Contents

Galician Pronunciation & Accents

Geo-social Applications of the Natural Phonetics & Tonetics Method

7	1.	A general approach to Natural Phonetics
7		Vowels
9		Voicing
10		Consonants
11		Places of articulation
13		Manners of articulation
19	2.	A general approach to Natural Tonetics
19		Prosodic elements
19		Stress
20		Sentence stress
22		Tones
22		Intonation
27	3.	Galician vowels
27	/	Neutral
, 31		Traditional
31		Colloquial
32		Mediatic
35	4.	Galician consonants
35	•	Neutral & traditional
36		Nasals
37		Stops
37		Stop-strictives (or 'affricates')
38		Constrictives (or 'fricatives')
39		Approximants
39		Rhotics
40		Laterals
41		Colloquial consonants
42		Mediatic consonants
43	5.	Galician structures
43	_	Metaphony
44		Phone combinations
47		Contractions
47		Stress
49	6.	Galician intonation and transcribed texts

49 52		Intonation "The North Wind and the Sun" A short conversation
53 55 55 56 57 58	7.	Regional accents Galician accent map Western Central Eastern
61		Galician accent of Spanish
63	9.	Medieval Galician
655 666 688 699 700 711 722 733 744 755 766 777 788 799 799		Phonopses of languages (for comparisons) English German & Dutch French & Spanish Portuguese & Italian Romanian & Russian Czech & Polish Bulgarian & Greek Hungarian & Albanian Finnish & Arabic Hebrew & Turkish Persian & Hindi Burmese & Vietnamese Chinese & Korean Japanese Main consonant orograms
83	11.	Annotated Bibliography

88 Official IPA chart

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6

1. A general approach to Natural Phonetics

1.0. In this introductory chapter, we will present the fundamental categories, with a simplified treatment limited to the most basic elements. These categories constitute the minimum necessary to proceed scientifically with phonetics.

In what will follow, every part will be gone into in greater depth and with added detail, helping the reader to arrive at a more complete knowledge of the subject.

Vowels

1.1. The back of the tongue is the fundamental element in vowel production. It moves in two different directions: HIGH-LOW and FORWARD-BACK. Consequently, the combination of these two elements produces a *quadrilateral*, which gives us the fundamental VOCOGRAM, used for showing –inside it– the positions of the vowels of a given language. On the left side of fig 1.1, there are three orograms indicating the zone of vocoid articulations; these orograms are steadily more schematic, moving downwards. The first, on top, is the most realistic, while the third, at the bottom, is a quadrilateral.

On the right-hand side of fig 1.1, the upper diagram is an orogram which shows the tongue: LOW and CENTRAL, as in the pronunciation of a [a] in most languages. The upper outlines of the positions of i [i], HIGH and FRONT, and u [u], HIGH and BACK, are also given – as they occur in most languages. The points are connected and contained in the white (or transparent) quadrilateral, which is given enlarged in the figure below (the *vocogram*, on the lower part of the right-hand side).

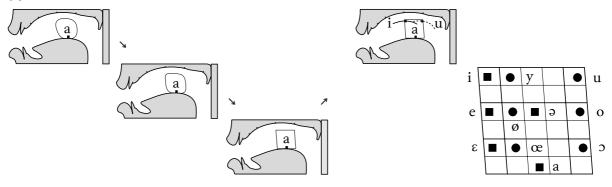
1.2. In the large quadrilateral, 11 vowels have been placed, shown by (square and round) MARKERS. The ROUND ones refer to vowels articulated with ROUNDED lips, while the SQUARE ones naturally represent vowels with unrounded –either SPREAD or neutral– lip position.

The symbols [i, a, u] correspond to Spanish *i*, *a*, *u*, as in *utilizar* [u_itili θ ar] (or Italian *utilità* [u_itili'ta]), while [e, o] are the 'closed' vowels of Portuguese, as in *vê*, *povo* ['ve, 'povu] (or Italian *tre*, *sono* ['tre, 'so:no]); [ɛ, ɔ] are the (stressed) 'open' vowels of Portuguese, as in *pé*, *pó* ['pɛ, 'pɔ] (or Italian *sette*, *otto* ['sɛt:te, 'ɔt:to]). Note also German *Kamm*, *Tag* ['kham, 'tha:k], *viel*, *Kuh* ['fi:l, 'khu:], and –but closer–Weg, *Boot*, *weg*, *Loch* ['ve:k, 'bo:t, 'vɛk, 'lɔɣ]. The Italian words written *corressi* and

volto have two different meanings corresponding to two different pronunciations: (*se*) *corressi* '(if) I ran' [kor'res:si], and (*io*) *corressi* '(I) corrected' [kor'res:si]; (*il*) *vol-to* '(the) face' ['vol:to], and (*io*) *volto* '(I) turn around' ['vol:to]. Consequently, the two GRAPHEMES $\langle e, o \rangle$ can each represent two different phonemes: $|e, \varepsilon|$ or |o, o|.

The vowels of a number of languages are concisely shown in (6.10) to accurately deraphy contains the books we produced (or intend to produce) to accurately describe a number of languages.

fig 1.1. The articulatory extent of vowel sounds.



1.3. fig 1.1 (the vocogram part) contains three more vowels $|y, \emptyset, \varpi|$, which are rounded, and for this reason have circular markers. These vowels are *almost* like $|i, e, \varepsilon|$ with lip rounding added. However, the tongue is a bit farther back than it is in $|i, e, \varepsilon|$, and in fact, these rounded vowels are a little centralized in the vocograms. $|y, \emptyset, \varpi|$ occur in many languages, such as French: *lune*, *deux*, *seul* ['lyn, 'dø, 'sœl], or German: *Füße*, Ö*l*, *zwölf* ['fy:sɨ, 'Pø:l, 'tsfœlf] (as well as in several Italian dialects, particularly Lombardian, Piedmontese, and Ligurian).

The first German example also has an instance of [a], which is generically placed in the center, at the height of [e, ø, o] (cf fig 1.1). However, '[a]' has many different realizations in the different languages, which are better rendered with more appropriate symbols.

