

Catalan

JOAN F. CARBONELL* AND JOAQUIM LLISTERRI**

*Department of Phonetics and Linguistics, University College, London NW1 2HE, UK

**Departament de Filologia Espanyola, Facultat de Filosofia i Lletres, Universitat Autònoma de Barcelona, 08193 Bellaterra, Barcelona, Spain

The style of speech illustrated below is that of an educated speaker of Central Catalan as spoken in the area of Barcelona. The speech illustrated in the recording is that of a 26-year-old male speaker whose speech is representative of that variety.

Consonants

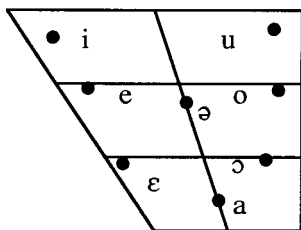
	Bilabial	Labio-dental	Dental	Alveolar	Post-alveolar	Palatal	Velar
Plosive	p b		t d				k g
Affricate					tʃ dʒ		
Nasal	m			n		ɲ	ŋ
Trill				r			
Tap or Flap				ɾ			
Fricative		f		s z	ʃ ʒ		
Central Approximant						j	w
Lateral Approximant				l		ʎ	

/v/ does not occur in the Central Catalan system, but is present in some dialects (e.g. Majorcan Catalan, in the Camp de Tarragona).

p	<i>piga</i>	'speck'	t	<i>talla</i>	'size'	k	<i>casa</i>	'house'
b	<i>biga</i>	'beam'	d	<i>dalla</i>	'scythe'	g	<i>gasa</i>	'lint'
						tʃ	<i>metxa</i>	'fuse' (n)
						dʒ	<i>metge</i>	'doctor'
m	<i>mama</i>	'mum'	n	<i>mana</i>	'he commands'	ɲ	<i>manya</i>	'skill'
			r	<i>serra</i>	'saw' (n)	ŋ	<i>sang</i>	'blood'
			s	<i>passar</i>	'to pass'	ɾ	<i>cera</i>	'wax'
f	<i>fosc</i>	'dark'	z	<i>pesar</i>	'to weigh'	ʃ	<i>eixut</i>	'dry'
			j	<i>iaia</i>	'grandma'	ʒ	<i>ajut</i>	'help'
			l	<i>pala</i>	'shovel'	w	<i>veuen</i>	'they see'
						ʎ	<i>palla</i>	'straw'

Vowels

The seven vowels /i/, /e/, /ɛ/, /a/, /o/, /ɔ/, /u/ occur in stressed syllables. If the syllables lose their stress /e/, /ɛ/, /a/ are reduced to schwa [ə] and /o/, /ɔ/ to [u]. The high vowels /i/, /u/ retain their quality in unstressed positions.

**Stressed vowels**

i	<i>ric</i>	'I laugh'
e	<i>cec</i>	'blind'
ɛ	<i>sec</i>	'dry'
a	<i>sac</i>	'sack' (n)
ɔ	<i>soc</i>	'log' (n)
o	<i>sóc</i>	'I am'
u	<i>suc</i>	'juice'

Unstressed vowels

i	<i>idea</i>	'idea'
u	<i>usar</i>	'to use'
ə	<i>amor</i>	'love' (n)

The phonetic diphthongs always begin or end with a high vocoid element. This may be interpreted as one of the independent phonemes /j/ or /w/, or may be regarded as an allophonic variant of a high vowel, /i/ or /u/. The first hypothesis seems more reasonable. On the one hand, both [uj] and [wi] can occur, so that the relative prominence of the components cannot be derived from their position in the syllable. On the other hand, the possibility of having both [wi] and [iw] shows that they are commutable. Therefore, it is best to consider /j/ and /w/ as underlying non-syllabic elements, rather than to derive them from /i/ and /u/.

