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Phonetic Variation in Catalan: The New Diccionari de la pronúncia catalana (DPC) **Joan Julià-Muné and Imma Creus**

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PHONETIC VARIATION IN CATALAN:
THE NEW DICCIONARI
DE LA PRONÚNCIA CATALANA (DPC)*

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ABSTRACT

The forthcoming *Diccionari de la pronúncia catalana* (DPC) aims to represent the recommended pronunciations and the pronunciations in common use of the four varieties of Catalan as spoken in Spain, that is, North Western, Valencian, Central, and Balearic. Compiled in collaboration with phoneticians from the Valencian area and the Balearic Islands, it contains about 170,000 entries and over 750,000 pronunciations, more than 10,000 of which have been verified through usage polls. The culmination of over fifteen years' work, the dictionary is modelled mainly on J.C. Wells' *Longman Pronunciation Dictionary* (1990; 2000, 2nd ed.) for English. The DPC includes a full general vocabulary as well as literary, scientific and technological terms (covering computing, law, medicine, and communications), and specific vocabulary of the four Catalan varieties. It also contains Catalan and foreign proper names (people, places, commercial, artistic, etc.), loanwords and neologisms, as well as abbreviations, acronyms, and onomatopoeias. In addition the DPC includes biographical and terminological information relating to the phonetic sciences.

I. INTRODUCTION: PHONETIC VARIATION AND LEXICOGRAPHY

Phonetic variation is inherent in any natural system of oral communication, and consequently it is present at any spoken intercourse. We can check this out simply by listening to any two persons talking to each other. In fact, if we take down, as a practical exercise, the pronunciation of a few selected words and expressions uttered by people attending a social gathering, such as an international scientific conference using Catalan and English, a large number of different pronunciations within the same language can be registered. This may be due both to the speakers' various places of origin and the communicative situation in which the speech is uttered, that is, in plain conversation or while presenting their papers.

* This article complements the one published in M.P. Perea (ed.), *Dialectología i recursos informàtics*. Barcelona: PPU, 2004, entitled «Els (sub)corpus lingüístics del Diccionari de la pronúncia catalana.», 237-274.

It is like this because some of the participants at the conference use Catalan as a first language and express themselves in different dialects of Catalan, while others have English as their first language and use Catalan as a second or foreign language. Up to this point, the exercise is relatively simple, at least in respect of overcoming the difficulty of listening to and identifying unfamiliar pronunciations. However, if the list of pronunciations is to be studied later without the fresh phonetic references —in the event that the voices had not been recorded—, the actual pronunciations would be rather unclear unless the phonetic variation had been preserved by means of a phonetic transcription.

Lexicography offers different examples of this phonic preservation. There are various types of dictionaries that reproduce the phonetic features of the words of a language using phonetic transcription. However, unlike the situation for English, French, and German, in the Catalan lexicographical literature there is a lack of reference works of this nature. General dictionaries of Catalan, such as the prescriptive dictionary published by the Institut d'Estudis Catalans (IEC) —DIEC (1995)— and the *Gran diccionari de la llengua catalana* (1998), published by Encyclopædia Catalana, do not include phonetic transcriptions systematically; they just do so in reference to some loanwords. For this reason, any Catalan speaker or learner of the language must necessarily consult more specialized works to check the pronunciation of a word. Therefore, they have to go through pronunciation dictionaries proper which, as we shall see, are limited in Catalan, as well as bilingual dictionaries and a number of dialectological works.

2. PURPOSE AND STRUCTURE

The DPC is the result of a research project carried out under the direction of Joan Julià-Muné at the Phonetics Laboratory of the University of Lleida (Catalonia, Spain). The result of more than fifteen years' work, it is modelled on J.C. Wells' *Longman Pronunciation Dictionary* (1990; 2000, 2nd ed.) for English as well as on the traditional research work on pronunciation undertaken at the Department of Phonetics and Linguistics, University College London. In recent phases of the work, phoneticians from the Valencian area (Carles Segura, Universitat d'Alacant) and the Balearic Islands (Nicolau Dols, Universitat de les Illes Balears) have collaborated in its compilation. With publication planned for 2008, the dictionary will be also compiled in machine-readable format so that it can be made available as the DPC electronic database in the near future, in particular with regard to the various phonetic applications (Julià-Muné, *Fonètica aplicada catalana*).

This dictionary is aimed at contributing to the knowledge of Catalan descriptive phonetics by offering contemporary pronunciation data derived from Catalan usage. The Catalan language has suffered a dearth of references on pronunciation (see Julià-Muné, "Els diccionaris de pronúncia del català") from the multidialectal, ten-volume *Diccionari català-valencià-balear* by Alcover & Moll (1926/ 1930-1962/1968), which requires updating, up to the recently compiled *Atlas lingüístic del domini català* (Veny & Pons, 2001-), whose publication is in progress. In between, few works have appeared. In 1990, the first Catalan pronunciation dictionary (Bruguera, 1990; 2004, 2nd ed.; see review by Creus) was published. It is restricted to Central Catalan and offers just one possible pronunciation, with no variants and few proper names, loanwords and neologisms. In 2000, a vocabulary (Paloma & Rico) of about 2000 words was published with pronunciations of two main varieties (Central and NW Catalan). It has an orthoepic purpose and uses broad transcriptions aimed at Catalan speakers. Finally, a dictionary that covers the Valencian variety (Lacreu, 2001) was compiled with a large range of entries but with no proper names and just one pronunciation for each entry (see Segura, 2002). One of the objectives of the DPC compilers, therefore, has been to improve upon and complement these recent works and to update the earlier ones, so that Catalan users and other speakers interested in the pronunciation of Catalan, especially those involved in phonetic variation studies, might have a useful linguistic tool at their disposal.

