

The Belgian Limburg dialect of Hamont

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Hamont is a small town located on the north-eastern edge of the Belgian province of Limburg, on the national border with the Netherlands. It is situated about 30 km south of Eindhoven and 15 km west of Weert in the Netherlands. The town has about 13,500 inhabitants. According to Belemans, Kruijsen & Van Keymeulen (1998), the dialect of Hamont belongs to the West Limburg dialects (subclassification: Dommellands). Limburg dialects occupy a unique position among the Belgian and Dutch dialects in that their prosodic system has a lexical tone distinction, which is traditionally referred to as SLEEPTOON ‘dragging tone’ and STOOTTOON ‘push tone’. In line with recent conventions, stoottoon is referred to as Accent 1 and transcribed as superscript 1; sleeptoon is referred to as Accent 2 and is transcribed as superscript 2 (cf. Schmidt 1986).

The position of the Hamont dialect in everyday social interaction is still quite strong, but most speakers are now bidialectal (Hamont together with Belgian Standard Dutch). The analyses in this illustration are based on recent recordings from ten native speakers ranging between 50 and 85 years of age. All the examples in this text are read by the same 75-year-old male middle-class speaker.

Consonants

	Bilabial	Labio-dental	Alveolar	Post-alveolar	Palatal	Velar	Uvular	Glottal
Plosive	p b		t d			k		
Nasal	m		n			ŋ		
Trill							ʀ	
Fricative		f v	s z	(ʃ) (ʒ)		x ɣ		ɦ
Approximant	β				j			
Lateral approximant			l					

The sounds between parentheses have a marginal status in the Hamont sound system.

p	pɑ:s ¹	‘passport’	ʃ	ʃɑ ¹ xələ	‘to haggle’
b	bɑ:s ²	‘bass’	ʒ	ʒɑ:t ¹	‘cup’
t	tin ¹	‘ten’	x	vli:x ¹	‘a fly’
d	din ¹	‘that one’	ɣ	vli: ² ɣŋ	‘to fly’
k	ki:əŋ ¹	‘chink’	ʀ	ʀɑ:t ¹	‘rat’
ʔ	ʔi:əŋ ¹	‘Irishman’			
m	vɫɪm ¹	‘(fish) bone’	j	jɑ:ŋ ²	‘year’
n	vin ¹	‘fin’	β	βe:nt ²	‘wind’
ŋ	vɪŋ ¹	‘(I) caught’	l	le:nt ²	‘ribbon’
f	fæ:l ²	‘fierce’			
v	væ:l ²	‘skin’			
s	sɑ ¹ lə	‘to hassle’			
z	zɑ ¹ dəŋ	‘attic’			