Diphthongs are formed with a vowel and /j/ and /w/ either preceding (rising diphthong) or following (falling diphthong). Examples are given below.

ej	<i>rei</i>	'king'	ɛw	<i>peu</i>	'foot'
uj	<i>avui</i>	'today'	ow	<i>pou</i>	'well' (n)
ja	<i>iaia</i>	'grandma'	wa	<i>quatre</i>	'four'
jɛ	<i>veiem</i>	'we see'	wə	<i>aigua</i>	'water'

Stress and accent

Stress may fall on the last syllable of a word, [kumbər'sa] 'to chat', on the penultimate syllable, [kumpəndrə] 'to understand', or on the antepenultimate, [kapsulə] 'capsule'. All lexical words have one stressed syllable, though compound words regularly retain the stress

associated with each element, e.g. *parallamps* [paɾə'kams] 'lightning conductor'; similarly adverbs formed with *-ment* may be double-stressed, *bonament* ['bɔnə'men] 'willingly'. Most monosyllabic function words are always weak, even if stressed and accented.

Although the vowel reduction process suggests that stress is not distinctive, there are some minimal pairs where stress is contrastive, like *surti* ['surti], subjunctive form of 'to go out' and *sortir* [sur'ti], infinitive form of 'to go out'.

Differences between dialects

There are two main dialects of Catalan: Eastern Catalan and Western Catalan. Each dialect is further subdivided into different subdialects. The standard pronunciation of Catalan can be considered that of educated Central Catalan, a variety of Eastern Catalan.

The two main dialects differ noticeably in the treatment of unstressed vowels: while Western Catalan does not show vowel reduction processes in unstressed syllables, in Eastern Catalan dialects /e/, /ɛ/ and /a/ merge into schwa [ə] and /o/ and /ɔ/ merge into [u] in unstressed positions, while /i/ and /u/ retain their quality. In other words, in most Eastern dialects unstressed syllables will only contain one of the three vowel qualities [i], [u] or [ə]. In Western dialects [e], [o] and [a] also occur as unstressed vowels.

Conventions

The three voiced plosives have approximant variants [β], [ð], [ɣ] in onset positions (except after pause) after a vowel, or a liquid (except for /d/ after /l/). Elsewhere, these segments are realized as plosives. The voicing contrast of all the obstruents is neutralized word-finally due to the processes of word-final devoicing and voicing assimilation. All obstruents are devoiced word-finally before a pause. Moreover, the plosives have voiced allophones before a voiced consonant, but voiceless allophones before a vowel or a voiceless consonant. The fricatives behave similarly, but, unlike plosives, they also assimilate voicing before a vowel. This results in morphophonemic alternations, like *pes* [pɛs] 'weight' – *pesar* [pə'za] 'to weigh'.

Voiceless plosives are unaspirated; voiced allophones of the voiced plosives are voiced throughout. /b/ and /g/ are geminated before /l/ in the same syllable, if internally in a word after a stressed vowel: *poble* [pɔβblə] 'village'. In Barcelona, the voiced geminates are currently devoiced, [pɔpplə] or reduced to an unvoiced stop [pɔplə], while in other dialects the stops are realized as approximants, i.e. [pɔβlə]. The geminates [nn] and [mm] also occur in careful speech in words like *innecessari* [innəsə'sari] 'unnecessary' and *immens* [im'mens] 'huge'. There is also a geminate lateral [ll] as in *il·lusió* [illu'zió] 'illusion', but it is usually reduced to [l] in colloquial speech. The geminate [λλ] appears in words like *espatlla* [əs'paλλə] 'shoulder'. /l/ has some degree of velarization in all positions, but is darker before a pause or consonant.

Final clusters of nasal or lateral stops are reduced by dropping the stop, which is usually restored if a morpheme starting with a vowel is added: *pont* [pɔn] 'bridge' – *pontet* [pun'tet] 'small bridge'. Final /r/ is lost before a word boundary or before the plural morpheme in most words, including infinitives, but is restored before a morpheme starting with a vowel:

color [ku'lo] 'colour' but *coloraina* [kulu'rajnə] 'bright colours'. There are however a number of exceptions, like *futur* [fu'tur] 'future'.