Our dictionary includes an introduction, with detailed usage information on Catalan pronunciation. The corpus contains a full general vocabulary as well as literary, scientific and technological terms, covering computing, law, medicine, and communications. It also contains specific vocabulary of the four Catalan varieties, loanwords and neologisms, abbreviations and acronyms, as well as Catalan and foreign proper names (people, places, commercial, and artistic), which have been taken mainly from the *Gran Encyclopédia Catalana* (GEC, 1969-2001). In this respect, the dictionary records the pronunciation of many foreign-language words and names in the original language and in Catalan. As will be seen below, IPA symbols are used to represent all pronunciations, with relatively narrow transcriptions so that they may be useful to both Catalan speakers and foreign learners of Catalan. Primary and secondary stress are marked, as well as the syllabic separation that is based on Dols (1993), Jiménez (1999), Cabré & Prieto (2001), C. Pons (2001) and Lloret (2002), amongst others. The DPC also includes complementary information on the phonetic sciences relating to phoneticians and phonetic terms.

3. SOURCES AND ENTRY PHONETIC ASPECTS

The DPC draws on both *lexicographical* corpuses proper and *oral* corpuses. The former include Catalan and foreign sources and are related to works with varying characteristics. Some have been made use of in *toto*, such as the already-mentioned *Diccionari de la llengua catalana* (DIEC, 1995) initially and later the *Gran diccionari de la llengua catalana* (Encyclopèdia Catalana, 1998), Bruguera (1990 and 2004, 2nd ed.) and Lacreu (2001), as well as others that have been used sporadically. Among the latter, Catalan sources were useful for obtaining personal names (Albaigès, 2000; *Gran Encyclopèdia Catalana*, 1969-2001), place names (Moran, Batlle & Rabella, 2002; GEC; *Nomenclàtor*, 2003), neologisms (*Observatori de Neología*, 1998, 2004; Termcat, 2001; Colell, 2003), abbreviations and acronyms (Mestres & Guillén, 2001; Murcia, 2002), and onomatopoeias (Riera-Eures & Sanjaume, 2002). Foreign sources have been used primarily for obtaining proper names and as a means of checking up foreign pronunciations included in the DPC (Jones, 2003; Wells, 1990, 2000; Krech & Stötzer, 1982; Duden, 2000; Warnant, 1968; Martinet & Walter, 1973).

With regard to oral sources, we distinguish between speech data obtained through systematic usage polls and spoken material obtained from oral media, public talks, and everyday conversations in colloquial and formal styles. Most pronunciations presented in the DPC reflect the intermediate speaking style as defined by Daniel Jones (*The Pronunciation of English*):

[...] it must be noticed that even the best speakers commonly use more than one style. There is the rapid colloquial style and the formal oratorical style, and there are many shades between the two extremes. For our standard pronunciation we shall adopt [...] an intermediate style, which may be termed the *careful conversational style*. (1)

In respect of phonetic entries, these have been increased progressively from the beginning of data compilation. Initially, a study was undertaken of the pronunciation of the lesser-known NW variety of Catalan by conducting usage surveys to ascertain variant pronunciations according to sex, age, education and professional groups. Once a large corpus of data had been obtained, a second data-management stage was set up. A decision was taken to present the phonetic variant considered standard in first position and that the other variants would follow according to usage frequency. Soon after, it was decided to include the Central Catalan variant for each entry as representative of the vast majority of pronunciations. At present, we are in the process of entering pronunciations that correspond to the Balearic and Valencian varieties.

The following diagram represents the form in which alternative pronunciations are presented in entries in the DPC:

<i>North Western / Valencian</i>	<i> Central / Balearic</i>	<i>Other languages</i>
st pr + (st var) + phon var + (NR f)	st pr + (st var) + phon var +	(NR f) (ang. [Eng.] etc. st pr+ (st var))

As can be seen from the diagram and the examples provided below, Western transcriptions appear in the first place: North Western (N-O) and Valencian (V), followed by the Eastern ones: Central (C) and Balearic (B), as well as those belonging to other languages in some cases. Whenever there is more than one variant, the standard form (st pr) appears in first place at each side of the double bar. It may be, however, that more than one standard pronunciation is considered (st var). The following (phon var) are usual pronunciations within the variety concerned. Phonetic variation is always marked with a simple bar. In some cases non-recommended (NR f) pronunciations are pointed out by means of (!), although they are rather common forms in everyday Catalan speech, such as voicing as well as devoicing with regard to certain fricative sounds. As far as the value of the different types of pronunciation is concerned, one must bear in mind the following aspects:

- a) *Standard forms*: officially recommended transcriptions of oral language have been respected and recent orthological works covering the different Catalan varieties have been taken into account.
- b) *Standard variants*: this concept has been applied to those pronunciations considered to be admissible in formal speech, although they are not included in the official proposal put forward for a standard oral language (IEC, 1990). Some controversial forms, in relation to the above-mentioned proposal, have been included because it is felt they reflect general oral tendencies in Catalan, for example, occurrences of diphthongisation and the pronunciation of the so-called double 'l' as a simple one.
- c) *Phonetic variants*: this label covers forms that show dialectal variation and have been obtained mostly by means of the aforementioned oral sources.
- d) *Non-recommended forms*: these correspond to very common forms in oral language though they should not be regarded as formal pronunciation.

