

## ILLUSTRATIONS OF THE IPA

# Belgian Standard Dutch

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Dutch is a language spoken by about 20 million people in the Netherlands and Belgium. This region is not only characterised by a complex dialect situation, but also by the use of two institutionalised varieties of the Standard language: Netherlandic Dutch is spoken in the Netherlands and is documented in Collins & Mees (1982), Mees & Collins (1983) and Gussenhoven (1999), while Belgian Dutch is spoken in the northern part of Belgium (Flanders) by approximately 6 million speakers. This variety is the same as what is commonly referred to internationally as ‘Flemish’. However, the term ‘Flemish’ is avoided here since it erroneously suggests that this language is different from the one spoken in the Netherlands: the lexical and syntactic differences between the two language varieties are very small. Nevertheless, there are significant phonetic differences as well as substantial regional variability within the two speech communities.

Belgium has three official languages: Dutch, French and German. Each language is confined to a specific area of the country. Dutch is spoken in the northern part of Belgium (Flanders), while in the southern part (Wallonia), French is spoken. In the province of Liege, in the east of Belgium, there is a small area with German as an official language. Within the Dutch-speaking area there is a bilingual (French–Dutch) enclave, i.e. Brussels. The present situation was instituted by law in 1962.

## Consonants

	Bilabial	Labio-dental	Alveolar	Post-alveolar	Palatal	Velar	Uvular	Glottal
Plosive	p b		t d		(c)	k (g)		(ʔ)
Nasal	m	(m̥)	n		(ɲ)	ŋ		
Trill			(r)				R	
Fricative		f v	s z	(ʃ) (ʒ)		x ɣ		ħ
Approximant	w				j			
Lateral approximant			l		(ʎ)			

The sounds between parentheses result from surface phenomena or have a marginal status in that they occur in loan words only.

p	pa:lə	<i>palen</i>	‘poles’	f	do:ʃə	<i>doosje</i>	‘little box’
b	ba:lə	<i>balen</i>	‘bales’	ʒ	lo:ʒə	<i>loge</i>	‘lodge’
t	ta:lə	<i>talen</i>	‘languages’	x	xɛil	<i>chijl</i>	‘chyle’
d	da:lə	<i>dalen</i>	‘to go down’	ʏ	ʏeil	<i>geil</i>	‘horny’
k	ka:lə	<i>kale</i>	‘bald person’				
ʔ	ʔa:lə	<i>alen</i>	‘eels’	ʀ	ra:t	<i>raad</i>	‘advice’
m	vɫam	<i>vlam</i>	‘flame’	j	ja:ɾ	<i>jaar</i>	‘year’
n	vən	<i>van</i>	‘from’	w	wa:ɾ	<i>waar</i>	‘true’
ŋ	vɑŋ	<i>vang</i>	‘(I) catch’	l	la:t	<i>laat</i>	‘late’
f	fɛl	<i>fel</i>	‘fierce’				
v	vɛl	<i>vel</i>	‘skin’				
s	se:l	<i>ceel</i>	‘warrant’				
z	ze:l	<i>zeel</i>	‘rope’				

### Plosives

The sound system of Belgian Dutch distinguishes between two series of plosives: a voiceless series /p/, /t/ and /k/ and a plain voiced series with plosives at a bilabial and alveolar place of articulation. Phonetically, the language also has a voiceless palatal stop [c] in diminutive forms of nouns ending in /t/ or /d/ such as [bɔ:cə] ‘little boat’ and [pa:ɾcə] ‘little horse’ and a labiodental stop in words like [ɔpʃalə] ‘to stand out’ and [ɔpʃu:rə] ‘to perform’. The glottal stop is confined to word-initial position as a strong attack of vowels. Furthermore, Dutch also has [g] in words like [zɑgduk] ‘handkerchief’ and [degbet] ‘quilt’. These phonetic realisations, however, originate from processes of assimilation. The voiceless plosives are unaspirated, while the voiced plosives are fully voiced in word-initial and intervocalic position. There are no substantial differences between Belgian and Netherlandic Dutch as far as the plosives are concerned.

### Nasals

The Belgian Dutch sound system has nasals at three places of articulation: [m], [n] and [ŋ]. Phonetically, the language also has a labiodental and a palatal nasal. The former is confined to cases of assimilation where the bilabial nasal is followed by a labiodental fricative such as in [ɔŋvələ] ‘to fall over’. The latter occurs in foreign words [lɑzɑŋɑ] ‘lasagna’ and cases of assimilation where the alveolar nasal is followed by a palatal stop in the diminutive form as in [lɑŋcə] ‘little country’. The nasal system is the same as in Netherlandic Dutch.