In emphatic speech and in certain dialects, initial postalveolar fricatives are affricated: *ximple* ['(t)ʃimplə] 'foolish', *germà* [(d)ʒər'ma] 'brother'. Underlying /v/ is realized as /b/ in Central Catalan; [b] or [β] occur before a vowel and [w] occurs finally; this results in alternations between [b] or [β] and [w]. Thus *blava* ['blaβə] 'blue' (fem) vs. *blau* [blaw] 'blue' (masc).

Transcription of recorded passage

lə trəmuntanə j əl səl əz ðisputaβən | sustəniŋ 'kað u k eɫ 'erə l mes fər |
 kwan də 'soptə | 'bɛwən um biədʒe kə s ə'kɔstə mbuli'kat ən unə 'ɣraŋ 'kapə ||
 baŋ kumbəni kə l ki pri'me fə'riə kə l βiədʒe s trə'ɣes lə 'kapə | sə'riə tiŋ'gup
 pəl mes fər || lə trəmuntanə s 'pɔz ə βu'fa m 'totə lə 'seβə 'furiə | pə'rɔ kɔm
 mez βu'faβə | mez əl βiədʒe s əβri'ɣaβə m lə 'kapə || ə lə fi | ba də'fa 'korə
 ferli 'trɛwɾə || ələ'zɔrɛz əl səl kumən'sa ðə βri'ɣa | j əl kab d um mu'men | əl
 βiədʒe | ben əskəl'fat | əs trɛw lə 'kapə || ə'ʃi | lə trəmuntanə βa 'βe ðə
 kumfə'sa kə l səl 'erə l mes fər ||

Orthographic version

This text was published in the *Principles of the International Phonetic Association* edited in 1912 but was omitted from the specimens in the subsequent versions of the *Principles*. It had appeared for the first time in *Le Maître Phonétique* vol. 26 ns. 7–8 (1911) p. 119 and was prepared by Josep M. Arteaga (Barcelona, 1846–1913), a Catalan phonetician who became a member of the Council of the IPA in 1907.

La tramuntana i el sol es disputaven, sostenint cada u que ell era el més fort, quan de sobte, veuen un viatger que s'acosta embolicat en una gran capa. Van convenir que el qui primer faria que el viatger es tragués la capa seria tingut pel més fort. La tramuntana es posa a bufar amb tota la seva fúria; però com més bufava, més el viatger s'abrigava amb la capa; a la fi, va deixar còrrer fer-li treure. Aleshores el sol començà de brillar, i al cap d'un moment, el viatger, ben escalfat, es treu la capa. Així, la tramuntana va haver de confessar que el sol era el més fort.

Acknowledgements

We would like to thank Carme de la Mota and Antonio Ríos for their useful comments and suggestions.

References

- ALARCOS, E. (1983). *Estudis de lingüística catalana*. Barcelona: Ariel.
- BADIA I MARGARIT, A. M. (1951). *Gramàtica històrica catalana*. Barcelona: Noguer.
 Catalan translation: València, Tres i Quatre, 1981.
- BADIA I MARGARIT, A. M. (1988). *Sons i fonemes de la llengua catalana*. Barcelona: Publicacions de la Universitat de Barcelona.

- BONET, E.-LLORET, M.-R. (1998). *Fonologia catalana*. Barcelona: Ariel.
- GILI, J. (1974). *Introductory Catalan Grammar*. Oxford: Dolphin Books.
- HUALDE, J. I. (1992). *Catalan*. London: Routledge.
- INSTITUT D'ESTUDIS CATALANS. (1990). *Proposta per a un estàndard oral de la llengua catalana I: Fonètica*. Barcelona: Institut d'Estudis Catalans.
- RECASENS, D. (1991). *Fonètica descriptiva del català*. Barcelona: Institut d'Estudis Catalans.
- RECASENS, D. (1993). *Fonètica i fonologia*. Barcelona: Enciclopèdia Catalana.
- VENY, J. (1985). *Introducció a la dialectologia catalana*. Barcelona: Enciclopèdia Catalana.
- WHEELER, M. W. (1979). *Phonology of Catalan*. Oxford: Basil Blackwell.
- YATES, A. (1975). *Catalan*. London: Hodder and Stoughton (Teach Yourself Books).