4. CONTENTS

The dictionary includes general and specialized vocabulary, proper names of both Catalan and foreign origin, loanwords and neologisms, abbreviations and acronyms, onomatopoeias and expressive words, as well as exclusive vocabulary of every variety (see § 6 and § 7 for samples of the DPC in progress).

General vocabulary covers most of the entries of our general dictionary, recent entries in later works and the above-mentioned dialectalisms or specific North Western, Valencian, Central, and Balearic terms. *Specialized entries* include literary, scientific and technological terms, covering computing, law, medicine, and communications. Apart from this, the DPC offers good coverage of Catalan and foreign *proper names* such as those of people (forenames, surnames, literary characters, gods, heroes, and figures of myth and legend), places in the Catalan-speaking countries and other parts of the world, of commercial firms and products with their corresponding *trademarks*. For *loanwords* and *neologisms*, we have benefited from recent works and have added several entries that have not yet been incorporated into any other dictionary (e.g. *chapapote/(t)xapapote* 'oil spilled at sea which damages the coastline'). With regard to *abbreviations*, *acronyms*, *onomatopoeias*, and *expressive words*, we have made use of the sources mentioned above. For further details on methodological questions such as the criteria for lexical selection, which differ from traditional lexicographical sources at times, and obviously for the phonetic information the DPC contains, you can see Julià-Muné & Creus, "Els (sub)corpus lingüístics del *Diccionari de la pronúncia catalana*".

Table 1 includes a sample of DPC transcriptions that illustrates the different lexical fields we have mentioned. An important and novel aspect of our dictionary is the phonetic adaptation into Catalan of foreign names (see table 2). In these instances, a few examples are presented in Dutch (§ 5.1) and Mandarin Chinese (§ 5.2), which illustrate our methodology. As already mentioned, the DPC will also include supplementary information on Catalan and foreign phoneticians as well as on basic phonetic terms (see § 8 and § 9).

TABLE 1. A sample of the DPC contents (pronunciation in NW, V || C, B Catalan)

<i>General vocabulary</i>
abarrocament <i>m.</i> N-O [a.βa.ro.ka'men] V [aβaroka'ment] 'men] C [aβaruka'men] B [aβaroka'ment] ru ca'
pressió <i>f.</i> [pre.si'o 'sjo 'zjo (!)] [pre'si'o 'sjo 'zjo (!)]
<i>Specialised entries</i>
abarognòsia <i>f.</i> N-O [a.βa.rog'nɔ.zi.e .rog' .zje] V [aβaron'nɔzia rog' zja] C [aβeroun'nɔzia rug' zje] B [aβeroun'nɔzia rog' run' rug' zja zi]
attrezzo <i>m.</i> [a'tre.ðzo] <i>it.</i> [at'trettso]
<i>Entries exclusive to particular varieties</i>
aixolet <i>m.</i> N-O, V [aj.ʃo'tet] C [əʃu'tet] B [əʃo'tet] ʃu'
desficiaci <i>m.</i> [des.fi'ka.si] [dəʃfi'kasi]
<i>Abbreviations and acronyms</i>
PSC <i>m.</i> [pe.e.se'se ,pe.se'se 'θe (!)] [pe.esə'se ,pesə'se 'θe (!)]
AFI <i>m. & f.</i> ['a.fi] <i>ang.</i> IPA [,aɪpʰi'i'eɪ]
<i>Onomatopoeias and expressive words</i>
ai! <i>interj.</i> [a:i ?aj ?aj?] (<i>cf. ai m.</i> [aj])
xip-xap! [tʃip tʃap ʃip ʃap]
<i>Neologisms, loanwords, and foreign expressions</i>
au revoir! <i>N-O</i> [or'βwar] V [or'βwar or'vwar] C [or'βwar] B [or'vwar] <i>fr.</i> [or'vwa:r]
avanti! <i>N-O</i> [a'βan.ti] V [a'βanti 'van] C [a'βanti] B [a'vanti] <i>it.</i> [a'vanti]
background <i>m.</i> [bag'grawn] [bag'grawn baɡ'] <i>ang.</i> ['bækgrəund]
modus vivendi <i>loc. ll.</i> <i>N-O</i> [moðuz.βi'ben.di] V [moðuzβi'ben.di vi'ven] C [moðuzβi'ben.di] B [moðuzβi'ben.di vi'ven]
<i>Trademarks (®, TDMK)</i>
Alitalia® <i>N-O</i> [a.ti'ta.ʃja .tje] V [ati'tatja] C, B [ati'tatja əti'tatja] <i>it.</i> [ali'ta:ʃja]
Bayer® ['ba.jer] <i>al.</i> ['baje]
Bailey's® ['bej.tis 'bej. 'baj.] <i>ang.</i> ['berliz]
BMW® <i>N-O</i> [be.e.me'be ,be.me'] V [,beema'be 've ,bema'] C [,beemə'be ,bemə'] B [,beemə've ,bemə'] <i>al.</i> [be:em've]
<i>Catalan names</i>
Bardolet <i>N-O</i> , V [bar.ðo'tet] C [barðu'tet] B [barðo'tet ðu']
Baronia de Rialb, la <i>N-O</i> [ta.βa.ro.ni.a.ðe.rí'ałp .e. 'awp] V [taβaro,niáðeri'ałp] C [taβeru,niáðeri'ałp] B [taβero,niáðeri'ałp ru,]