The symbol //, (an uncurved apostrophe) placed immediately before a syllable, indicates STRESS. The CHRONEME, /:/, indicates distinctive lengthening of the preceding vowel – for example, in German there is a contrast between *Stadt* ['ftat] 'city' and *Staat* ['ftat] 'State'. When the same symbol occurs in PHONETIC TRANSCRIPTIONS (in brackets, [], instead of in PHONEMIC TRANSCRIPTIONS, which are written between slashes, / /), it is called a CHRONE, and indicates length which is not distinctive.

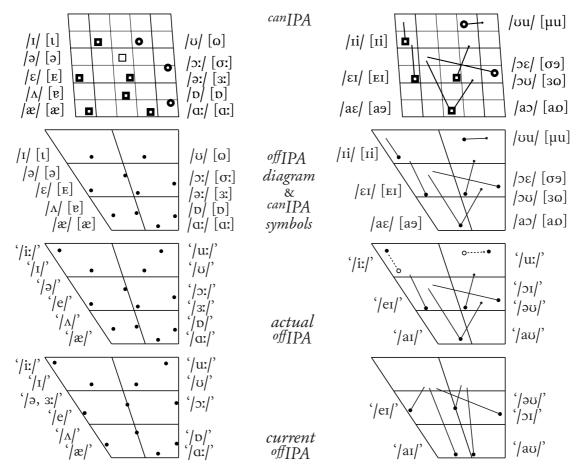
1.4. An example of non-distinctive lengthening is that occurring in Italian word--internal stressed unchecked syllables: *seme*, *solo* ['se:me, 'so:lo].

In conclusion, vowels consist of three fundamental elements: RAISING (of the tongue and jaw), ADVANCING (of the back of the tongue), and lip ROUNDING (or its absence).

As a first approach to the vowel phonemes of English, which are many more than in Spanish (5) or in Italian (7), we reproduce a simplified version of the vocograms of neutral British English, showing only its monophthongs (9 + schwa

 $|\dot{a}|$ and diphthongs (7), with no combinatory variant, and excluding centering diphthongs, as well (here). This is done to enable the comparison with other similar figures currently found in phonetics or linguistics textbooks. We also present them both in our own vocograms and in the official quadrilaterals (but keeping our symbols) for a quicker comparison (followed by both an actual and current application of *offIPA* criteria and symbols, too).

fig 1.2 Four versions of simplified monophthongs and diphthongs of neutral British English.



Voicing

1.5. Voicing is the 'voice' given to vowels and certain consonants by the vibration of the vocal folds (which are located in the larynx).

Voicing can, therefore, be present or absent, giving rise to two main TYPES OF PHONATION: VOICED and VOICELESS consonants.

To give a few examples, the consonants present in *man*, *ring*, *dig*, *jazz*, *these*, *leasure* are voiced: ['mæn, 'uŋ:, 'dvġ, 'dʒæ'z, 'ðriz] and ['lɛʒɛ, 'lɪiʒɛ; 'lɛɪʒɛ].

The Spanish or Italian /p, Λ / are also voiced, and in neutral Italian pronunciation, they are always geminated between vowels, just like the consonants written doubled in the official orthography: *sogno*, *foglio*, *mamma*, *babbo*, *oggi* ['sop:po, 'fo Λ : Λ o, 'mam:ma, 'bab:bo, 'odg:dʒi].

However, in other languages, /μ, λ/ are generally found without gemination, as in Spanish: *mañana*, *calle* [ma'µarna, 'ka'λe], or Portuguese *ninho*, *filho* ['ni'µu, 'fi'λu].

1.6. The other fundamental group of consonants is that of VOICELESS consonants, as seen in *pack*, *teach*, *south*, *fish* ['phæk, 'thritʃ, 'sa θ , 'fuʃ]. Of course, we have *fishy* ['fuʃ-i], while in neutral Italian, /ʃ/ is geminated between vowels: *pesce* ['peʃ:ʃe].

Gemination occurs even in foreign words adapted into Italian, such as the word *cachet* [kaʃʃɛ], which in French is [kaˈʃɛ]. It is interesting to note that Italians also pronounce the orthographic geminates of foreign languages as true phonic geminates, as in the English name *Billy* ['bil:li], instead of ['bul-i].

Consonant gemination is distinctive in Italian, as the following examples demonstrate: *cade*, *cadde* ['ka:de, 'kad:de], *tufo*, *tuffo* ['tu:fo, 'tuf:fo], *nono*, *nonno* ['no:no, 'non:no], *caro*, *carro* ['ka:ro, 'kar:ro]. In neutral Italian, there is also gemination in cases such as *è vero* [Ev've:ro], *ho sonno* [os'son:no], *a casa* [ak'ka:za], *blu mare* [,blum'ma:re], *cosí forte* [,kozif'for:te], *tornerò domani* [,torne'rod do'ma:ni], *città balneare* [tʃit'tab balne'a:re]. This kind of gemination is better defined as *co-gemination*.

Consonants

1.7. We will now see how the consonants are produced. As we have seen, the articulation of vowels is determined by the back of the tongue, with its up/down movements (complemented by closing and opening of the jaw), as well as its front/back movements, and also by the possibility of lip rounding. With consonants, instead, the space available is greater. In fact, it extends from the lips all the way to the larynx (cf fig 1.3).

In the table of fig 1.3, the names across the top are the main PLACES OF ARTICU-LATION, ranging from the lips to the larynx. The names to the left of the rows, instead, indicate the main MANNERS OF ARTICULATION. Intersections between the rows and columns can then produce various consonant sounds, and the number is often doubled due to the possibility of adding voicing (*ie* the voiced PHONATION TYPE).

All the British English consonant phonemes are given in the table, including the voiced elements forming diphonic pairs (given in parentheses). The consonants

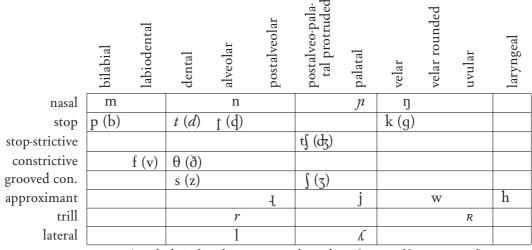


fig 1.3. Simplified table of consonant sounds.

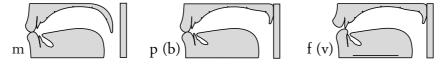
(symbols in brackets –or standing alone [except *h*]– are *voiced*)

[η ; t, (d); r, R; Λ] also appear; these are not phonemes of English (and are therefore given in italics), but are very important in certain other languages, or as taxophones in words like *cats* ['khæts] and *heads* ['hE'dz]. All of these articulations are given in fig 1.4-10 (and again, from another perspective, in fig 1.11-17).

