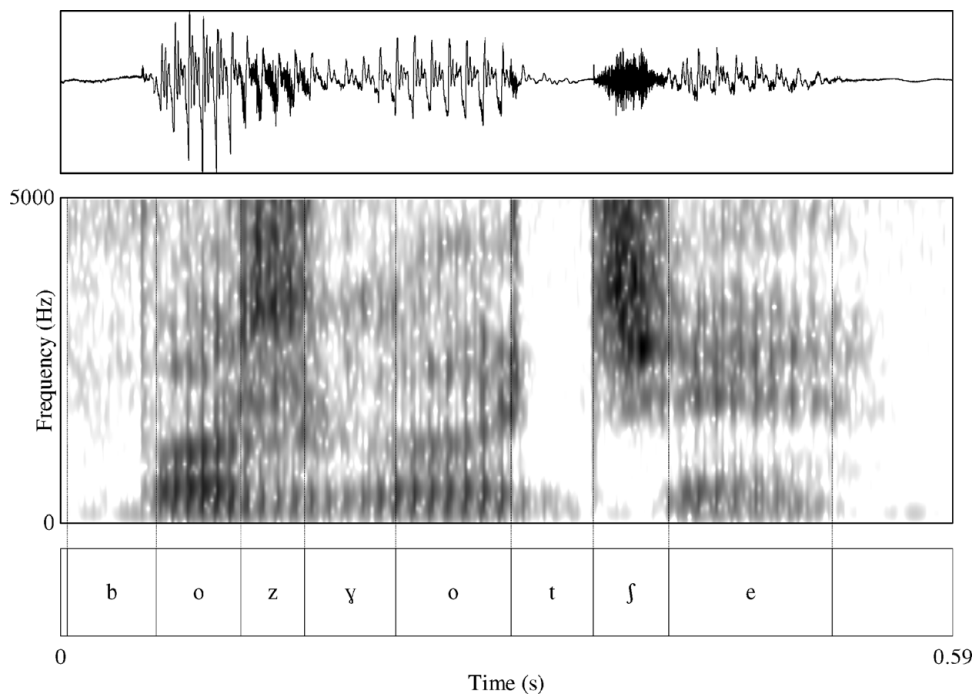


Figure 3 /bóʃt kòtʃe/ 'five cars'. In this example, in the group /st-k/ word-final /t/ is deleted and word-initial /k/ is realized as a voiced approximant.

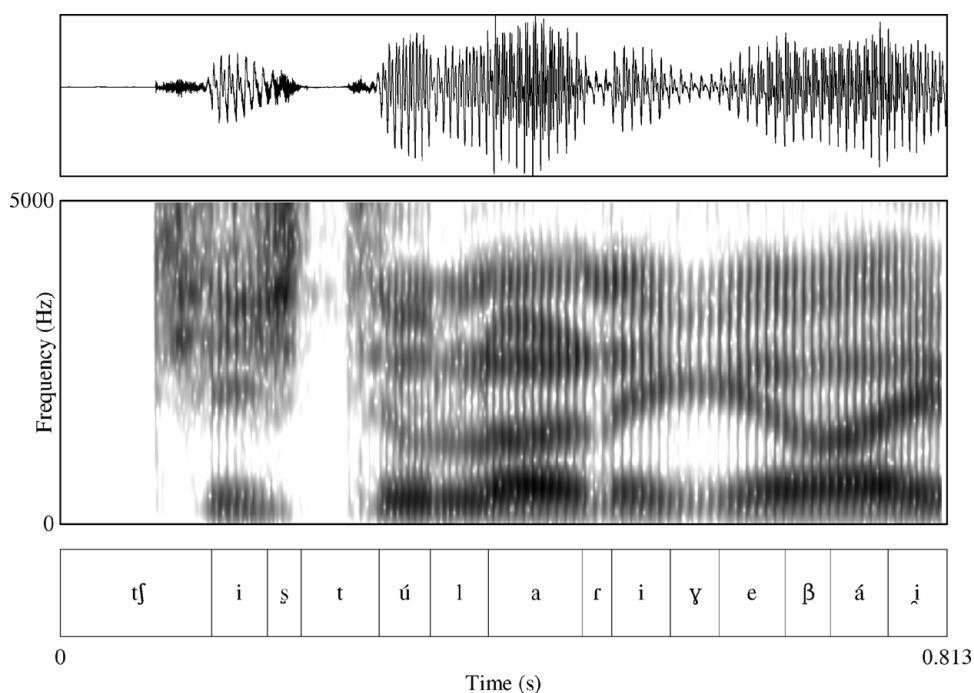


Figure 4 /tʃiʃtúlarike e(ɾ)e bai/ 'the flutists too'. In this example word-final intervocalic /k/ is realized as an approximant.

b. Affective/diminutive palatalization

Anttòn /ancòn/ ‘a proper name’, *pattár* /pacár/ (~ *patár*) ‘brandy’, *ttiki* /cíki/ ‘small’, *pittikot* /picikot/ ‘a little bit’