5. ADAPTATION OF FOREIGN NAMES TO CATALAN

Unless entered in their traditional Catalan form, that is, according to the 'translated' version — Londres (< London in English), Aquisgrà (< Aachen in German), Saragossa (< Zaragoza in Spanish)...— both personal names and place names are included in their original form, in over seventy languages. They are adapted to Catalan in two forms, according to most common usage, in this order:

1. The *paraphonic* pronunciation, based on the original language pronunciation adapted to Catalan.
2. The *paragraphic* pronunciation, in accordance with the original language spelling —or romanization in non-alphabetical languages, such as Mandarin Chinese, which is transcribed originally in the *pinyin* system (see below)— pronounced 'in a Catalan way'.

In addition to the already-mentioned references, we have made use of the pronunciation samples contained in the latest edition of the IPA *Handbook* (The International Phonetic Association, 1999). Needless to say, whenever it has been possible those pronunciations have been obtained from educated, native speakers.

Some problems may arise from the adaptation of foreign names to Catalan. We can illustrate these as follows, the pronunciation on the left-hand side of the double bar belonging to Western Catalan, and that on the right-hand side to Eastern Catalan:

a) Subjection to Spanish pronunciation

Some adaptations to Catalan are usually carried out by many speakers using the Castilian Spanish phonetic system (see § 9). Therefore, they are marked with (!). In fact, most 'Catalanized' forms —without any 'Hispanicization'— are closer to the original ones. We take some examples from Dutch, Romanian, Welsh (referred to English, as a supplement to the entry):

Anderlecht ['an.der.tɛxt | .text | .tɛkt | .tɛkt | .tɛtʃ (!) | .tɛtʃ (!)] ||
['andərɛtɛxt | tɛkt | tɛtʃ (!)] *neerl.* ['andərɛtɛxt]

Cluj [kluʃ | kluχ (!)] *rom.* [kluʒ]

[Capel] Coch [kox | kok | kołʃ (!)] *gal.-lès* [koχ] (cf. *ang.* [kʰəʊx | kʰəʊk | kʰɒk | kʰɒx || kʰoʊk])

b) Homograph but not homophone entries (examples in Catalan and Hungarian):

Brassó [bra'so] || [brə'so]

Brassó ['brɔ̄.so | bra'so] || ['brɔ̄so | bra'so] *bong*. ['brɔ̄ʃʃɔ̄]

c) Adapted pronunciations in accordance with spelling diversity (example in Russian):

Andropov, *Andropov* [an'drɔ̄.pof | .pof \ an.dro'pof] || [ən'drɔ̄pəf \ əndru'pof | andro'pof] *rus* [an'drɔ̄pəf]

TABLE 2. *A sample of the DPC adaptation of foreign names to Catalan (Western || Eastern)*

Foreign names			
PRONUNCIATION LANGUAGE	Traditional (assimilated to the translated form)	Adapted to Catalan 1. Paraphonic pronunciation 2. Paragraphic pronunciation	Original
German	Hamburg [am'bürk əm'bürk]	Bach 1. [bax] 2. [bak] (see <i>Catalan Bach</i>) (DPC: <i>Bach</i> [bax bak batʃ (!)]) Reich 1. [rajx] 2. [rejk] (DPC: <i>Reich m.</i> [rajx rejk rejtʃ (!)])	Hamburg ['hambʊrk] Bach [bax] Reich [rajç]
English (British)	Londres ['ton.dres 'tondrəs]	Arthur 1. ['ar.tur] 2. [ar'tur ər'tur] (DPC: <i>Arthur m.</i> ['ar.tur ar'tur] ['artur ər'tur]) Cambridge 1. ['kem.britʃ] 2. ['kam.britʃ] (DPC: <i>Cambridge</i> ['kem.britʃ 'kam.ʃ])	London ['lʌndən] Arthur ['ɑ:θə]
Hungarian	Budapest [bu.ða'pest buðə'pest]	Bartók 1. ['bərtok 'bartok] 2. [bar'tok bər'tok] (DPC: <i>Bartók</i> (Béla ...) ['bər.tok 'bar. bar'tok] ['bortok 'bar bər'tok])	Budapest ['budəpeʃt] Bartók ['bərto:k]