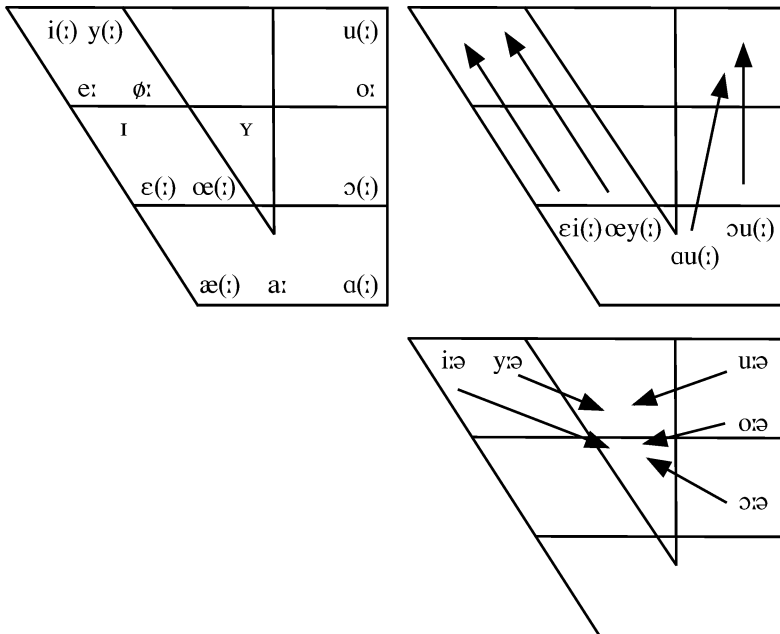
The consonant inventory of the Hamont dialect closely resembles that of Belgian Standard Dutch (Verhoeven 2005). It has two series of plosives, namely an unaspirated voiceless set at three places of articulation and a voiced set at a bilabial and alveolar place of articulation. Glottal stops are confined to the strong onset of word-initial vowels. Like Belgian Standard Dutch, the Hamont system has three nasals at a bilabial, alveolar and velar place of articulation. There are fricatives at four places of articulation. The fricatives [ʃ] and [ʒ] do not occur as frequently as in many other Limburg dialects. In the word-initial cluster /sx/, /s/ is realised as [ç] by this individual speaker. The voiced trill is typically uvular with a clear transitional aspect of articulation (Laver 1994). The devoiced uvular trill in word-final position is realised as a uvular fricative either with or without a transitional aspect. The dialect also has [ç], [g], [ŋ] and [ŋ] but these result from assimilation in contexts similar to Belgian Standard Dutch. Voiced stops, fricatives and trills are devoiced in word-final position. Like most Limburg dialects, Hamont has regressive assimilation of voiceless consonants in, for instance, the past tense of regular verbs where voiceless stops and fricatives are voiced when followed by the past tense morpheme [də]: e.g. [p] > [b] in [krɑbdə] ‘scratched’ and [s] > [z] in [pɑ:zdə] ‘fitted’. In addition, word-final voiceless consonants are voiced in intervocalic position: e.g. [t] > [d] in [dɑ e:d ɪx nɛ] ‘I don’t eat that’ or [f] > [v] in [dɑ ɣe:v ɪx nɛ] ‘I don’t give that’.

Vowels

The Hamont dialect has 22 oral monophthongs, 10 of which are short and 12 of which are long. The short vowels are [i], [y], [ɪ], [ɛ], [œ], [æ], [ɑ], [ɔ], [u] and [ʏ]. The long vowels are [i:], [y:], [e:], [ø:], [ɛ:], [œ:], [æ:], [a:], [ɑ:], [ɔ:], [o:] and [u:]. In addition, it has schwa, which is restricted to unaccented syllables. Unlike the neighbouring Weert dialect, [æ:] and [ɑ:] are not confined to contexts where they are followed by a sonorant consonant, but have a wider distribution, as witnessed by words like [knæ:xt] ‘servant’ and [kla:s] ‘classroom’. On average, long vowels are 95 ms longer than short vowels: this difference is very similar to the length distinction in the vowels of Belgian Standard Dutch which amounts to 105 ms (Verhoeven & Van Bael 2002).

In terms of the number of vowels, the Hamont dialect equals that of Weert (Heijmans & Gussenhoven 1998) and Hechtel (Agten 1999) and exceeds that of Eksel (21 vowels; Agten 1999) and Hasselt (21 vowels; Peters 2006). It is also worth pointing out that the Hamont dialect has more monophthongs than consonants: the vowel-to-consonant ratio (excluding the consonants with a marginal status) is 1.10 whereas the mean vowel-to-consonant ratio in languages of the world amounts to 0.39 (Maddieson 1984). In this respect, the Hamont dialect is exceptional in that it ranks among the very few language varieties which have a vowel-to-consonant ratio higher than 1.00.

In addition to the 22 vowels, the Hamont dialect has 5 centring and 8 rising diphthongs, bringing the total of vocalic elements to 35. The centring diphthongs are all long. The closing diphthongs [ei], [au], [ɔu] and [œy] contrast in duration as witnessed by (near) minimal pairs like [z̥eɪs²] ‘scythe’ vs. [reɪs²] ‘journey’, [kau²] ‘cold’ vs. [kau¹] ‘jackdaw’, [kɔu^{s2}] ‘stocking’ vs. [pɔu^{s1}] ‘pope’ and [bœy^{t2}] ‘loot’ vs. [ʔœy^{t1}] ‘ever’. The long diphthongs are on average 70 ms longer than their short equivalents.