Given its historical origin in the palatalization of /t/, the status of /c/ as an independent phoneme or as an allophone of /t/ is not always clear in Basque varieties with this sound. In Goizueta, however, /c/ is clearly an independent phoneme, as it is found in phonemic contrast with /t/ (even leaving aside the phonological treatment of affective/diminutive palatalization). This is primarily so because two subsequent developments have rendered conditioned palatalization of /t/ after /i/ (vowel or glide) opaque. On the one hand, a glide [i] has been absorbed into the following palatal consonant in some lexical items: *átta* /áca/ ‘father’ (< *aita*), *mátte* /máce/ ‘love’ (< *maite*), *gótti* /góci/ ‘up’ (< *goiti*), *bátten* /bácen/ ‘inside’ (< *baitan*), *zérbette* /šérbece/ ‘something’ (< *zerbait*), *eòtten* /eòcen/ ‘be, stay, IMPF’ (< *egoiten*), *emátten* /emácen/ ‘give, IMPF’ (< *emaiten*), *ebátten* /ebácen/ (< *ebagiten*) ‘cut, IMPF’; on the other hand, palatalization has not applied in some cases where later contractions have placed /t/ in the palatalization context, as in *abitu* /abitu/ ‘depart’ (< *abiatu*), *kanbítu* ‘change’ (< *kanbiatu*), *oblítu* ‘oblige’ (< *obligatu*), *kaníta* ‘knife’ (< *kanibeta*), etc. In addition, in a couple of auxiliary verbs, deletion of a whole syllable has placed /c/ in word-initial position. In these items a palatal [c] that arose by the sound change in (1a) above is now found without the conditioning environment for the change: *dítut* > *dittut* > *ttut* /cut/ ‘I have them’ (vs. *dut* ‘I have it’). Unlike in some other Basque dialects with this process, the ablative suffix /tik/ does not undergo palatalization: *mendítik* ‘from the mountain’.

In a few examples, palatalization has affected an /nt/ sequence: *mintegi* > *mintéi* /mincéi/ ‘seedbed’. In a few words there is optional palatalization of /ld/ to [ʎ] *bildots* /bildóts/ ~ /biʎóts/ ‘lamb’, *bildú* /bildú/ ~ /biʎú/ ‘gather’ (Zubiri & Perurena 1998: 50), but this is not a systematic phenomenon.

Whereas in northern Bizkaian Basque and western Gipuzkoan areas, where palatalization of /t/ after /i/ has also been systematic, /c/ has merged or is merging with the affricate /tʃ/ in the speech of the younger generations (the merger has been completed in Ondarroa and is ongoing in Lekeitio, Gernika, Eibar and other towns), in Goizueta /c/ is kept distinct from /tʃ/ and there is no sign of merger as yet.

As for the phonetic realization of /c/, its articulation involves contact between a relatively large area of the predorsum and the hard palate (see Salaburu 1984: 263–264). As in other languages with this phoneme, this consonant is realized with a certain amount of frication in the release of the occlusion, which explains its merger with /tʃ/ in other dialects (and languages).

Fricatives and affricates

From a typological perspective, an interesting aspect of Basque phonology is the three-way place contrast among lamino-dental or lamino-alveolar /s/, apico-alveolar /ʃ/ and post-alveolar /x/ and the corresponding affricates /tʃ/, /tʂ/ and /tʃ/. (For a different proposal for the transcription of these segments, see Yáñez Yaben 2001.) This contrast has been simplified further west (in many Gipuzkoan and all Bizkaian varieties), through various neutralizations. In Goizueta, however, the contrast is fully stable.

The post-alveolar fricative /ʃ/ is the ‘affective/diminutive’ correlate of the other two sibilant fricatives. Thus, for instance, *xakúr* /ʃakúr/ ‘little dog’ is a diminutive of *zakúr* /ʂakúr/ ‘dog’ and *Xubiri* /ʃubiri/ is an affective form of the surname *Zubiri*. However, some words with /ʃ/, such as *xáu* /ʃáu/ ‘mouse’, *xérre* /ʃéra/ ‘steak’, do not have a variant without /ʃ/.

The velar fricative /x/ is found almost exclusively in borrowings from Spanish. Only a small handful of native words contain this phoneme, all in word-initial position: *jatór* /xatór/ ‘authentic’, /xáun/ ~ /jáun/ ‘lord, sir’. This is in striking contrast with local varieties immediately to the west. The few native words containing /x/ in Goizueta are the result of interdialectal borrowing. See section ‘Central approximant’ below.

