

Acknowledgements

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European Portuguese

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The following illustration of European Portuguese is based on the Lisbon dialect. The text is transcribed from a recording made by a female native speaker of Lisbon in her mid-forties, speaking in a style that may be described as educated colloquial. All phonemes of European Portuguese are illustrated in the passage unless otherwise noted.

European Portuguese comprises several regional accents, including those of the archipelagos of Madeira and the Azores. The Lisbon accent is one of the two national standard varieties in mainland Portugal, the second being that spoken in the area of the city of Coimbra.

The language is characterized by a velarized resonance superimposed on both vowels and consonants, in that the usual posture of the tongue body is retracted and raised. In addition, an overall rather lax articulation further affects vowel quality and voicing, as well as the articulation and voicing of voiced consonants. These features are not, it should be pointed out, exclusive to informal or careless speech and, together with specific prosodic patterns, they constitute the most striking characteristic distinguishing European from Brazilian accents of Portuguese.

Consonants

	Bilabial	Labio-dental	Dental	Alveolar	Palato-alveolar	Palatal	Velar	Uvular
Plosive	p b		t d				k g	
Nasal		m		n			ŋ	
Fricative		f v		s z	ʃ ʒ			χ
Tap				r				
Lateral Approx.			l			ʎ		

p 'patu <i>pato</i> 'duck' (m)	t 'tatu <i>tacto</i> 'tact'	k 'katu <i>cacto</i> 'cactus'
b 'batu <i>bato</i> 'I strike'	d 'datu <i>dato</i> 'I date'	g 'gatu <i>gato</i> 'cat' (m)
m 'matu <i>mato</i> 'I kill'	n 'natu <i>nato</i> 'innate' (m)	ɲ 'piɲe <i>pinha</i> 'pine cone'
f 'fatu <i>fato</i> 'costume'	s 'kasu <i>caço</i> 'I hunt'	ʃ 'ʃatu <i>chato</i> 'flat' (m)
v 'viɲe <i>vinha</i> 'vine'	z 'kazu <i>caso</i> 'I marry'	ʒ 'zatu <i>jacto</i> 'jet'
	r 'pire <i>pira</i> 'pyre'	χ 'ʒatu <i>rato</i> 'mouse' (m)
	l 'liɲe <i>linha</i> 'line'	ʎ 'piʎe <i>pilha</i> 'battery'

Vowels

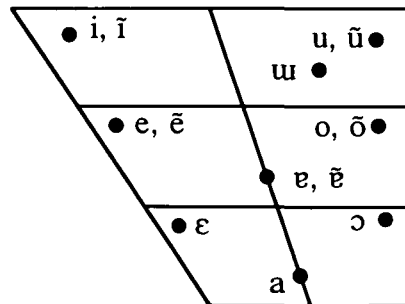
European Portuguese has 14 monophthongs, 9 oral and 5 nasalized. These vowels are usually described using four values for height and three for backness. Their positions are shown on the chart below according to the values widely agreed on in the literature, with the exception of the vowel /u/. This vowel, which occurs only in unstressed syllables, is often represented as /ə/ but does not correspond to the mid central quality associated with *schwa*. It is a fronted and lowered high back unrounded vowel; hence the symbol chosen here for its transcription. The chart represents target articulations of the vowels which are normally 'undershot' in connected speech, resulting in more centralized qualities.

Oral vowels

i	vi	vi	'saw' (1 sg)
e	ve	vê	'see' (3 sg)
ɛ	se	sé	'cathedral'
a	va	vá	'go' (3 sg)
ɔ	sɔ	só	'alone'
o	so	sou	'I am'
u	'mudu	<i>mudo</i>	'mute' (m)
ɐ	pɐ'gar	<i>pagar</i>	'to pay'
ʊ	pu'gar	<i>pegar</i>	'to grip'

Nasalized vowels

ĩ	vĩ	vim	'came' (1 sg)
ẽ	'êtru	<i>entro</i>	'enter' (1 sg)
ɛ̃	'êtru	<i>antro</i>	'den'
õ	sõ	som	'sound' (N)
ũ	'mũdu	<i>mun</i>	'world'



Diphthongs

There are 14 diphthongs, 10 oral and 4 nasalized, as shown below. The diphthongs /ei, oi, ui, eu/ do not occur in the transcribed passage.