Places of articulation

1.8. Here we consider the most important PLACES (or *points*) of articulation according to a structural and typological point of view (further on, we will see many more). The most external ones are BILABIAL ([m; p, b]), as in *my pub* [maə'phe'b], and LABIODENTAL ([f, v]), as in *five* ['fa'əy']. These articulations are particularly easy to see (fig 1.4).

fig 1.4. Bilabial and labiodental articulations.



Immediately afterwards, we encounter the places: DENTAL ([t, d; θ , $\tilde{\theta}$; s, z], fig 1.5), as in *the thing*, *seize* [$\tilde{\partial} = \theta \cup \eta$:, 'sriz], and Spanish *data*, *zona* ['darta, ' $\theta \cup \eta$] (in American Spanish we have ['s $\cup \eta$]); ALVEOLAR ([n; t, d; r; l], fig 1.6), as in *today* [t='der], and Spanish or Italian *rana*, *luna*, Sp. ['r:arna, 'lurna], It. ['ra:na, 'lu:na].

In English, /t, d/ are alveolar (as we have already seen), as is Castilian Spanish /s/. In phonemic (or phonological) transcriptions, simpler symbols may be used: today /tə'deɪ/, casas /kasas/. However, in truly useful phonetic transcriptions, more precise symbols are to be used, [t, d; s] (although not official *IPA*).

fig 1.5. Dental articulations.

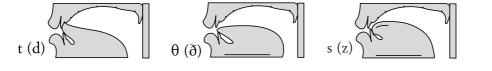


fig 1.6. Alveolar articulations.



1.9. We, now, have the POSTALVEOLAR place of articulation (fig 1.7), which is still farther back than the alveolar one. It occurs in British English *rain* ['LE'IN]. It is quite clear that the British articulation is postalveolar (in spite of the misleading official term 'retroflex', which intends to mean the same thing, although saying it in a more complicated way).

However, in part because of a less clear official terminology, even British and American phoneticians often exchange the symbols, using [4] for the neutral American *r*, which is not postalveolar, but a slightly postalveolarized prevelar approximant, that we indicate exactly with the symbol [1].

The following place of articulation, which officially (but very dangerously) is called 'postalveolar', naturally risks being confused with the preceding articulation (which is legitimately POSTALVEOLAR) – a common fate with those who entrust their fate to overly simplistic definitions.

1.10. In reality, we have here a compound articulation. It is not merely POSTAL-VEOLAR, but also has two simultaneous articulatory components (*ie coarticulations*): one which is PALATAL and another which is LABIAL.

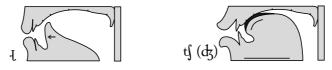
fig 1.7 (on the right) shows the articulation of the (respectively, voiced and voiceless) consonants *church*, *judge* ['tʃhɜ·tʃ, 'dʒɐ·dʒ]. As can be seen, there is a point of contact, in the postalveolar zone, indicated in black (for reasons that we will soon see when we move on to manners of articulation), and a point of proximity of the articulatory organs (at the palate), as well as (fairly visible) protrusion of the lips.

The descriptions of this articulation are usually among the worst (and this goes for the MANNER as well). In fact, perhaps thinking to make things easier by (excessive) simplification, the articulation is often described as 'palatal' (as an alternative to 'postalveolar', already seen). In reality, its proper definition is POSTALVEO-PAL-ATAL PROTRUDED, precisely because each of its three components is fundamental.

1.11. For example, in Spanish, we encounter an articulation without lip protrusion, which is therefore simply POSTALVEO-PALATAL. It is useful to indicate this slightly different articulation with a symbol of its own (as we have already mentioned, and will again). The symbol used is a suitably modified version of the one used for the articulation with lip protrusion, so that the relationship between the articulations is preserved in the symbols, without, however, confusing them together. In phonemic transcriptions, the more general symbols are employed in all cases, thus, we have Spanish *chachachá* /tʃatʃa'tʃa/ [,tʃatʃa'tʃa].

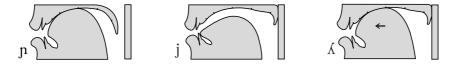
Although it is more complex, this clearer definition surely helps the reader to fully understand the mechanism of its articulation; and the consequential knowledge and phonetic richness leads to much more satisfying practical results. In fact, phonetics should not be carried out unwillingly, proceeding only by memorization. Phonetics is an artistic science, and as such, should be 'savored' and 'lived' in the best and most creative way (as we have already pointed out in § 1.4).

fig 1.7. Postalveolar and postalveopalatal protruded articulations.



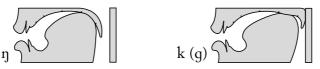
1.12. We next come to the true PALATAL place of articulation (fig 1.8), as with Italian /p, j, λ /, or in Castilian Spanish *sueño*, *ciencia*, *calle* ['swe'po, ' θ jen θ ja, 'ka- λ e], or in Italian *gnocco*, *paio*, *foglia* ['pok:ko, 'pa:jo, 'fo λ : λ a]. English has /j/ in yes, unit ['jes, 'jµunt].

fig 1.8. Palatal articulations.



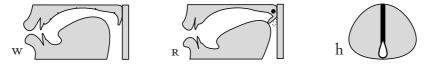
1.13. We also have the VELAR place (fig 1.9). The velar nasal, $/\eta/$, is a phoneme in English (occurring between vowels as well): *sing*, *singing* ['suŋ:, 'suŋ-uŋ/. Moreover, there are the velar stops, /k, g/, also with their prevelar taxophones, occurring before palatal vocoids (or [j]), as in *cat*, *get* ['khæt, 'get]. In Spanish and Italian, [η] only occurs as a contextual variant (ie taxophone) of the phoneme /n/, as in Sp. *congreso* /kon'greso/ [koŋ'gresso] or It. *congresso* /kon'gresso/ [koŋ'gresso].

fig 1.9. Velar articulations.



1.14. Adding lip rounding (as in [u]), we obtain the VELAR ROUNDED place of articulation (fig 1.10, on the left), as in /w/ in *wit*, *one* ['wıț, 'wen:], or in Spanish *cuatro* ['kwartro], or Italian *uomo* ['wɔ:mo].

fig 1.10. Velar rounded, uvular, and laryngeal articulations.