As in many other Basque dialects, the contrast between fricatives and affricates is neutralized after a nasal or liquid, in favor of the affricate. This can be seen in the adaptation of borrowings: Sp. *ensalada* > GB *entsálada* /entsálada/ ‘salad’, Sp. *ansia* > GB *ántsi* /ántʃi/ ‘anxiety’, Sp. *calza* > GB *gáltza* /gáltʃa/ ‘pants’, Sp. *verso* > GB *bértso* /bértʃo/ ‘poem’. In Goizueta the affrication of fricatives after liquids and glides remains fully productive in the adaptation of recent borrowings, unlike in other Basque dialects that have been studied in this respect (Hualde & Bilbao 1992: 5; Hualde, Elordieta & Elordieta 1994: 16). A synchronic alternation is found in participle + verb combinations, where auxiliaries starting with a fricative undergo affrication after /n/ and /l/: *ikási zun* [(i)káʃiʒun] ‘s/he learned’, *esán tzun* [(e)ʃántʃun] ‘s/he said’. Word-initial fricatives are not affricated in other syntactic contexts: *éun zuló* [éʊnʒuló] ‘a hundred holes’.

Nasals

The three nasal phonemes contrast only in syllable-initial position.

The palatal nasal has its historical origin in the palatalization of /n/ (see above for /c/). As in some other Basque dialects, in Goizueta, /n/ has palatalized after the vowel /i/ and the palatal glide: *irina* > /iríɲa/ ‘the flour’, *arin* > /aríɲ/ ‘fast’. When the trigger was a glide, it has been almost always absorbed: *laino* > /laɲó/ ‘cloud’, *zain* > /ʃáɲ/ ‘vein’ (with a few exceptions: *erein* > /eréɲ/ ‘sow’), so that /n/ and /ɲ/ are found in phonological contrast in the postvocalic environment. Even after /i/ there is a contrast, since a few recent borrowings have not undergone palatalization; cf. *mina* /mina/ ‘(the) mine’ (< Sp.) vs. *miña* /míɲa/ ‘the pain’. Word-initially, the palatal nasal /ɲ/ is rare, but it is found in a few examples such as *ñáñu* /ɲáɲu/ ~ *ñàño* ‘dwarf’, *ñiñí* /ɲiɲí/ ‘baby’.

Before a consonant, nasals undergo place assimilation. In other Basque dialects, the three nasal phonemes are neutralized in /n/ word-finally either before a vowel or before pause (Trask 1978: 78). In Goizueta, however, the palatal nasal is also found word-finally as a consequence of historical palatalization, as we have just mentioned.

Laterals

Word-initially the palatal lateral is only found in a few borrowings from Spanish. On the other hand, /l/ has palatalized in the same contexts as /n/: *mila* > /míɭa/ ‘a thousand’, *zail* > /ʃáɭ/ ‘difficult’. Like elsewhere in the Basque Country, and coinciding with the same development in Spanish, the palatal lateral /ɭ/ is in the process of becoming delateralized in the speech of young speakers, becoming neutralized with the palatal approximant [j]: *milla* /míɭa/ ‘a thousand’, *makilla* /makija/ ‘stick’.

Rhotics

As in Spanish, the contrast between rhotic tap and trill is only made in word-internal intervocalic position. Elsewhere the distinction is neutralized. Unlike in Spanish, this neutralization in Basque is generally in favor of the trill. Neither rhotic is found in word-initial position in the native lexicon, although the trill is found in a few recent borrowings from Spanish, e.g. *ràdio* ‘radio’. Notice also *roéri* /roéri/ ‘drugstore’ < Sp. *droguería*. Phonetically (also as in Spanish), rhotics are often realized without full contact, as approximants or fricatives.

Central approximant

The syllable-initial central approximant [j] of *yábe* [jáβe] ‘owner’, *yón* [jón] ‘go’, *yénde* [jénde] ‘people’ is probably best analyzed as an independent phoneme rather than as an allophone of the high front vowel /i/ in syllable-initial, prevocalic position, since it contrasts with [ie], [ia] in hiatus in words such as [iél] ‘frog’ (St. Bq. *igel*), [iéri] ‘notice’ (St. Bq. *igerri*),

[iár] ‘thin’ (St. Bq. *ihar* ‘dry’). (As can be seen from the standard Basque cognates, hiatus is found in items where an intervocalic consonant has been lost by historical change.)³

The degree of constriction of this consonant is variable. For very constricted realizations, the symbol [j] would seem appropriate, as in *aió* /ajó/ [ájó] ‘bye’. In utterance-initial and postconsonantal contexts it can be optionally realized as a voiced palatal (affricated) stop [j̥]: *yábe* [jáβe] ~ [jáβe] ([j̥jáβe]) ‘owner’.

In Gipuzkoan Basque and even in the neighboring Navarrese village of Arano, just a few kilometers to the west of Goizueta, word-initial /j/ has systematically become /x/ by a historical change that mirrors the evolution of this sound in Spanish. One finds a systematic isogloss between Goizueta and Arano separating word-initial /j/ from /x/ in a large number of words (e.g. Goizueta /ján/ ‘eat’, /jó/ ‘hit’, Arano /xán/, /xó/).

In some items, /j/ is the result of affective/diminutive palatalization of /d/, as in *jántza* /jánts̺a/ ‘dance’ (< *dantza*), *aió* /ajó/ ‘bye’ (< *adio*). The delateralization of /k/ has considerably increased the frequency of [j] in the speech of the younger generations, e.g. older generation *màlla* [màʎa] (St. Bq. *maila*), younger generation [màja] ‘level’, which may become homophonous with *màia* ‘table’ (St. Bq. *mahaia*) for young speakers.