Dutch	L'Haija [t̪a.je̞.a t̪ajə]	Anderlecht 1. ['andər̪lɛ̞kt̪] 'andər̪ləkt̪] 2. ['an.der̪.fekt̪] 'andər̪ləkt̪] (DPC: Anderlecht ['an.der̪.text .text .text .fekt̪ .fekt̪ .t̪et̪ (!) .t̪et̪ (!)]) ['andər̪ləxt̪ fekt̪ t̪et̪ (!)])	Den Haag [d̪en'ha:g]
Chinese (Mandarin)	Pequín [pe'kɪn pə'kɪn]	Beijing 1. [pej't̪iŋ pəj't̪iŋ] 2. [bej'zɪŋ bəj'zɪŋ] (DPC: Beijing (Pequín) [pej't̪iŋ bej'zɪŋ] [pəj't̪iŋ bəj'zɪŋ])	Bēijīng [pej t̪iŋ]

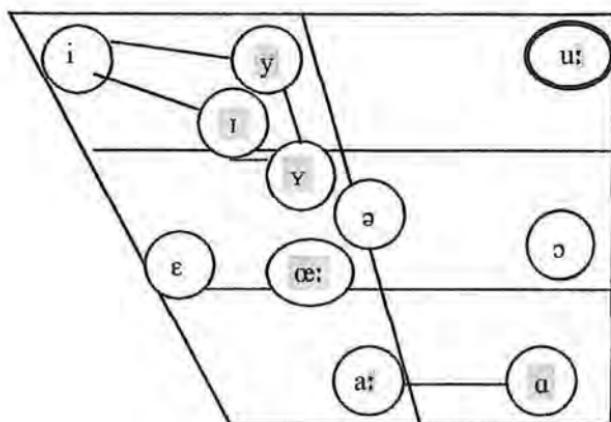
5.1. Adaptation of Dutch names: vowel cases

Table 3 and figure 1 show the vowel sound inventory of Dutch. The vowel contrasts and especially those related with rounded front vowels, that are unknown to Catalan speakers, are highlighted in grey. The three Dutch surnames ('De Boer', 'Rikaard', and 'Kluivert') exemplify the double process of vowel adaptation proposed by the DPC, on paraphonic and paragraphic grounds. Figure 1 refers to a case where a pure vowel is involved and figure 2 covers two examples which include a diphthong. In both cases, the adaptation process is directed to the 'nearest' Catalan pronunciation from an articulatory and perceptive point of view, as is usual in loanword adaptation (Peperkamp & Dupoux, 2003).

TABLE 3. *Dutch vowel phonemes*

Degree of tongue movement				
OPENNESS	FRONTNESS			
	front (palatal)	central	back (velar)	
un-rounded	rounded		rounded	
close	i(:)	y(:)		u(:)
half-close	I	Y		o(:) [oʷ]
mid	e: [e̞:]	ø(:) [ø̞:]	ə	
half-open	ɛ(:)	(æ:)		ɔ(:)
open			a:	ɑ

FIGURE 1. Dutch pure vowels



De Boer

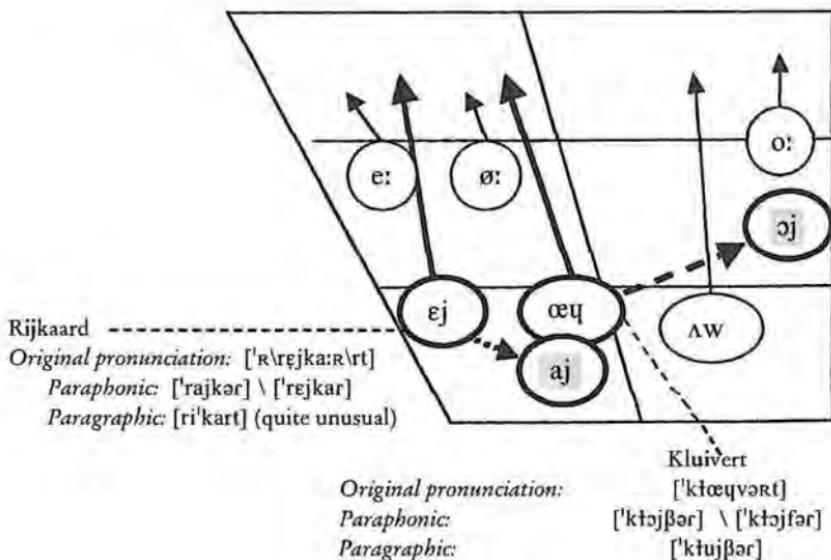
Original pronunciation: [də'bu:r]

Adapted pronunciations to Central Catalan:

Paraphonic pronunciation: [də'bʊr]

Paragraphic pronunciation: [də'bo.er] | [də'bʊər]

FIGURE 2. Dutch diphthongs and two Catalan adaptations (in grey)



5.2. Adaptation of Chinese names: consonant cases

Table 4 contains the consonant sound inventory of standard Chinese—known as Mandarin in the West and ‘putonghua’ to the Chinese. Next to every sound is the equivalent letter according to the ‘pinyin’ romanization system.