1.15. Farther back, we find the UVULAR place (fig 1.0, in the middle), which we will exemplify with the voiced trill, [R]. It may advisable to use this symbol in phonemic transcriptions of French and German, even though the most frequent actual realization in these languages is not a trill (as will be seen later on). The purpose of this choice of a phonemic symbol is to make it particularly evident that the articulation is uvular (and not alveolar, [r], or postalveolar, [I]): French *rare* /'Ra:R/ ['Ba:R], and German *rein* /'Raen/ ['Baen]. Let us observe that [B] is a constrictive, while [A] is an approximant: progressively weaker than [R].

The last place of articulation (in this simplified table) is the LARYNGEAL place, most commonly represented by /h/ (fig 1.10, on the right), as in English *hat* ['hæt], and German *Hans* ['hans].

Manners of articulation

1.16. Now, in order to fully master the table of fig 1.3 (which can be pictured mentally as well, since it is fairly simple – though new to those who have never done phonetics), we will move on to the seven fundamental MANNERS OF ARTICU-LATION, using the same consonants, but from this opposing perspective.

The PLACE and the MANNER of articulation are two of the *three* components constituting the consonants – the third is the TYPE OF PHONATION, particularly the distinction VOICED vs VOICELESS.

We will now move through the table, from the top downwards, so that we can see these MANNERS of articulation. The presentation will follow a quite precise physiological and articulatory logic, as we shall see.

1.17. *Nasal* (1). Lowering the velum, we open the passage to the nasal cavity, thus allowing expiratory air to escape from the nose. The result is the NASAL manner of articulation, which is combined with a closure produced somewhere in the mouth (in this table, in the bilabial, alveolar, palatal, or velar places).

However, these articulations should certainly not be called 'stops' (the next manner that we will consider), since nasal sounds are continuous, not momentary. Notwithstanding the closure in the oral channel, air can continuously escape through the nose, and the sound can be prolonged as long as expiratory air remains available.

The nasal consonants we have considered are [m, n, n, n, n, n, n, n] in English *man*, *singing* ['mærn, 'sıŋıŋ], or in Spanish *mar*, *no*, *caña*, *tengo* ['mar, 'no, 'karŋa, 'teŋgo], or in Italian *mai*, *no*, *ragno*, *lungo* ['mari, 'nɔ, 'rap:po, 'luŋ:go], and they are voiced. We group them together in fig 1.11 so that it can be easily seen that the velum is low-ered in all of them.

fig 1.11. Nasal articulations.

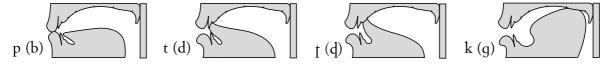


1.18. *Stop* (2). If, instead, the velum is raised (as in all the manners which follow), and a closure occurs, we have the STOP manner of articulation (fig 1.12). Here we have voiced and voiceless consonants, as in [p, b; t, d; t, d; k, g; k, g]: *pen*, *Ben*; *two*, *do*; *cot*, *got* ['phen:, 'ben:; 'thµru, 'dµru; 'khot, 'got]; and [t, d] *diente* (Sp.) ['djente]; *dente* (It.) ['dɛn:te].

In all the figures given to illustrate the manners of articulation, the reader should pay particular attention to what they have in common (even between different places of articulation) – these common features are precisely the characteristics of the manner in question.

1.19. *Constrictive* (3). For now, it will be convenient to skip the manner which is 'halfway' between the preceding manner and this one (and indicated in the table as 2+3, since it results from a combination of those two manners in a single sound – the reason will be seen shortly).

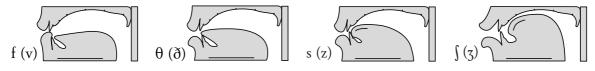
We therefore come to the CONSTRICTIVE manner of articulation, characterized by the speaker bringing the articulatory organs sufficiently close together that there is an audible noise of air friction. The constrictive manner is characterized by this friction, which however differs quite a bit in sound, depending upon the fig 1.12. Stop articulations.



place of articulation. In the table of fig 1.3, we have four DIPHONIC PAIRS of constrictives (which appear in fig 1.13), ie [f, v; s, z; θ , ϑ ; \int , z], as in *five*, *seize*, *this thing*, *ash*, *rouge* ['far9y, 'sriz, ϑ 's' θ (1);, 'æ \int , ' μ ruž]. As we have indicated, a diphonic pair consists of voiceless and voiced elements, sharing the same place and manner of articulation.

The term CONSTRICTIVE is clearer and more appropriate, since it is articulatory in nature, and therefore easier to put into concrete relationship with the production of the sounds in question. However, due to a sort of pernicious inertia, the term 'fricative' is still more common (the term is auditory and semantically much less transparent).

fig 1.13. Constrictive articulations.



1.20. *Stopstrictive* (2+3). The combination of manners 2 and 3 produces the STOPSTRICTIVE manner, which naturally derives from *stop* + *constrictive*. The more common term 'affricate' is not articulatory, but rather auditory, and therefore less evident and less easily concretized.

Instead, the new term *stopstrictive* immediately communicates the exact nature of the sound by virtue of its compound structure: the sound is composed of a first part which is incomplete, firmly joined to a second part, which characterizes it.

In the table, we have one diphonic pair of stopstrictives, $[t_j, d_z]$, as in *match*, *age* ['mæt_j, 'E'1d_z]. The mechanism is a combination of the stop manner (2) and the constrictive manner (3), with a total *length* corresponding to that of a *single* segment, *not* to the sum of two segments. A duration equivalent to that of two segments is found instead in SEQUENCES /ts, dz; t_j, dz/, such as, for example, *cats*, *heads* ['khæts, 'he'dz], or French *patchouli*, *adjectif* ['patʃµ'li, 'adʒɛk'tif].

It is important to pay careful attention to the distinction between the stopstrictive symbols, [tj dz], which are *monograms*, and the symbols for *sequences*, /tj, dz/, which are similar, but clearly not identical. For instance, in English, we have *patchouli*, ['phætj-əli, pə'tjhµuli/ and *adjective*, *agent* ['ædʒəktɪv, 'EIdʒənt]. The two successive phases of the articulation are, in fact, HOMORGANIC (*ie* produced in the same place of articulation). What occurs here is the combination of two different manners: the first half is a stop, corresponding in place of articulation to the constriction of the second half.