Vowels and glides

Like most other Basque dialects, Goizueta Basque has five vowel phonemes.

(2) Vowel phonemes

/i/	<i>bizí</i>	/biʃi/	‘live’
/e/	<i>besó</i>	/beʃó/	‘arm’
/a/	<i>basó</i>	/baʃó/	‘forest’
/o/	<i>bóza</i>	/bóʃa/	‘the voice’
/u/	<i>buztán</i>	/buʃtán/	‘tail’

The formant values in figure 5 are average values in stressed position for two male speakers. Values in unstressed syllables are very similar. A total of 482 tokens extracted from words in a carrier phrase were analyzed. These formant values are very similar to those reported for Castilian Spanish in Martínez-Celdrán, Fernández-Planas & Carrera-Sabaté (2003), the only noticeable difference occurring in F2 for /u/. Notice that /u/ is not more retracted than /o/ in our data. We may point out in this respect that word-final /u/ has become /o/ in some words, e.g. *du* > *do* ‘s/he has it’.

Sequences where a high vocoid immediately follows another vowel are generally syllabified as diphthongs. The diphthongs in (3) are common.

(3) Falling diphthongs

[ai̯]	<i>gáitz</i>	‘illness’	[aʊ]	<i>autsi</i>	‘break’
[ei̯]	<i>béi</i>	‘cow’	[eʊ]	<i>éutsi</i>	‘hold’
[oi̯]	<i>goibél</i>	‘sad’	—		

A hiatus is nevertheless exceptionally found in some words where an intervocalic consonant has been lost, as in *mintegi* > /mincei/ [mĩncéi] ‘seedbed’, *xagu* > [ʃaú] ~ [ʃáʊ] ‘mouse’. This

³ Following Martínez-Celdrán’s (2004) proposal, this palatal approximant would be represented as [j̥] rather than [j]. In our transcription the use of the symbol [j] for this consonantal segment is unambiguous, since we use [j̥] for the corresponding glide, either as a first (semiconsonant) or as a second (semivowel) member of a diphthong.

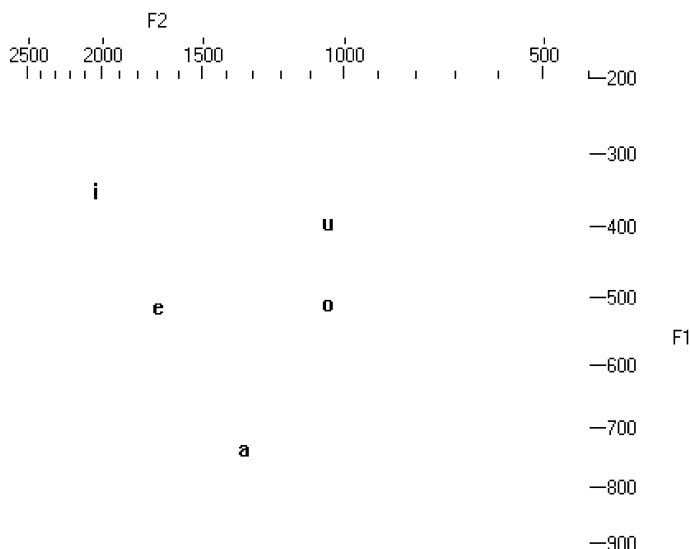


Figure 5 Vowel triangle (average in stressed position for two male speakers).

is especially the case when stress falls on the high vocoid (with variation among speakers), *egur* > /eúr/ ‘wood’ (~ /éur/ [é̞r]), *egun* > /eún/ ‘day’ (~ /éun/ [é̞n]). The vowel sequence created after intervocalic consonant deletion has, however, been reduced to a diphthong in other examples, such as *eguerdi* > /éurdi/ [é̞rði] ‘midday’, *lagun* > /láun/ [lá̞n] ‘friend’, *seguru* > /séuru/ [sé̞ru] ‘sure’ (possibly with historical displacement of the stress to the more open vocoid in some of these cases).

Sequences of rising sonority, on the other hand, are most usually realized as hiatus, as are sequences of two high vocoids. (Hiatus sequences may be reduced to diphthongs in fast speech. Etymological intervocalic consonants that have been lost in Goizueta are given in (4) in parentheses.)