ei	ɐˈneif	<i>anéis</i>	‘rings’ (N)
ai	sai	<i>sai</i>	‘go out’ (3 sg)
ɐi	sɐi	<i>sei</i>	‘know’ (1 sg)
ɔi	mɔi	<i>mói</i>	‘grind’ (3 sg)
oi	ˈmoitɐ	<i>moita</i>	‘thicket’
ui	ɐˈnuif	<i>anuis</i>	‘agree’ (2 sg)
iu	viu	<i>viu</i>	‘saw’ (3 sg)
eu	meu	<i>meu</i>	‘mine’ (poss m)
ɛu	vɛu	<i>véu</i>	‘veil’
au	mau	<i>mau</i>	‘bad’ (m sg)
ɛ̃i	sɛ̃i	<i>cem</i>	‘hundred’
õi	ɐˈnõif	<i>anões</i>	‘dwarves’ (m)
ũi	ˈmũitɐ	<i>muita</i>	‘much, many’ (f)
ẽu	mẽu	<i>mão</i>	‘hand’ (N)

Conventions

Except in word-initial position (and after nasalized vowels), the voiced plosives /b, d, g/ are normally pronounced as the fricatives [β, ð, ɣ]. /j, ʒ/ are weakly fricated in syllable-final position. Syllable-final /j/ occurs as [ʒ] before a voiced consonant (except before /ʒ/ itself, where it is deleted), and as [z] before a syllable-initial vowel both within and across word-boundaries, as in [kʷal duʒ doiz ˈɛrɔ] *qual dos dois era o* ‘which of the two (m) was the (m)’ in the transcribed passage. /l/ is velarized in all its occurrences.

/r/ does not occur in word-initial position, and /ɲ, ʎ/ only occur initially in a few borrowed words, and in the case of /ʎ/ also in the clitic pronoun /ʎu/ *lhe* ‘to him/her/it’ and all the forms in its paradigm.

All vowels have lower and more retracted allophones before /l/, and higher and more advanced allophones before alveolar, palato-alveolar or palatal consonants. /w/ and unstressed /ø, u/ are voiceless in word-final position.

The end-points of the diphthongs, although transcribed [i] and [u], tend to be more central and, in the case of [u], less strongly rounded than these symbols suggest. The diphthong /ɐi/ in the Lisbon accent is tending towards a retracted onset [ɐ̠i] or [ʌ̠i]. In some words the offglide has been altogether lost, as in the pronunciation of the word /pɛifw/ *peixe* ‘fish (N)’ as [pɛf].

In a vowel sequence in which the first vowel is an unstressed /i/ or /u/ and the second a stressed vowel the first vowel may lose its syllabicity, e.g. /βiˈaʎ/ *real* ‘real’ can be pronounced as a monosyllable, [β̠iˈaʎ], and /muˈidɐ/ *moída* ‘ground’ (adj, f) as [m̠uˈidɐ].

Prosody

Lexical stress

Lexical stress is distinctive. Stress provides very productive class-changing contrasts, such as those between nouns and verbs in pairs like [ˈduvidɐ] *dúvida* ‘doubt (N), [duˈvidɐ] *duvida* ‘doubt (V, 3 sg)’. Less frequently, words in the same class contrast in stress, e.g. the nouns [ˈtunɛl] *túnel* ‘tunnel,’ [tuˈnɛl] ‘wine cask.’

Most Portuguese words are stressed on the penultimate syllable, although lexical stress may fall on any of the last three syllables of the word, and even on the fourth from last in the case of verbal forms with enclitic personal pronouns such as [ʃɐˈmavɐmuʃtuɪ], *chamávamos-te* ‘we called you (sg),’ [ɐkɐˈbavɐsuɫu] *acabava-se-lhe* ‘he/she/it ran out of.’ Syllables with diphthongs not bearing primary stress are assigned a secondary stress, e.g. [auˈtɛ̃tiku] *autêntico* ‘authentic (m sg).’