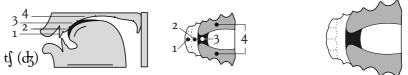
1.21. The best symbols for indicating stopstrictives are MONOGRAMS, as $[t_j, d_j]$, which make three fundamental points quite clear: that the sound is a SINGLE

sound, and not two sounds in sequence (even though it is composed of two distinct phases), with the NORMAL *duration* of one segment.

In fact, for instance, in Italian it is possible to have phonemic oppositions such as the one between *mogio* 'downcast' and *moggio* 'bushel': /'mɔdʒo, 'mɔdʒdʒo/ ['mɔ:dʒo, 'mɔdʒ:dʒo], and HOMORGANIC, as was mentioned above – it is therefore not a simple combination of [t, d] with [\int , $_3$], as can unfortunately be read in certain linguistics texts (and even phonetics texts!).

In fig 1.14, the first phase is marked in black, while the second one is in grey (as with all the other articulations). The first phase is the *stop* phase, and the second is the *constrictive* one, with the articulatory organs close together, but without occlusion of the passage of air. The two diagrams on the right-hand side of fig 1.14 show the mechanism from another point of view: that of PALATOGRAMS.

fig 1.14. Stopstrictive articulations.



1.22. Comparing the orogram of $[t_j, d_z]$ with that of $[\int, 3]$ (fig 1.13), it is possible to see the difference between the constrictives and the stopstrictives, at least for the case of the postalveopalatal (protruded) place of articulation.

Both of these, in our figures, contain a horizontal line at the bottom, which by convention represents the noise common to the two manners. Instead, a curved line, at the height of the blade, represents (also by convention) a longitudinal groove.

This groove is formed between the blade of the tongue and the part of the palatal vault that it approaches and partially touches. It is through the groove that air escapes, causing the hissing noises which characterize these GROOVED SOUNDS.

1.23. Approximant (4). The next manner, following the table of fig 1.3, is the AP-PROXIMANT manner. It is distinguished from the CONSTRICTIVE manner (3) because the articulatory organs are less close together, and as a result, they produce a less apparent noise. In fact, this noise is mostly heard only in the voiceless sounds, while in the voiced ones it is usually 'covered over' by the voicing produced by vocal-fold vibration.

fig 1.15 gives the orograms of [4, j, w], in which the amount of space between the back of the tongue and the palatal vault is clearly visible. In the orthographic systems of different languages, [j, w] are found written both with 'vowel' graphemes and 'consonant' graphemes: *use*, *yes*, *quite*, *wet* ['jµus, 'jEs, 'khwa9t, 'wEt] in Italian, *ieri*, *uomo* ['jEri, 'w0:m0]. Both are voiced.

In the table of fig 1.3 (and fig 1.15, on the right), we have [h], as well. Although it is mostly foreign to the Romance languages, it is nevertheless very important in many other languages: English *hut* ['het], German *Hut* ['hu:t]. It is voiceless, and produced in the glottis by opening the arytenoids. Therefore, it usuallt has no oral articulation of its own (except for coarticulation). fig 1.15. Approximant articulations.



1.24. *Trill* (5). The second to last manner in the table is the TRILL manner. It regards sounds which produce a pair of rapid tapping contacts of the tongue tip against the alveolar ridge, in the case of [r] in Italian *rana* ['ra:na], or of the uvula against the postdorsum, as in the [R] theoretically possible for French *rue* ['RY] or German *Rast* ['Rast].

In Spanish, the alveolar trill is typically longer: *rana* ['r:a'na] (sometimes we find '/'rrana/', or, on the contrary, simply *perro* '/'pero/', for real ['perro], as opposed to *pero* '/'pero/' ['pero]. Both are voiced, and both are shown in fig 1.16, where the tapping contacts are indicated schematically by the dark balls, and more concretely by the dashed outlines (more easily visible in the magnified versions on the sides).

Later on, we will also encounter 'trills' with only one tapping contact (these are called TAPS). It will be seen, in any case, that the grapheme r does not represent a strong or weak trill at all, in many languages, but rather a constrictive or an approximant, in most cases (which we will see adequately, when necessary).

fig 1.16. Trill articulations.



1.25. *Lateral* (6). The last manner is the LATERAL one, in which the tongue, while touching a point on the palatal vault, contracts laterally, thereby permitting air to pass out by the sides of the tongue.

fig 1.17 shows the laterals $[l, \Lambda]$, as in *lily* ['lul-i], or in Castilian Spanish *calle* ['ka· Λ e], or Italian *luglio* ['lu Λ : $\Lambda\sigma$]. English and many other languages do not have any $[\Lambda]$ sound, but rather a velarized alveolar [1], as in *fulfil* [fol⁴ft¹z].

fig 1.17. Lateral articulations.



2. A general approach to Natural Tonetics

Prosodic elements

2.1. While speaking of the vowels (§ 1.2), we have already mentioned the distinct role that segment DURATION (also called LENGTH or QUANTITY) can have in certain languages.

Normally, the CHRONEME, /:/, is placed after a vowel when it is necessary to indicate length (as we have seen in § 1.2, in the case of German *Stadt* ['ʃtat] 'city' and *Staat* ['ʃtat] 'State').

At times, differences in duration are combined with differences in timbre, as we find, again in German, with *offen* ['Pofm'], *Ofen* ['Pofm'].

Duration can also be associated with diphthongization, as in English *bee, two* ['bri, 'fhµu]. Too often, these last examples are still transcribed '[bi:, tu:]', as if they were actually long monophthongs (and, unfortunately, they are also often transcribed without a stress mark, as if monosyllables could not be either stressed or unstressed).

2.2. PHONEMIC LENGTH of consonants is better indicated by doubling, or more technically GEMINATING the symbol. This is especially true of languages such as Italian, where –phonetically as well– the consonants in question are truly GEMINATE, extending over two different syllables ([CC], and not merely 'lengthened' consonants, [C:]): *vanno*, *detto*, *faccio*, *passo*, *carro*, *gallo* ['van:no, 'det:to, 'fatf:tfo, 'pas:so, 'kar:ro, 'qal:lo].