Table 5 shows the authors’ orthological proposal—used in the DPC—to adapt Mandarin Chinese names to Catalan. The arrow indicates the paraphonic adaptation, as shown in table 2 (e.g. *Beijing*) and in § 9 (e.g. *Mao Zedong*):

‘Beijing’

<i>Original pronunciation:</i> *	Bēijīng (in pinyin romanization) [p̚eɪ̚ t̚ɕɪŋ̚]
<i>Paraphonic:</i>	[pəj̚ t̚ʂɪŋ̚]
<i>Paragraphic:</i>	[bəj̚ ʈ̚ʂɪŋ̚]

‘Mao Zedong’

<i>Original:</i> *	Máo Zéđōng (in pinyin) [m̚əw̚ t̚ʂən̚ tuŋ̚] (Spelled as <i>Mao Tse Tung</i> , in the former Wade-Giles romanization system)
<i>Paraphonic:</i>	[maw̚iʂət̚uŋ̚]
<i>Paragraphic:</i>	[maw̚za̚d̚oŋ̚]

* Numbers indicate the four Mandarin phonemic tones: 1-high, 2-rising, 3-falling-rising, 4-falling.

TABLE 4. *The Consonant Sounds of Mandarin Chinese*
(Non-Catalan sounds are highlighted in light grey; Catalan sounds unknown by
Mandarin speakers are in dark grey; romanization in pinyin is marked in italics)
(Adapted from Julià-Muné, *Fonètica aplicada catalana* 331)

MODE OF ARTICULATION	PLACE OF ARTICULATION											
	- +	- +	- +	- +	- +	- +	- +	- +	- +	- +	- +	- +
Plosives (aspirat.)	p̚ 'b'			t̚ 'd'						k̚ 'g'		
	p̚h̚ 'p'			t̚h̚ 't'						k̚h̚ 'k'		
Fricatives		f̚			s̚ 's'			ʂ̚ 'ʂ'	x̚ 'x'	x̚ 'x'		
		f̚			s̚ 's'			ʂ̚ 'ʂ'	x̚ 'x'	x̚ 'x'		
Affricat. (aspirat.)					ʈʂ̚ 'ʐ'			ʈʂ̚h̚ 'ʐ'	ʈʂ̚ 'ʐ'			
					ʈʂ̚ 'ʐ'			ʈʂ̚h̚ 'ʐ'	ʈʂ̚ 'ʐ'			
Nasals	m̚ 'm'				n̚ 'n'				j̚ 'ŋ'	ŋ̚ 'ŋ'		
Laterals					l̚ 'l'				ʎ̚ 'ʎ'	ʎ̚ 'ʎ'		
Trill & Tap					r̚ 'r'				ʎ̚ 'ʎ'	ʎ̚ 'ʎ'		
Approximants								y̚ 'j'	w̚ 'w'	w̚ 'w'		

TABLE 5. *Orthological proposal of Mandarin consonantal system for adaptation to Catalan*

labial	dentoalveolar	palatal	apicopalatal (retroflex)	dorsovelar
<i>Plosives</i>				
[p]	[t]			[k]
[p ^h] [p]	[t ^h] [t]			[k ^h] [k]
<i>Fricatives & affricates</i>				
[f]	[s]	[ʃ]		[χ]
[f] [f]	[s] [s]	[ç] [ç]	[ʂ] [ʂ]	[χ] [χ]
[ts] ← [z] [ts] ← [c]	[tç] [tç] [tç ^h]	[j] [q]	[tʂ] [tʂ] [tʂ ^h]	→ [tʃ]
<i>Pseudoliquids</i>				
	[t] ← [l]			[ɾ] → [ʒ]
	[l]			[z]

6. SAMPLE OF THE DPC ACCORDING TO THE FOUR VARIETIES
 [NORTH WESTERN, VALENCIAN || CENTRAL, BALEARIC]

[...]

abarrotar *v.* N-O [a.βa.ro'ta]

V [aβaro'tar] || C [əβəru'ta]

B [əβəro'ta [ru']

abarrotat, -ada *adj.* N-O [a.βa.ro'tat\ə.ðə]

V [aβaro'tat\əðə] || C [əβəru'tat\əðə]

B [əβəro'tat\əðə [ru']

abarset *m.* N-O, V [a.βar'set] ||

C [əβər'set] B [əβər'set ['set]

abarta *f.* N-O [a'βar.te] V [a'βarta] ||

C, B [ə'βarta]

abartra *f.* N-O [a'βar.trə] V [a'βartra]

|| C, B [ə'βartra]

abartrell *m.* N-O, V [a.βar'treλ] ||

C, B [əβər'treλ]

abartrosi *f.* N-O, V [a.par'trɔ.zi | a.βar' | .zis (!) | .sis (!)] || C,

B [apər'trɔzi |əβər'|zis (!) | sis (!)]

Abascal N-O, V [a.βas'kaλ] ||

C [əβəs'kaλ] B [əβəs'kaλ ['cat] esp. [aβas'kal]

abasardar *v.* N-O [a.βa.zar'ða]

V [aβazar'ðar] || C, B [əβəzər'ða]

abàsia *f.* N-O [a'βa.zi.e | .zjə] V [a'βazia | zja] || C, B [ə'βaziə | zjə]

abassegador, -a *adj., m.* & f.

N-O [a.βa.se.ya'ðo\re]

V [aβaseya'ðor\la] ||

C [əβəsəya'ðo\ra] B [əβəsəya'ðo\re | jə']

abassegement *m.* N-O [a.βa.se.ya'men]

V [aβaseya'ment | men] ||

C [əβəsəya'men]

B [əβəsəya'ment | jə']

[...]