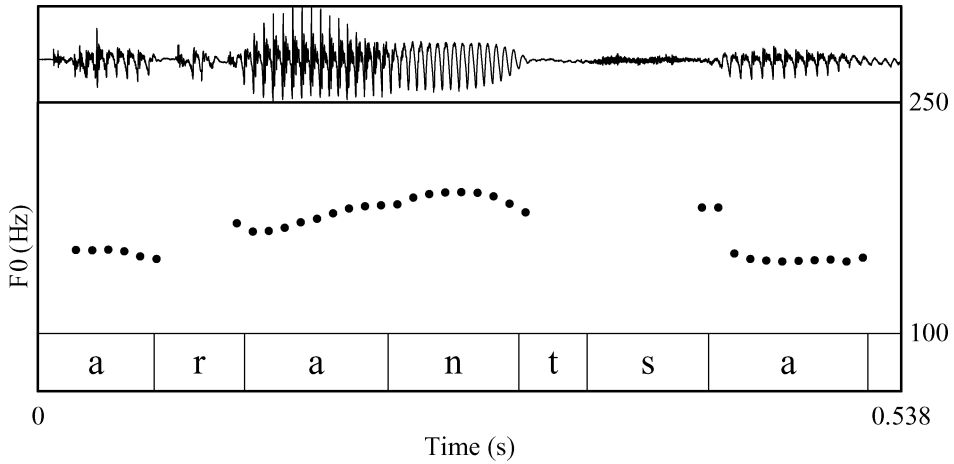
(4) Hiatus sequences of rising sonority

[ia]	<i>bi(h)ár</i>	[biár]	‘tomorrow’	[ua]	<i>burúa</i>	[burúa]	‘head’
[ie]	<i>ostí(r)el</i>	[o̞stíel]	‘Friday’	[ue]	<i>su(g)é</i>	[sué]	‘snake’
[io]	<i>bi(h)ór</i>	[biór]	‘mare’				
[iu]	<i>bi(h)úrri</i>	[biúri]	‘twisted’	[ui]	<i>alú(b)ita</i>	[alúita]	‘rascal’

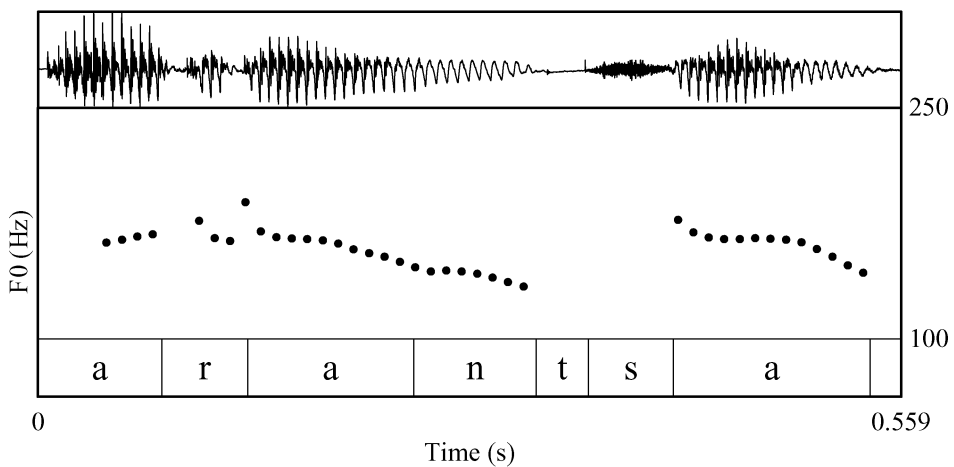
Exceptions are relatively recent borrowings from Spanish such as *soziálismo* ‘socialism’, *guártzibilla* ‘Civil Guard’, *fiésta* ‘holiday’, *siésta* ‘siesta’, *kuárto* ‘room’, *suérte* ‘luck’, *fuérte* ‘strong’, etc., which maintain the diphthong of the source language.

Given the existence of lexical exceptions to the general rule of syllabifying sequences of falling sonority as diphthongs and sequences of rising sonority as hiatus, the status of glides as allophones of the high vowels or as independent phonemes is not straightforward.

Sequences of three ‘underlying’ vocoids commonly arise in inflected forms of nouns and adjectives ending in a diphthong. In such sequences, the high vocoid is resyllabified as a syllable-initial approximant consonant: [bé̞] ‘cow’, [bé̞ja] ‘the cow’; [balkó̞] ‘balcony’, [balkó̞ja] ‘the balcony’; [gá̞u] ‘night’, [gá̞wa] ‘the night’. Such sequences are also found morpheme-internally: *oihú* [ojú] ‘shout’, *maiátz* [maját̚s] ‘May’, *Oihana* [ojàna] ‘a woman’s name’.



(a) /arántsa/ 'bray'