It is thus important to avoid transcriptions such as '/'van:o, 'det:o, 'fatʃ:o, 'pas:o, 'kar:o, 'gal:o]' (or, even worse, '/'fat:ʃo/'). Let us also note English: *penknife*, *bookcase*, *this seat* ['phen,naef, 'bok,keis, ðis'srif].

PHONETIC LENGTH (which is not distinctive) of single elements, whether vowels or consonants, is marked with the CHRONE, [:], or with the SEMI-CHRONE, [·] (when less duration is present): English *car*, *card*, *cart*, *cardigan* ['khɑː, 'khɑːd̯, 'khɑːd̯, 'khɑːd̯, 'khɑːd̯, 'snid̯, 'snid̯ŋ], *sea*, *seed*, *seat*, *seeding* ['sri, 'srid̯, 'snid̥, 'snid̥uŋ].

Stress

2.3. Word STRESS (as well as that of RHYTHM GROUPS, or *stress groups* – the first term is preferable) is marked by ['] in front of the syllable in question: *finally* ['fa9-

nəli] (and certainly not in front of the stressed vowel, '[f'aənəli]', nor above the vowel, '[fáənəli]'. Secondary stress, which is weaker (and generally, phonetic and not phonemic, ie without distinctive value), is denoted by [,]: *dynamite* ['daənə-maət] (not '[d'aənəm,aət]', nor '[dáənəmàət]').

Especially in Romance studies, terminological inertia has dragged obviously unscientific names through time from the Roman era to the present, and so we must insist, once again, that 'tonic' is completely inappropriate in the sense of STRESSED.

The word *tonic* clearly refers to the *tone* (pitch) of a syllable, not to its *stress*. The Romans took their terminology for syllable PROMINENCE from Greek, where prominence was *tonal* (determined by *pitch*, in addition to inevitable intensity), even though, in Latin, prominence was *intensive*, *stress-based*. All terms of this sort without scientific foundation should be rigorously avoided, since they cannot fail to produce dangerous conceptual misunderstandings.

2.4. In the case of stress position, it is also good to use scientific and objective terminology. We will therefore speak of FINAL-STRESSED words (stressed on the last syllable, rather than 'oxytone'), ie with stress on the last syllable: *ago, again, replace, kangaroo* [ə'g3'\omega, ə'gE(I)n, Iə'phleIs, khæŋgə'Iµ'u].

Spanish *terminó*, *convoy*, *tendría*, *tomar* [,termi'nơ, kom'bơi, ten'dria, to'mar]. Italian: *partirà*, *partirai*, *ferrovia*, *Manin* [,parti'ra, ,parti'ravi, ,ferro'via, ma'nin:].

Next we have PENULTIMATE-STRESSED words (stressed on the last but one syllable, better than 'paroxytone'): *apparent*, *deductive*, *evolution* [ə'phælənț, də'dekțıv, _ievə'lµu∫n] or [iivə-].

Spanish: termino, mañana, hermoso [ter'mi'no, ma'pa'na, er'mo'so], Italian: ritorno, domani, principi 'principles' (also written princípi) [ri'tor:no, do'ma:ni, print'fi:pi] (different from principi 'princes', also written príncipi); prepenulti-MATESTRESSED ones (stressed on the last but two syllable, better than 'proparoxytone'): dedicate, cumbersome, curiosity ['dedukheit, 'khembəsm, ,khjuəij'bsəti].

Spanish: *término*, *régimen*, *regimenes* ['termino, 'r:eximen, r:e'xi'meneş], Italian: *ri-tornano*, *domenica*, *termino*, *fabbrica* [ri'tor:nano, do'me:nika, 'ter:mino, 'fab:brika].

Much less frequently, we encounter words stressed on the fourth to last syllable: *prosecutor*, *definitely* ['phipsə,khj@fe, 'defənətli].

Italian: *terminano*, *fabbricalo* ['tɛrːmina_ino, 'fab:brika_ilo]; on the FIFTH TO LAST: *cumulatively*, *positivism* ['khjµumjələ_ifıvli, -ileitıvli, 'phoz-əfuvızm], Italian: *fabbricamelo* ['fab:brikame_ilo].

And on the SIXTH TO LAST as in the very rare Italian form *fabbricamicelo* 'build it for me there, or by means of that, or out of that' ['fab:brika,mitʃe,lo] (actually, a form made up purposely as an example, just to set a linguistic record).

Sentence stress

2.5. It is advisable to consider as SENTENCE STRESS, or *ictus*, every case of word stress which remains stressed in sentence context, and does not become reduced. When stress reduction actually occurs, it is a phonetic (rather than a phonemic)

phenomenon, as in Italian *tre gatti* 'three cats' [treg'gat:t], where the isolated ['tre] loses its stress when placed in a rhythm group.

In English such a reduction does not occur; as a matter of fact, we can easily have examples such as: *Then three nice black cats ran out* ['ðen 'θιri 'nass 'blæk 'khæts 'ιæn 'aot].

It is preferable to avoid using the term 'sentence stress' to refer to the sentence FOCUS; this last notion refers to the word, or words (and therefore concepts), which in a given utterance are communicatively more **PROMINENT**. In fact, they are highlighted by virtue of being new to the conversation (as opposed to being already given, or known).

2.6. Sentence stress and focus are in fact two distinct attributes, although they are not necessarily incompatible. In fact, they can both be present in the last stress group, even though this possibility is statistically the least frequent: *I never said that was true* [a9'nev-ə'sed 'ðæp wəz'th.u..]. Or, in Italian, *Non ho mai detto che questo fosse vero* 'I never said that was true' [no,nommai'detto kek,kwesto,fosse'vero.]).

In practice, it is much more probable that the sentences above would be said as [aə'nev-ə 'se'd. 'ðæp wəz"[thlµ'u..], or better [aə"nev-ə 'se'd. 'ðæp wəz'[thlµ'u..], or [aə-'nev-ə,sed... l'ðæp wəz'[thlµ'u..] (and [no,nommai'det:to. kek,kwesto,fosse"ve:ro.], or [no,nommai"det:to. kek,kwesto,fosse've:ro.], or also [,nonom'maidetto. lkek,kwestofosse"ve:ro.]).

Therefore, a concrete utterance (which is sufficiently long) will have multiple *ictuses*, ie *protonic* syllables and one or more *tonic* syllables (in the rigorous sense of *stressed syllables* in the *tune*).