The acoustic characteristics of the vowels in the Hamont sound system are illustrated in figure 1. From figure 1, two interesting observations can be made. First, it can be seen that the acoustic difference between long and short vowels is systematic: all the short vowels are slightly more open and central than their long counterparts, except for [æ] and [ɑ], which are somewhat closer and more fronted than their long equivalents. Nevertheless, the differences are very small and this seems to indicate that this language variety distinguishes vowel pairs on the basis of duration only, while quality differences between durational pairs are minimal. The only exception to this is [y], whose short version is substantially more open and more central than the long version. Secondly, it can be noted that the vowel system seems to operate on the basis of four degrees of opening with [i], [y] and [u] as close vowels; [e:], [ø:] and [o:] as close-mid vowels; [ɛ], [œ] and [ɔ] as open-mid vowels; and [æ], [a:] and [ɑ] as open vowels. Hence, these data do not provide evidence for the existence of five degrees of opening

SHORT VOWELS			LONG VOWELS			DIPHTHONGS		
i	stil ²	'vocation'	i:	sti:l ²	'style'	i:ə	sti:rən ²	'stone'
y	byl ¹	'(paper) bag'	y:	by:l ¹	'Budel (town)'	y:ə	fiy:rəŋ ²	'(I) hear'
			e:	be:k ²	'ditch'			
			ø:	bø:k ²	'beech'			
ɪ	wint ¹	'(he) wins'	ɛ:	RE:k ²	'rake'			
ʏ	RYs ²	'a Russian'	œ:	fiœ:k ¹	'hook-PLU'			
ɛ	REk ²	'shelf'	æ:	pæ:ns ²	'belly'			
œ	fiœk ²	'cage-PLU'	a:	za:k ²	'business'			
æ	pæn ²	'pen'	a:	tɑ:nt ²	'tooth'			
ɑ	tɑm ²	'tame'	ɔ:	scɔ:p ¹	'sheep'	ɔ:ə	ɣlɔ:əs ²	'glass'
ɔ	scɔp ²	'barn'	o:	do:r ²	'through'	o:ə	no:ət ²	'nut'
u	rut ²	'railway track'	u:	RU:t ²	'pane'	u:ə	RU:ət ²	'red'
						ɔ:u:	kɔ:us ²	'stocking'
						ɔ:u	pɔ:us ¹	'pope'
						au:	kau: ²	'cold'
						au	kau ¹	'jackdaw'
						œy:	bœy:t ²	'loot'
						œy	œyt ¹	'ever'
						ei:	zei:s ²	'scythe'
						ei	rei:s ²	'journey'

in vowel systems such as is provided by the Bavarian dialect of Amstetten (Traunmüller 1982) and the Limburg dialect of Weert (Heijmans & Gussenhoven 1998).

Vowel plus glide

Apart from the above-mentioned vocalic elements, the Hamont dialect also allows certain long vowels and short lax vowels to be followed by [β, j] in the coda. The possible vowel–glide combinations are listed in the table below. All vowel–glide combinations are distributionally restricted to the coda, unlike in the neighbouring dialect of Weert, for example, where the short vowel–glide combinations can be followed by a tautosyllabic consonant (Heijmans & Gussenhoven 1998).

LONG VOWEL + GLIDE			SHORT VOWEL + GLIDE		
e:j	sne:j ¹	'slice'	uj	buj ¹	'buoy'
o:j	ko:j ²	'cage'	ɔ:j	kɔ:j ¹	'naughty'
u:j	nu:j ¹	'unwillingly'	(ɑj)	dɪtɑj ¹	'detail'
ɔ:j	vlɔ:j ²	'cake'	iβ	kiβ ²	'gill'
æ:j	mæ:j ¹	'(I) mow'	œβ	lœβ ²	'lion'