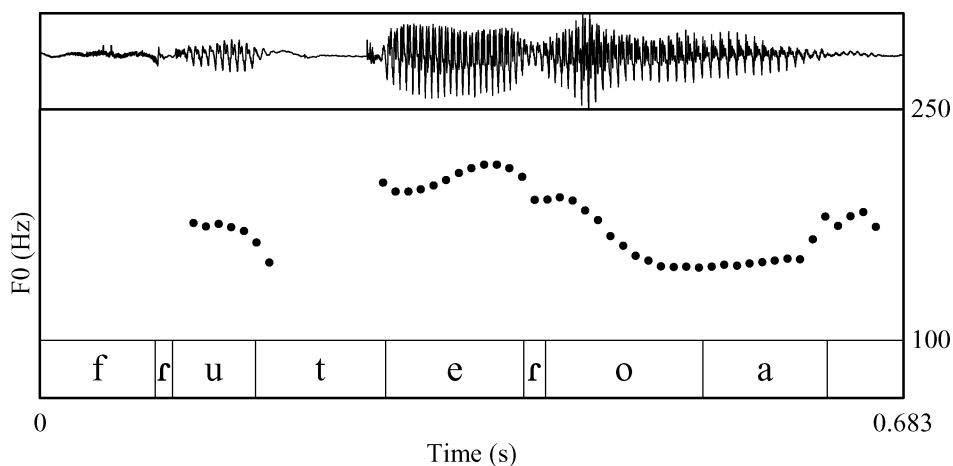


(b) /aràntsa/ 'fishing'

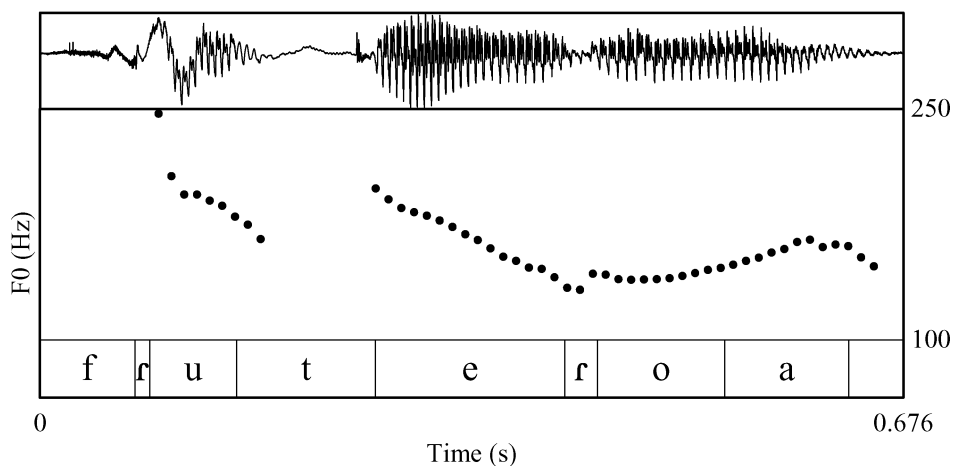
Figure 6 Tonal contrast /á/ ~ /à/.

Word stress and word tone

In Goizueta both the position of the stress and the tonal contour or pitch-accent associated with the stressed syllable are lexically contrastive. This is perhaps the most remarkable feature of this Basque dialect. As already mentioned, stress may fall either on the first or on the second syllable and the stressed syllable bears one of two lexically specified accents: Accent 1, which is a rise over the stressed vowel (a high tone), or Accent 2, which is falling contour (a low tone) (Hualde, Lujanbio & Torreira 2008). Vowels in stressed syllables are significantly longer than adjacent unstressed vowels. Historically, unstressed vowels have been lost in some words. The vowel bearing a tone mark in our transcriptions is the nucleus of the stressed syllable. In figure 6a, b and figure 7a, b we illustrate the tonal contrast with two minimal pairs: *arrántza* 'bray' vs. *arràntza* 'fishing' and *frutéroa* 'the fruitseller' vs. *frutèroa* 'the fruitbowl'. This



(a) /frutéroa/ 'fruit seller'



(b) /frutèroa/ 'fruit bowl'

Figure 7 Tonal contrast /é/ ~ /è/.

contrast plays a crucial role in inflectional morphology, as in the pair offered in figure 8, *mendiri* 'to the mountain, DATIVE' vs. *mendiri* 'to the mountains, DATIVE' (for more details see Hualde et al. 2008).

The North Wind and the Sun

We offer four versions of the text. The first is the text that the speaker read. It is a phonemic transcription using Basque orthography but reflecting the phonology of the dialect. The second version is essentially a transliteration using IPA conventions. The only phonetic detail that it adds is that semivowels are distinguished from vowels. The third text is a relatively narrow phonetic transcription of the acoustic signal that was recorded. Finally, a literal rendition of the text in standard Basque is also provided. This last version might be useful as a point of