At the same time, the utterance can also have one or more points which are communicatively *highlighted* (ie the *sentence foci*), and these are generally expressed by different proportions of stress and pitch.

The sentence *These are the new co-workers of my neighbor Roberta* [diizəðə'njµu 'kh30,w3'kəz əvmaə'nEibə lə'b3'te.] can be variously realized, with single or multiple highlights.

We can therefore encounter [ˌðiizəðə'njµ'u 'kh30₁w3'kəz· əvmaə'neibə <code>Jə'b3'tp..], or also [ˌðiizəðə'njµ'u 'kh30₁w3'kəz· əvmaə'neibə <code>Jə'b3'tp..], or possibly [ˌðiizəðə-'njµ'u 'kh30₁w3'kəz· əvmaə'neibe· <code>Jə'b3'tp..], or else also [ˌðiizəðə'njµ'u 'kh30₁w3'kəz· əvmaə'neibe· <code>Jə'b3'tp..], or else also [.diizəðə'njµ'u 'kh30₁w3'kəz· əvmaə'neibe· <code>Jə'b3'tp..], or else also [.diizəða'njµ'u 'kh30₁w3'kəz· əvmaə'neibe· <code>Jə'b3'tp..], or else also [.diizəða'njµ'u 'kh30₁w3'kəz· əvmaə'neibe· <code>Jə'b3'tp..], or else also [.diizəða'njµ'u 'kh30₁w3'kəz· əvmaa'neibe· <code>Jə'b3'tp..], or else also [.diizəða'njµ'u 'kh30₁w3'kəz· əvmaa'neibe· <code>Jə'b3'tp..], or else also [.diizəða'njµ'u 'kh30₁w3'kəz· əvmaa'neibe· <code>Ja'b3'tp..], or else also [.diizəða'njµ'u 'kh30₁w3'kəz· əvmaa'neibe· <code>Ja'b3'tp..], or else also [.diizaða'njµ'u 'kh30₁w3'kəz· əvmaa'neibe· <code>Ja'b3'tp..], or else also [.diizaða'njµ'u 'kh30_1 w3'kaz· avmaa'neibe· <code>Ja'b3'tp..], or else also [.diizaða'njµ'u 'kh30_1 w3'kaz· avmaa'nibi w3'b3'tp..], or else also [.diizaða'njµ'u 'kh30_1 w3'kaz· avmaa'nibi w3'b3'tp..], or else also [.diizaða'njµ'u 'kh30_1 w3'kaz· avmaa'nibi w3'b3'tp..], or else also [.diizaða'njµ'u 'kh30_1 w3'b3'tp..], or else also [.diizaða'njµ'u 'kh30_1 w3'b3'tp..], or e</code></code></code></code></code></code></code></code></code></code></code></code></code></code></code></code></code></code></code></code></code></code></code></code>

2.7. Of course, similar subdivisions are possible for the corresponding Italian sentence, too: *Questi sono i nuovi colleghi della mia vicina Roberta*: [,kwesti,sonoi'nwɔvi kol'lɛ:gi· ,della,miavi'tʃi'na ro'bɛr:ta·.], or also [,kwesti,sonoi'nwɔ:vi· kol'lɛ:gi· ,della,miavi'tʃi'na ro'bɛr:ta·.], or possibly [,kwesti,sonoi'nwɔ:vi kol'lɛ:gi· ,della,miavi'tʃi:na· ro'bɛr:ta·.], or else also [,kwesti,sonoi'nwɔ:vi· kol'lɛ:gi· ,della,miavi'tʃi:na· ro'bɛr:ta·.].

In any case, the elements highlighted can also be grammemes, in cases such as particular contrasts. With the examples above, we can have ['ðriz·], or [ðiiz'ɑ:·] (with *are* highlighted), or even [ðə_injµu] (with *new* destressed, but with *my* highlighted, ['ma·9], for some particular reason). Quite the same for Italian (and other languages).

Some kind of attenuation can occur in parts of the sentence rendered 'parenthetical', as in [ləvmaə'nEIbə lə'b3'te..], where *of my neighbor Roberta* is spoken as a sort of afterthought. Again, similar possibilities occur in the Italian example given: [ldel laımiavi'tʃi'na ro'bɛr:ta·.] *della mia vicina Roberta*.

Tones

2.8. Certain languages have distinctive TONES; these are called, logically enough, TONEMES. Distinctive tones imply that when the pitch of a syllable changes, its meaning can change, as well. Let us look at, for example, the three basic ton(em)es of the African language Yoruba (cf fig 2.1): ró, ro, rò / ro, ro, ro/ 'to drape, to till, to think'.

fig 2.1. The three Yoruba tonemes.

1 / [[] (')	2 /'/ ['] 〈 〉	3 /_/ [_] (`)

In fig 2.2, the four ton(em)es of Mandarin Chinese are shown: *mā*, *má*, *mǎ*, *mǎ*, *mǎ*, *ma*, 'ma, 'ma, 'ma/ 'mother, hemp, horse, to curse'. Of course, in our book Chinese Pronunciation & Accents, all possible variants are clearly shown.

fig 2.2.				\square
The four (Mandarin)				
Chinese tonemes.	1 / [[] < - >	2 /′/ [┘] ⟨´ ⟩	3 /,/ [_] (``)	4 /'/ [\] (`)

Examining these fairly simple examples, it becomes clear that the graphic signs used are capable of referring to (quite) different tonetic realities in different languages.

Intonation

2.9. We will now concisely introduce the bare essentials of INTONATION. In fact, all languages have their own intonation systems, and phonetics should therefore not be treated without examining intonation, as well. Unfortunately, it is often left out entirely, even in descriptions of particular languages or in transcriptions of sentences or passages! A notably bad example of this omission is given by the 'official manual' of the International Phonetic Association: A Guide to the Use of the International Phonetic Alphabet (found in the bibliography).

In every language the THREE MARKED TUNES (/. ? ;/) and the UNMARKED PRO-TUNE (the normal / /, without a special symbol) should be clearly indicated with appropriate symbols (both on a phonetic, or rather, TONETIC level, and on a phonemic, or TONEMIC one). The *tune* involves the final stressed syllable of an utterance and the syllables around it (cf fig 2.3), while the *protune* is what is found before the tune in the same intonation group (cf fig 2.3, on the right). In the example his cousin's name is Bartholomew [htz/kheznz 'nE'Im Izbo''0pl-əmjµu.], the tune is constituted by the full name of *Bartholomew*, while the protune is everything prior to it: his cousin's name is...