### Fricatives

It has been argued that one of the most salient phonetic differences between Belgian Dutch and Netherlandic Dutch has to do with the voicing distinction in fricatives (Gussenhoven 1999): the Netherlands has a strong tendency to devoice its phonologically voiced fricatives, while it has been held traditionally that the voicing distinction in fricatives is still very stable in Belgian Dutch. Recent research on fricative devoicing in Belgian Dutch, however, shows that 70% of word-initial and 56% of intervocalic fricatives are realised without any trace of vocal fold vibration (Verhoeven & Hageman, in press). Word-final fricatives are always voiceless.

A striking difference between Belgian Dutch and Netherlandic Dutch relates to the velar and uvular place of articulation: Belgian Dutch has a voiced and voiceless velar fricative: these are absent in the Netherlands. The Netherlands has a voiceless uvular fricative which does not occur in Belgian Dutch.

## Trills

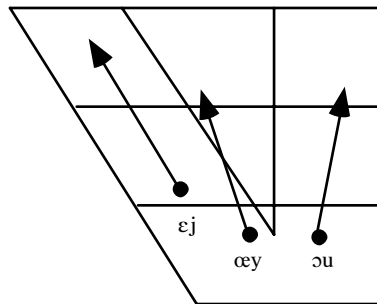
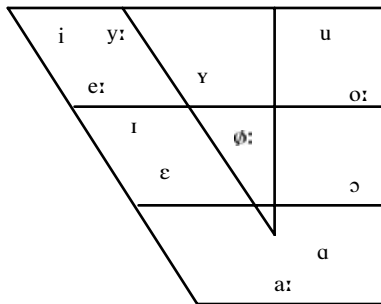
The phonological system of Belgian Dutch has free variation between an alveolar and uvular trill. The alveolar trill is most frequent and geographically most widely distributed. The uvular trill is regionally confined to the cities of Ghent and Brussels and the province of Limburg, but estimates suggest that it is gaining fast in popularity (Van Reenen 1994). The alveolar/uvular trill is voiced in all positions, except word-finally as in [do:r̥] ‘through’ and when followed by a voiceless stop in consonant clusters as in [va:r̥t] ‘sails’. The phonetic characteristics of the uvular trill in the province of Limburg were investigated in Verhoeven (1994). It was found that uvular trills are virtually always realised with a clear transitional aspect of articulation, i.e. the uvula does actually trill against the back of the tongue. Only in a very small number of cases the uvular trill was realised phonetically as a voiced uvular approximant or a voiceless uvular fricative, i.e. without a transitional aspect. This limited phonetic variability of r-realisation in Belgian Dutch contrasts with the Netherlands where /r/ is also frequently realised as amongst others a central vowel, a retroflex approximant, an alveolar tap, an alveolar approximant or a uvular fricative (Van de Velde 1994).

## Approximants

Belgian Dutch has two central approximants and one lateral, i.e. /j/ and /w/ vs. /l/. [w] has a labial-velar articulation rather than labiodental in many accents of Netherlandic Dutch. The lateral approximant is often slightly velarized in postvocalic positions. The palatal lateral approximant only occurs as a result of assimilation with following /j/.

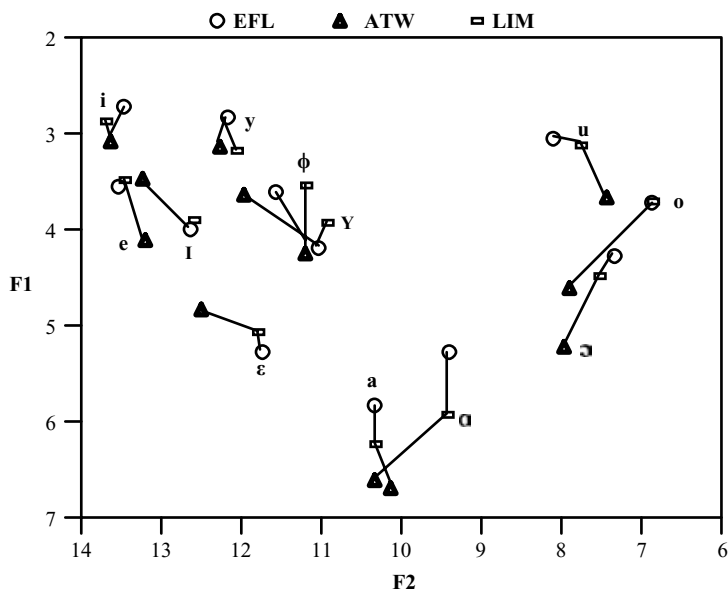
## Vowels

Belgian Dutch has twelve monophthongs and three diphthongs.