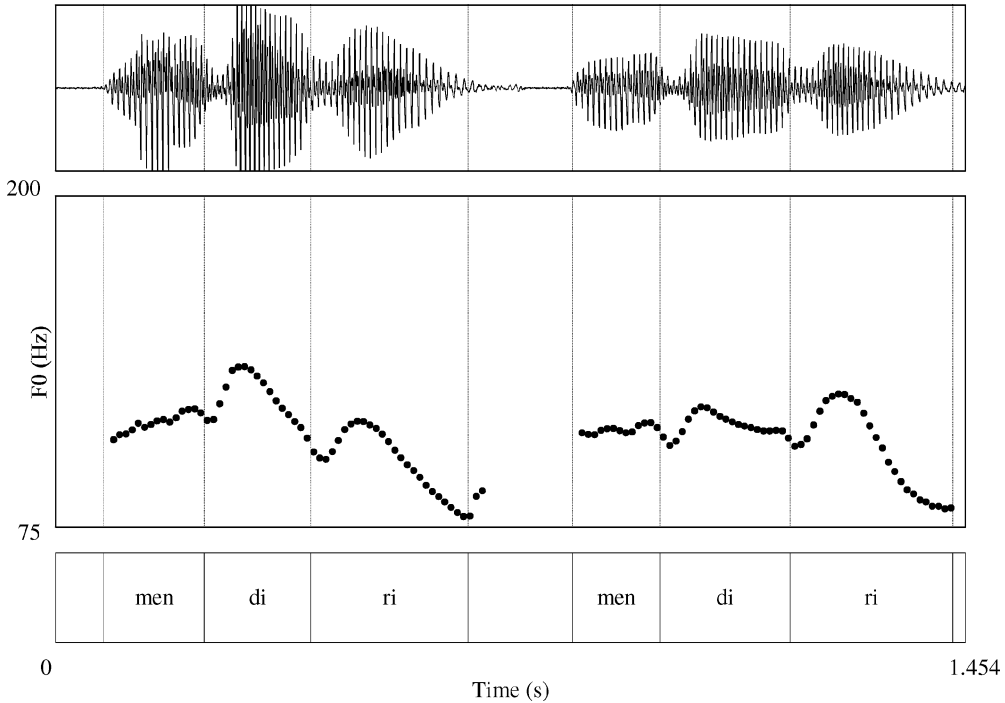


Figure 8 /mendíri/ 'to the mountain, dative' vs. /mendíri/ 'to the mountains, dative' (= Hualde et al. 2008, figure 9).

comparison as it offers a clear picture of the reductions that have taken place in Goizueta. It should also prove useful to those who want to check the meaning of specific forms by consulting a Basque dictionary.

Orthographic transcription (phonemic, in Basque orthography adapted to the dialect)

Ipàr aizéa ta Èuzkia

Ipàr aizéa ta Èuzkia, indàrtsuna zèin tzen éspan ài zíała, ibíltari bat pasátu zen kàpa lodì baten bildúa. Erábaki zutén indàrtsuna izáin tzela ibíltariri kàpa aurréna kendüzitzen tzína. Órdun Ipàr aizék berè ñnal guzikin yó zun, biño zénbat eta fuérteo yó, ibíltarik órdun ta estúo èusten tzin berè kàpari; azkénen, Ipàr aizék, etsita, utzi ín tzun berè aléiña. Géro, Èuzkia fuèrte beròtzen así zen, ta ibíltarik bélexe kendú zun berè kàpa. Ta óla, Ipàr aizék attòrtu bear izan tzún Èuzkia zéla bietan indàrtsuna.

Phonemic/broad phonetic transcription in IPA

ipàr aĩsɛ́a ta ɛ̀us̺kia||

ipàr aĩsɛ́a ta ɛ̀us̺kia | indàrtsuna s̺ɛ̃n t̺sɛ̃n ɛ̃span ài ʒiála | ibíltari bat pasátu s̺ɛ̃n kàpa lodì baten bildúa || erábaki s̺utén indàrtsuna iʒáin t̺sɛ̃la ibíltariri kàpa aurréna kendüs̺its̺ɛ̃n t̺s̺ína || órdun ipàr aĩsɛ́k berè ñnal guzikin jó s̺un | biño s̺émbat eta fuérteo jó | ibíltarik órdun eta ɛ̃stúo èusten t̺s̺in berè kàpari || aʒkénen | ipàr aĩsɛ́k | ɛ̃ts̺ita | ut̺si ín t̺s̺un berè aléiña || géro | ɛ̀us̺kia fuèrte beròt̺s̺ɛ̃n así s̺ɛ̃n | ta ibíltarik bélexe kendú s̺un berè kàpa || ta óla | ipàr aĩsɛ́k acòrtu bear iʒan t̺s̺ún ɛ̀us̺kia s̺éla bietan indàrtsuna ||

Narrow phonetic transcription of recorded text

ipàr aᵢséa | ta èuᵣkia ||
 ipàr aᵢséa ta èuᵣkia: | indàrtᵣsuna ᵣèᵢn ᵣᵣᵣᵣ ᵣésᵣpan àᵢ ᵣiála | iᵢíltari ᵢa paᵣátu ᵣᵣᵣᵣ
 || kàpa loᵢᵢ bátᵣᵣᵣᵣ biᵢdúa || ᵣeᵣáᵢak^j(i) ᵣutén | indàrtᵣsuna iᵣáᵢn ᵣᵣᵣᵣ | iᵢíltariᵣi
 | kàpa ᵣauréna ken(d)ùᵣitsᵣᵣᵣᵣ ᵣᵣiána || ᵣórdun | ipar aiᵣék | beᵣè íᵣal yuᵣiᵣin jó
 ᵣun || biᵣno ᵣémbat eta fuérteo jó | iᵢíltariᵣ | órdun eta eᵣtúo ᵣèuᵣᵣᵣᵣ ᵣᵣᵣᵣ beré
 kàpari || ᵣaᵣkénen | ipàr aiᵣék | eᵣᵣᵣᵣ | utᵣi ín ᵣᵣᵣᵣ beᵣaléᵣna || géᵣo | èuᵣkia
 fuérte ᵢeròᵣᵣᵣᵣ aᵣi ᵣᵣᵣᵣ || ᵣa iᵢíltariᵣ | béleᵣe ken(d)ú ᵣum beré kàpa || ᵣa óla |
 ipàr aiᵣék aᵢcòrtu ᵢar iᵣan ᵣᵣᵣᵣ èuᵣkia ᵣéla biᵣtan indàrtᵣᵣᵣᵣᵣᵣ ||