7. SAMPLE OF DPC ACCORDING TO THE
 MAIN VARIETIES OF CATALONIA [NORTH WESTERN || CENTRAL]

[...]

androide *adj., m.* [an'drɔj.ðe] || [ən'drɔjðə]

andròlatra *m.* & f. [an'drɔ.ta.tre] || [ən'drɔtətra]

androlatria *f.* [an.dro.ta'tri.e] || [andrułə'triə]

andròleg, -òloga *m.* & f. [an'drɔ.łek\to.ye] || [ən'drɔłek\tuɣə]

- andrologia *f.* [an.dro.tɔ'ʒi.ə | .tɔ̃i] || [andru'tu'ʒiə]
 Andròmac, -a *m.* & *f.* [an'drɔ mak\vε] || [ən'drɔmæk\və]
 andromania *f.* [an.dro.ma'ni.ə] || [andrumə'niə]
 Andròmeda *f.* [an'drɔ.me.ðə] || [ən'drɔməðə]
 Andromèdids, els *m. pl.* [e\l, zan.dro'me.ði\ts]
 || [ə\l, zandru'me\ði\ts]
 andròmina *f.* [an'drɔ.mi.ne] || [ən'drɔminə]
 andromonoècia *f.* [an.dro.mo.no'\e.si.ə | .sje] || [andrumunu'\e siə | sje]
 andromonoic, -a *adj.* [an.dro.mo'nɔjk\vε] || [andrumu'nɔjk\və]
 andromorf, -a *adj.* [an.dro'morf\vε | 'mɔrf] || [andru'mɔrf\və]
 androna *f.* [an'dro.ne] || [ən'dronə]
 Andrònic *m.* [an'drɔ.nik] || [ən'drɔnik]
 Andronovo [an'drɔ.na.βa | an.dro'nə.βo] || [ən'drɔnəβa | andro'nəβo]
 rus [ən'drɔneva]
 andronovià, -ana *adj., m.* [an.dro.no.βi'a\.ne | 'βja]
 || [əndrunuβi'a\nə | 'βja]
 andropausa *f.* [an.dro'paw.zə] || [andru'pawzə]
 andropètal *m.* [an.dro'pe.ta\ | .te\] || [andru'petə\]
 Andròpov, Andropov [an'drɔ.paf | .pof \ an.dro'pof] || [ən'drɔpaf \
 andru'pof | andro'pof] rus [an'drɔpaf]
 [...]
back-up *m.* [ba'kap] ang. ['bækʌp]
backyard *m.* [bag'jart | 'jar] ang. [bæk'ja:d] || ['ja:rd]
 [...]
 Bacqueville [bag'veit | 'bit] fr. [bak'veil]
 Bács [batʃ | baks] hong. [ba:tʃ]
 Bácska ['batʃ.kə | 'baks ka] hong. ['ba:tʃkə]
 bacsonià, -ana *adj., m.;* Bacsonià
 [bak.so.ni'a\.ne | 'nja] || [bəksuni'a\nə | 'nja]
 [...]
baihuà *m. & f.* [paj'χwa | baj'χwa] mand. báihuà [²paj⁴χwa]
 Baikal [baj'ka\] rus [bej'ka\]
 Baikonur [baj ka'nur | .ko'] || [bajkə'nur | bəj] rus [bajkə'nur]
 Bailaguet [baj.ta'\χet] || [bəjta'\χet]

8. SAMPLE OF BIOGRAPHICAL TABLES

Josep M. ARTEAGA PEREIRA
(Barcelona 1846–1913)

Conegut més aviat com a poeta i compositor, fou un membre molt actiu de l'*Associació Fonètica Internacional* (AFI), que destacà per les seves contribucions, durant la primera dècada del s. XX, a la revista de l'esmentada associació *Le Maître Phonétique*. D'aquesta manera esdevingué l'especialista català en fonètica de començaments del segle passat, fins al punt que Pompeu FABRA (1868–1948) li encaixà de revisar el capítol corresponent de la *Gramàtica de la llengua catalana* de 1912. Abans que presentés la seva comunicació al Primer Congrés Internacional de la Llengua Catalana (Barcelona, 1906), titulada «*Ullada general a la fonètica catalana. El seu caràcter propi dins la família novo-llatina*», era més coneugut a fora que a Catalunya mateix. Pere BARNILS (1882–1933) li ordenà i edità els seus *Textes catalans avec leur transcription phonétique* (Barcelona, 1915).

[...]

Alexander Graham BELL
(Edimburg 1847 – Nova Escòcia, Canadà 1922)

Provinent d'una família escocesa de professors de correcció i elocució, fou un inventor que posseí les patents, entre moltes d'altres, de l'audiòmetre, el fonògraf i el telèfon. Fou un gran defensor del *mètode oralista* per a l'ensenyament dels sords i promotor —amb la impagable col·laboració de George Bernard Shaw— del mètode “Visible Speech” del seu pare, Alexander Melville Bell, l'obra del qual *Standard Elocutionist* va arribar a prop de les dues-centes edicions en anglès.