i	lip	<i>liep</i>	‘ran’	ɛj	lej	<i>lei</i>	‘slate’
ɪ	lip	<i>lip</i>	‘lip’	œy	lœy	<i>lui</i>	‘lazy’
e:	le:s	<i>lees</i>	‘(I) read’	ɔu	lou	<i>lauw</i>	‘tepid’
ɛ	les	<i>les</i>	‘lesson’				
ɑ	rap	<i>rap</i>	‘quick’				
a:	ra:p	<i>raap</i>	‘turnip’				
ɔ	lot	<i>lot</i>	‘fate’				
o:	lo:t	<i>lood</i>	‘lead’				
u	buk	<i>boek</i>	‘book’				
ɤ	byk	<i>buk</i>	‘(I) bend over’				
y:	dy:r̥	<i>duur</i>	‘expensive’				
ø:	dø:r̥	<i>deur</i>	‘door’				

The main difference between Belgian Dutch and Netherlandic Dutch has to do with the pronunciation of the half-close long vowels [e:], [ø:] and [o:]. In the Netherlands, these are



**Figure 1** Average formant values (Bark) for the 12 Dutch monophthongs in five male speakers from the East Flanders (EFL), Antwerp (ATW) and Limburg (LIM) region.

frequently diphthongized. In Belgian Dutch, however, they are always monophthongs. The acoustic characteristics of the vowels in Belgian Dutch were investigated in Verhoeven & Van Bael (2002). This study describes monophthong realisation in three regional varieties of Belgian Dutch, i.e. in the Limburg area (LIM), the Antwerp area (ATW) and the East-Flanders area (EFL). Mean formant values of five male speakers in each of these areas are illustrated in figure 1.

From figure 1, it can be seen that there is substantial regional variability in vowel realisation. The Antwerp region has very similar average formant values for [i] and [I], [a] and [ɑ], [y] and [ɣ]. This may foreshadow the collapse of these distinctions in future generations. In addition, [e] and [ɪ] have swapped positions as compared to East Flanders and Limburg. Finally, all the Antwerp back vowels have substantially higher F1 values than the other varieties.

## Prosody

The intonation system of Belgian Dutch is very similar to that of Netherlandic Dutch, i.e. pitch contours consist of combinations of rising and falling pitch movements between an upper and lower declination line. The most common pitch configuration consists of a prominence-leading rise-fall combination in the same syllable with a frequent variant in which the two prominence-leading movements are positioned on different syllables: they are connected by a stretch of high declination. Another frequent pitch configuration is a rise associated with continuation or question intonation. The investigation of the precise differences between the intonational systems in both language varieties is in its initial stages.

A prosodic characteristic which has recently been investigated in detail is speech rate (Verhoeven, De Pauw & Kloots 2004), calculated for 80 speakers in Belgian Dutch. In this study, articulation rate amounted to 4.22 syllables per second (syll/sec) and speaking rate was 3.98 syll/sec. The value for speaking rate included silent and filled pauses, whereas silent pauses were excluded from the measure for articulation rate. These rates were significantly

lower than those established for Netherlandic Dutch, where articulation rate amounts to 5.04 syll/sec and speaking rate to 4.23 syll/sec.

### Transcriptions

The speaker is a highly educated 45-year-old male who speaks Belgian Dutch with a very slight regional Limburg accent. The symbol || marks the end of an utterance and the symbol | marks the end of an intonational phrase.

### Orthographic

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

### Broad phonetic

də nɔ:rdəwint<sup>s</sup> ?ɛn də zɔn | wɑ:rə ryzi a:n ət ma:kə | ?ɔ:vər wi fiət stɛrkstə was |  
 tun əR ən REIZIYƏR vɔ:rbei kwam met ən wɔrmə jɑzɑ:n || zə sprɑ:kən ?af |  
 dət dəyɛ:nə di ?ərin zɔu slɑ:yə ?ɔm də REIZIYƏR zɛin jas tə dun ?œytrɛkə | də  
 stɛrkstə was || də nɔrdəwints blis sɔ: fiət fiɛi kɔn | mɑ:r fiu fiɑrdər hɛi blis |  
 hu wɔrmər də REIZIYƏR zix indyfeldə || ?œyteindələk gaf hɛi zɛin pɔ:yɪŋ ?ɔp  
 || dən bəyɔn də zɔn fiət tə sxɛinə | ?ɛn də REIZIYƏR de:t ɔmidələk sɛin jazœyt  
 || də nɔ:rdəwint<sup>s</sup> must tɔyɛ:və | dətə zɔn hət stɛrkstə was.

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