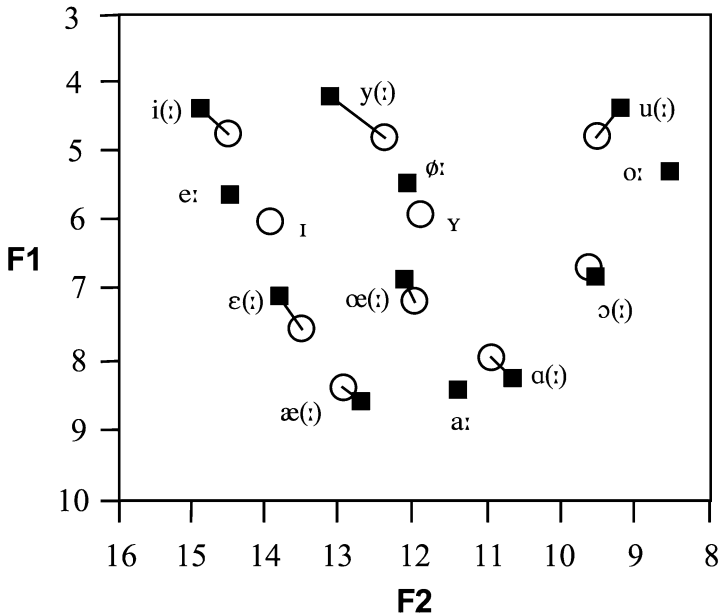


Figure 1 Average formant values (Barks) for the long (filled squares) and short vowels (open circles) in the Hamont sound system. The values are based on recordings of five male and five female speakers. Total number of observations for each vowel is 40.

Prosody

Traditionally, the Hamont dialect is classified amongst the Limburg dialects with a lexical tone contrast. This lexical tone distinction can signal either lexical differences or grammatical distinctions such as those between the singular and the plural forms of certain nouns. Typical examples of the former are words like [ɦu:s²] ‘house’ vs. [ɦu:s¹] ‘(record) sleeve’. Plural marking is exemplified by words like [kəni:n²] ‘rabbit’ vs. [kəni:n¹] ‘rabbits’, [ti:ən²] ‘toe’ vs. [ti:ən¹] ‘toes’. Although it has been shown that several dialects in this area no longer have a lexical tone contrast (Heijmans & Gussenhoven 1998, Schouten & Peeters 1996), the dialect of Hamont seems to have retained its lexical tone distinction. In the Hamont dialect, the lexical tone contrast is syllable-based rather than mora-based. In the mora-based East-Limburg dialects of Maastricht, Venlo and Roermond, the tonal contrast can only occur in accented syllables with long vowels and in syllables consisting of a short vowel followed by a sonorant mora. In the syllable-based westerly Limburg dialects such as Hasselt and Borgloon, the tonal contrast also manifests itself in syllables consisting of short vowels followed by a non-sonorant mora (monomoraic syllables). Indicative of this is that in Hamont Accent 2 can occur in monomoraic syllables such as [ʃɔ:p²] ‘barn’ and [ʀɛk²] ‘shelf’. Since all accented syllables participate in the phonological distinction between Accent 1 and Accent 2, the dialect does not distinguish between Accent 1 and no-Accent.

The pitch contours associated with Accent 1 and Accent 2 in four different prosodic conditions are illustrated in figure 2. In both the [+focus, +final] and the [−focus, +final] conditions tone realisation is very similar. Accent 1 is realised as a steady fall through the rhyme. Accent 2 is realised as a fall-rise contour: the fall is situated in the first half of the rhyme, while the rise takes up the other half. The excursion sizes of the movements depend on whether the word is in focus position or not: excursion sizes in [+focus] position are on average two semi-tones greater than in [−focus] position.