Adaptation in standard Basque

Ipar haizea eta Eguzkia

Ipar haizea eta Eguzkia, indartsuena zein zen espan ari zirela, ibiltari bat pasatu zen kapa lodi batean bildua. Erabaki zuten indartsuena izanen zela ibiltariari kapa aurrena kenduarazten ziona. Orduan, Ipar haizeak bere eginahal guztiekin jo zuen, baina zenbat eta fuertego jo, ibiltariak orduan eta estuago eusten zion bere kapari; azkenean, Ipar haizeak, etsita, utzi egin zuen bere ahalegina. Gero Eguzkia fuert berotzen hasi zen, eta ibiltariak berehalaxe kendu zuen bere kapa. Eta hola, Ipar haizeak aitortu behar izan zuen Eguzkia zela bietan indartsuena.

Acknowledgements

We want to thank all the speakers of Goizueta Basque who have assisted us in the fieldwork on which this paper is based. We are also grateful to three anonymous reviewers for this journal for their comments.

References

- Hualde, José Ignacio. 2003. Segmental phonology. In José Ignacio Hualde & Jon Ortiz de Urbina (eds.), *A grammar of Basque*, 15–65. Berlin: Mouton de Gruyter.
- Hualde, José Ignacio & Xabier Bilbao. 1992. *A phonological study of the Basque dialect of Getxo*. Donostia-San Sebastián: Diputación Foral de Gipuzkoa. [Supplement 29 of *Anuario del Seminario de Filología Vasca 'Julio de Urquijo'*.]
- Hualde, José Ignacio, Gorka Elordieta & Arantzazu Elordieta. 1994. *The Basque dialect of Lekeitio*. Bilbao & Donostia-San Sebastián: University of the Basque Country Press & Diputación Foral de Gipuzkoa.
- Hualde, José Ignacio, Oihana Lujanbio & Francisco Torreira. 2008. Lexical tone and stress in Goizueta Basque. *Journal of the International Phonetic Association* 38(1), 1–24.
- Lewis, Anthony. 2001. *Weakening of intervocalic /p, t, k/ in two Spanish dialects: Toward the quantification of lenition processes*. Ph.D. dissertation, University of Illinois at Urbana–Champaign.
- Martínez-Celdrán, Eugenio. 2004. Problems in the classification of approximants. *Journal of the International Phonetic Association* 34(3), 201–210.
- Martínez-Celdrán, Eugenio, Ana María Fernández-Planas & Josefina Carrera-Sabaté. 2003. Castilian Spanish. *Journal of the International Phonetic Association* 33(2), 255–259.
- Michelena, Luis. 1977. *Fonética histórica vasca*, 2nd edn. Donostia-San Sebastián: Diputación de Guipúzcoa. [3rd edn. 1985, Supplements of *ASJU* 4.]
- Oñederra, Miren Lourdes. 1990. *Euskal fonologia: Palatalizazioa. Asimilazioa eta hots sinbolismoa*. Leioa: Univ. del País Vasco/Euskal Herriko Unibertsitatea.
- Trask, R. L. 1978. Basque (Western Low Navarrese dialect). *Journal of the International Phonetic Association* 8, 75–79.

- Trask, R. L. 1997. *The history of Basque*. London: Routledge.
- Salaburu, Pello. 1984. *Hizkuntzaren soinu-egitura. Hizkuntz teoria eta Baztango euskalkia: Fonetika eta fonologia (I)*. Bilbao: Euskal Herriko Unibertsitatea.
- Yárnoz Yaben, María Belén. 2001. *Sibilants in the Basque dialect of Bortziri: An acoustic and perceptual study*. Ph.D. dissertation, Philipps-Universität Marburg. [Published 2002, Pamplona: Gobierno de Navarra.]
- Zubiri, Juan Joxe. 2000. Arano eta Goizuetako hizkera. In Koldo Zuazo (ed.), *Dialektologia gaiak*, 85–120. Vitoria-Gasteiz: Diputación Foral de Alava/Arabako Foru Aldundia.
- Zubiri, Juan Joxe & Patziku Perurena. 1998. *Goizueta eta Aranoko hizkerak*. Pamplona-Iruñea: Nafarroako Gobernua & Goizuetako eta Aranoko Udalak.