Rhythm, vowel reduction and devoicing

European Portuguese is a stress-timed language with vowel reduction in unstressed syllables. In connected speech, unstressed vowels are either centralized or altogether omitted, and consonants and vowels in unstressed positions may be devoiced (Mateus 1975, Willis 1971). Examples in the transcribed passage include /ɛ̃ˈvɔltu/, phonetically [ɯ̃ˈvɔlt], *envolto* ‘wrapped (m)’ and /dʊzɪʃˈtiu/ [dʊz̥ʃˈtiu] *desistiu* ‘gave up’ (3 sg), where a potentially trisyllabic word is reduced to a monosyllable with a complex onset.

Intonation

Portuguese intonation can be analyzed as a set of nuclear tones associated with phrase-length intonation groups. The nuclear tones fall on a stressed syllable, typically the last stressed syllable in the intonation group. If the nuclear syllable is not the last syllable in the group, the nuclear pitch movement continues on any following weak syllables. Normally, such weak syllables are only pronounced when required for completion of an intonational pattern.

There are six main nuclear tones in Portuguese, three falling, two rising, and a rise-fall. They are transcribed here with ‘tone letters’ placed before the nuclear syllable. The low fall (∨) is the neutral tone for statements and question-word questions; a high fall (∇) is generally associated with emphasis; an extra-low fall is used in exclamations and commands. The low rise (∧) is the typical tone for yes/no questions, and marks continuation or incompleteness in discourse. The high rise (∧) is associated with echo questions or with questions requiring repetition of a previous utterance. The rise-fall (∩) typically marks implication and reserve. Only the low fall and low rise occur in the transcribed passage. Cruz-Ferreira (forthcoming) provides a more comprehensive outline of the prosodic system.

Transcription of the recorded passage

The transcription provided below is narrow in certain respects, and includes the representation of sandhi phenomena (Herslund 1986), for example, in line 1 where [ɛrɔ] is the contraction of /ɛrɐ u/, and of pitch excursions. Unstressed syllables which maintain their target vowel qualities are not transcribed with a secondary stress;

secondary stress is shown only with diphthongs. Upstepped syllables are followed by low or falling syllables, downstepped syllables by low or rising syllables. Since upstep and downstep do not necessarily occur on a stressed syllable, all primary stresses not indicated by a tone mark are shown in the transcription.

u ˈvētu ˈnɔrt ˈi u sɔl dʒkuˈti.ẽu ˈkɥal duʒ doiz ˈɛrɔ maif ˈɤfɔrtu | ˈkɥẽdu
 susuˈdeu pɛˈsar ẽ viẽˈzẽtu u̯ˈvɔlt numɛ ˈkape || au ˈɤvelu | ˈpɔiˈẽis
 diẽˈkɔrdu ẽi ˈkɔmu ɛˈkel ku priˈmẽiru kɔsˈgis ɔbriˈgar u viẽˈzẽtu ɛ tiˈrar
 ɛ ˈkape | sriẽ kɔsiduˈradu u maif ˈɤfɔrt || u ˈvētu ˈnɔrtu kumuˈso ɛ
 suˈprar kɔ ˈmũite ˈɤfuriẽ | mɛʃ ˈkɥẽtu maif suˈprave | maiz ˈu viẽˈzẽtu si
 ɛkɔʃˈgava suẽ ˈkape | ɛˈte ˈkiu ˈvētu ˈnɔrtu ˈɤʒʃtiu || ˈu sɔl briˈʎo ẽˈtẽu kɔ
 ˈtodu ʃplẽˈɔdor | i ˈimudiatẽmẽt u viẽˈzẽtu tiˈro ɛ ˈkape || u ˈvētu ˈnɔrtu
 tev ɛˈsi du ʒkuɯˈsɛr ɛ supuriuˈɾidãd ˈdu ˈɤsɔl ||

Orthographic version

O vento norte e o sol discutiam qual dos dois era o mais forte, quando sucedeu passar um viajante envolto numa capa. Ao vê-lo, pôem-se de acordo em como aquele que primeiro conseguisse obrigar o viajante a tirar a capa seria considerado o mais forte. O vento norte começou a soprar com muita fúria, mas quanto mais soprava, mais o viajante se aconchegava à sua capa, até que o vento norte desistiu. O sol brilhou então com todo o esplendor, e imediatamente o viajante tirou a capa. O vento norte teve assim de reconhecer a superioridade do sol.

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