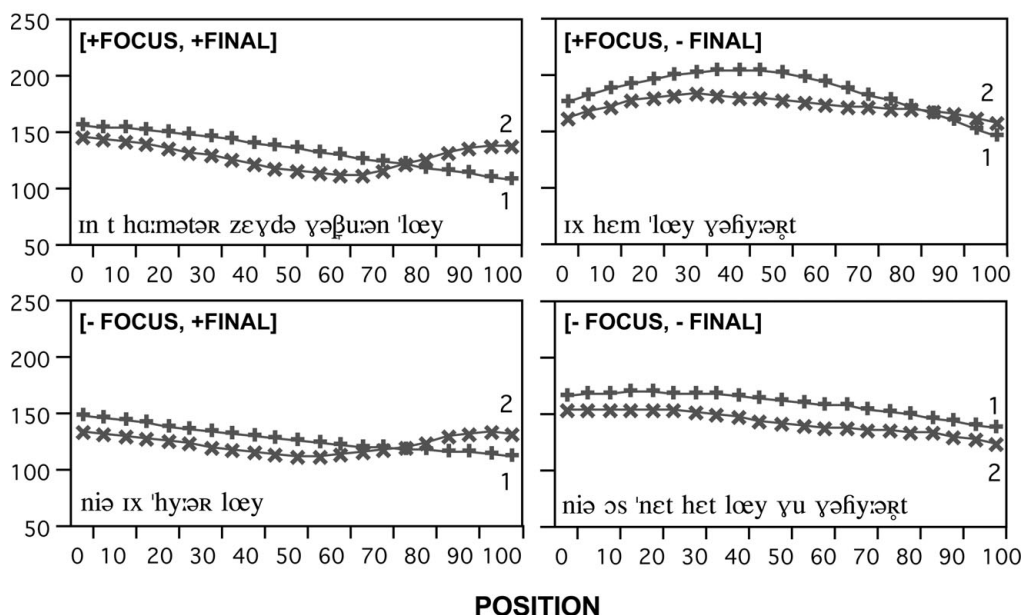
F0

Figure 2 Mean F0 contours in the rhyme of [lœy] in four prosodic statement conditions. F0 associated with Accent 1 (crosses) and Accent 2 (x marks) is time-normalized and represented as a percentage of total rhyme duration.

Tone realisation in the [+focus, -final] and [-focus, -final] conditions is somewhat different. In Accent 1, F0 stays high in the initial 45% of the rhyme and then falls rapidly towards the end of the rhyme. In [+focus, -final] position, Accent 2 is realised as a very shallow fall-rise combination, while in [-focus, -final] position F0 stays high in the initial 20% of the rhyme and then falls towards the end of the rhyme. Again, excursion sizes associated with both accents are smaller in [-focus] position.

Besides the pitch differences between Accent 1 and Accent 2, it should further be observed that there are also durational differences between the vowels with which the accents are associated: vowels with Accent 1 are generally shorter than vowels with Accent 2. In the words which exemplify the present illustration, the duration difference between phonemically short vowels with Accent 1 ($x = 88$ ms) and Accent 2 ($x = 119$ ms) amounts to 31 ms. The difference between the phonemically long vowels with Accent 1 ($x = 166$ ms) and Accent 2 ($x = 229$ ms) is 63 ms. This difference is consistent with the values reported for other Limburg dialects.

This durational difference can be considered as an enhancement feature secondary to the tonal distinction.

Phonetic transcription of recorded passage

Throughout the passage, the speaker pronounces [β̥i:nd] with [ɾ], probably under the influence of Belgian Standard Dutch. Strictly speaking [ɾ] is not part of the Hamont phoneme system.

de no:ɾdərβ̥i:nd ɛn də zɔn | di β̥arə ryzi nt ma:kə ʔo:vər β̥i t stɛrkstə β̥as | tun
 əɾənə v̥ɛ:nt fərβ̥ei: kβ̥a:mp mɛ nə β̥ɛrmə jʌz ɔn || zə sprakən aɪf ɔm tə pɾob̥e:ɾə

| dɛ di vɛ:nt zənə jas zɔu uitrɛkə || də no:rdərβi:nt di βæ:jdə zu fiɑrt ʔi kəs | mɑr
 hu fiɑrdər fiɛi βæ:jdə | fiu βæ:rmər də vɛ:nt siɣ indyʔəldə || u:teindələk xɑ:v
 fiɛid əp || dɑn bəɣɔzdə zən hɑ:rtə sxinə | ʔɛn də vɛ:nt di de:ɣ zənə jaz ut || də
 no:rdərβi:nt ti must tɔuɣe:və dɛ də zən t stɛ:rkstə βɑ:s ||

Standard Belgian Dutch orthographic version

De noordenwind en de zon waren ruzie aan het maken over wie het sterkste was toen er een man voorbij kwam met een warme jas aan. Ze spraken af om te proberen de man zijn jas te laten uittrekken. De noordenwind blies zo hard hij kon, maar hoe harder hij blies hoe warmer de reiziger zich induffelde. Uiteindelijk gaf hij het op. Dan begon de zon hard te schijnen en de man deed zijn jas uit. De noordenwind moest toegeven dat de zon het sterkste was.

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