El 1871, quan tenia 23 anys, emigrà al Canadà i després als EUA, on fou professor de fisiologia de la Universitat de Boston i on aconseguiria una de les primeres comunicacions telefòniques, connectat amb el seu ajudant Thomas Watson, el 1876, any en què patentà el telèfon. L'any següent es casà amb Mabel Hubbard, la sordesa congènita de la qual impulsà els seus treballs de recerca en audiologia, que difongué des del *Volta Bureau*, i en telefonia, que desenvoluparia des de la Bell Telephone Company. Fou Bell qui posà en contacte la professora Ann Sullivan amb la cèlebre alumna sorda, muda i cega Helen Keller, relació que ha estat molt difosa entre nosaltres pel film *El miracle d'Anna Sullivan*. El termes *bel* i *decibel* han estat encunyats en honor seu.

[...]

André MARTINET
(Saint-Albans-des-Villard, Savoia 1908 – París 1999)

Professor de la Universitat de Colúmbia (EUA, 1947-1955), entre els seus doctorands destaca Uriel Weinreich. Des de 1955 professà a la Sorbona i dos anys més tard esdevingué director dels estudis de lingüística de l'École Pratique des Hautes Études, des d'on difongué els mètodes estructuralistes. Les seves aportacions més rellevants corresponen al camp de la fonètica aplicada i la fonologia històrica.

Publicà, entre d'altres, *La prononciation du français contemporain* (París, 1945); *Phonology as functional phonetics* (Londres, 1949); *Économie des changements phonétiques. Traité de phonologie diachronique* (Berna, 1955); *La description phonologique* (Ginebra-París, 1956); *Dictionnaire de la prononciation française* (1973), amb Henriette Walter, i *Evolution des langues et reconstruction* (1975).

9. SAMPLE OF PHONETIC TERMS

Barbarisme fònic

Ús injustificat de pronúncies impròpies de la parla estàndard. El DPC les assenyala com a no recomanables amb la indicació (!), p. ex. *tesi* [t̪e.zi].zis (!)].sis (!)]. En podem distingir tres tipus bàsics en relació amb les expressions onomàstiques:

1. Com a resultat de la *superditació a pronúncies foranes*, pròpies d'una llengua dominant.
 - La pronúncia síglica d'ACB com a [a.θe'βe] 'a la castellana' en un context català és com a mínim xocant. És obvi que en català la lletra 'C' es pronuncia [se].
 - Les pronúncies [nwe.βa'jɔrk] i [te'rweɪt] en un discurs català són del tot inacceptables, ja que disposem en la nostra llengua d'adaptacions tradicionals ben arrelades: *Nova York* N-O [nɔ.βa'jɔrk].βε'l] V [nɔβa'jɔrk].va'] || C [nɔβa'jɔrk] B [nɔva'jɔrk] i *Terol* [te'rɔt] || tə'rɔt].
 - La pronúncia del topònim xinès *Xangai* com a [saŋ'haj], ja que es parteix de la transcripció/pronunciació anglesa *Shanghai* [sæŋ'hai], quasi parafònica (la pron. originària en mandarí és [tʂan˥˧ tʂai˥˧]), en comptes de la pronúncia paragràfica o grafista de la forma força més tradicional en català:

Xangai [ʂan'gaj] (cf. les pronúncies de *París* i *Londres*, per exemple, en què les parafòniques no tindrien cap sentit). El *DPC* recull les dues formes de l'esmentat topònim xinès: parafònica | paràgrifica, com escau al cas: *Xangai* [ʂan'xaj | ʂan'gaj] *mand.* Shànghǎi [ʂan ʂxaj], amb indicació de la transcripció en *pinyin* (ortogràfica) i segons l'AFI (fònica, amb indicacions tonals) de la forma originària en xinès mandarí.

2. Per l'ús *inadequat* —sovint pedant— de pronúncies 'quasi' originàries en un context català en casos en què ja disposem de pronúncies tradicionals adaptades.
 - "Segons la *BBC*..." pronunciat [,_bi.βi'si] 'a l'anglesa' quan en català ja disposem d'una forma adaptada i prou vigent com és [,_be.βe'se] (cf. *ang.* [,_bi:bi'si:]).
 - *Oxford* pronunciat 'a l'anglesa' [,_oksфt] en comptes de [,_oks fort | 'oksfor], com tradicionalment se sol pronunciar aquest topònim anglès (cf. *ang.* [,_oksфd]).
3. A causa de la *mala interpretació* de la transcripció o transliteració d'un determinat mot en el moment de la lectura.
 - *Mao Zedong* pronunciat [,_mao.θe'ðoŋ] com si es tractés d'un antropònim castellà, quan de fet es tracta d'una transcripció llatinitzada del cognom-nom de l'estadista xinès segons el sistema *pinyin*. La grafia 'z' en aquest sistema representa l'africat alveolar sord [ts], com en alemany, i, consegüentment, caldria pronunciar la segona síl·laba d'aquest antropònim com a [tse | tsə] en pronúncia parafònica, o bé adaptada a la catalana en pronúncia paràgrifica [ze | zə]: *Mao Tse-Tung / Mao Zedong* N-O, V [,_maw.tse'tun | ,mao.zə'ðoŋ] || C, V [,_mawtsə'tun | ,mawzə'ðoŋ] *mand.* Máo Zéđōng [,_mew ɿtsɿ'tuŋ]

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