The example of *Bartholomew* is particularly interesting because it allows us to consider the four ideal components of a tune: the *pretonic* syllable (Bar-), the ton*ic* syllable (*-thol-*), and the two *posttonic* ones (*-omew*).

The pronunciation of this example normally provides a reasonably adequate realization of the schematic tonal movements shown in fig 2.3 (which besides the unmarked protune and the three marked tunes, give the important interrogative protune, $\frac{1}{2}$, which is marked, and the continuative intoneme, $\frac{1}{2}$ – which is unmarked).

2.10. If the example were his cousin's name is Dick [htz/kheznz 'nEIM tz/dtk.], the tune would be *is Dick*. The tonic and posttonic syllables would consist of only one syllable (Dick). In consequence, the ideal movement shown in the diagrams (for the case with four syllables) would be compressed, not just horizontally, but inevitably in terms of the vertical range, as well. When only one syllable is present (as in the answer to a question like what is his cousin's name? – Dick), the result is a fusion of the expected pitch patterns which maintains the characteristic movements, but in an attenuated form.

The intonation schemes of the British school were among the few to have some practical use; but precisely for the reasons considered here (and in general), they are sometimes decidedly excessive. In fact, for $[\cdot]$ or $[\cdot]$ (cf fig 2.3), they give diagrams like $\overline{\gamma}$ or $\overline{\gamma}$ when there is only one short voiced element: for example for $[\iota]$ in *Dick* – if the result were truly as extended as their diagrams show, it would rather sound like a police siren!

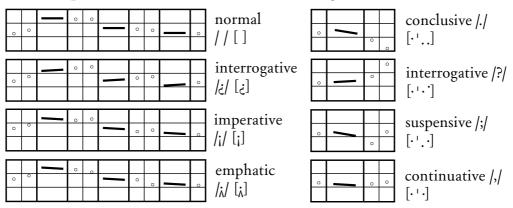


fig 2.3. The four protunes and tunes of neutral British English.

2.11. The protune and the tune taken together form an INTONATION GROUP more usefully called TUNING. We use examples such as *My favorite dictionary*, or That patient thinks he's Giuseppe Verdi, to show that the parts of an intonation group do not necessarily respect word boundaries. In fact, the tunes in these utterances are, respectively: [Jət'dık(nJi.] and [i'veədi.] (-rite dictionary and -pe Verdi). dyµu'sep] (*My favo-* and *That patient thinks he's Giusep-*). The full examples are: ['ðæts mae'feɪviət 'dukſnii.] and [ðæp'pheɪſnt 'θuŋks izdyµu'sep-i 'veədi..].

It will be seen that our transcriptions are not subdivided pedantically along word boundaries. That practice is still quite common (in the best case, motivated by hopes of helping the reader). It is much more useful to subdivide transcriptions into rhythm groups, as we have done, instead of giving things (and symbols) like '['ðæt ız 'maɪ 'feɪvrət 'dɪkʃənri]'.

Or '['ðæt 'peɪʃnt 'θıŋks hizz cʒu:'sepi 'veədi]', where the stresses and some un-reduced forms (for current reduced forms or 'weak forms') are also unnatural (*ie* in the cases of '/ız 'maɪ/' in the first example and '/hizz/', at least, in the second, which are weakened in normal speech, both articulatorily and prosodically).

2.12. Another (not unimportant!) counsel regards the fact that 'sounds have no capitals'; note that, for other reasons, the traditional orthographies of languages such as Arabic and Hindi, and Chinese and Japanese as well, have no capital letters. Children can easily tell that there is no phonic difference between *smith* and *Smith*, or between Italian *franco* and *Franco* – both of the English examples are pronounced exclusively ['smt0], and the Italian ones are both pronounced ['fran:ko].

And yet, even in textbooks, all too often we find (printed, as well) atrocities such as '[Dʒu:'sepi 'Veədi]' and also '/'Mai/' absurdly derived from writing conventions! The 'transcription' of My is given with a capital letter, because it is the first word in the sentence! Moreover, the transcription of *Giuseppe* uses a capital letter because the word is a proper name, and the result is an inappropriate and ambiguous digram, D_3 , instead of a slightly less forced D_3 , which would at least represent the unity of the sound [dʒ] better.

2.13. fig 2.4 will be a useful explanatory tool in order to understand more explicitly the use of tonograms (given that we are not all musicians or singers, for whom the analogy with a musical score is obvious). Let us observe, then, the graphemic text, to which we have given the form of the intonation curve. Normally this curve is shown with the lines and dots of tonograms, but here we have used a more 'intuitive' approach.

1	See you on Sat _{urday.}	
(Will they)		
3 don't)	see you on Saturday	(<i>it'll be a total di_{saster.}</i>)
4 don't) (If they	see you on Saturday	(don't dout it.)

fig 2.4. An iconic way to introduce people to intonation.

2. A general approach to Natural Tonetics

We show just four examples, based on the segment *see you on Saturday* (in neutral British pronunciation), expressly to compare them with $\overline{\underline{\ }}$ and $\overline{\underline{\ }}$, seen above. These examples contrast pairwise: a *conclusive* utterance is contrasted with an *interrogative* one (of a total question), and a *suspensive* utterance with a *continuative* one.

2.14. In the case of the last two sentences, the semantic importance of what follows (given in parentheses) is fundamental, whether it is expressed out loud, or instead remains implicit. In any case, the suspensive tune is characterized by decidedly greater and more immediate anticipation, while this is lacking with the continuative. This difference, and certainly not their syntax, explains the difference in intonation between the third and fourth examples.

Applying the movements of the three tunes to a slightly different example, we see that in neutral (better than 'standard') British English, the *conclusive tune* is falling $(/./ [\cdot'..])$, of the type shown in fig 2.3: *Christian* ['khiustjən..] (and also in three examples in fig 2.4).

The *interrogative tune* is rising $(?/ [\cdot \cdot \cdot])$, as in the question *Christian?* ['kh.lis-t \mathfrak{f} ən·]. The third tune, the *suspensive*, is used to create a sort of anticipation, or 'suspense'. In neutral British pronunciation, it is falling-rising, /;/ [· · .]: Although his name's Christian, -['kh.list \mathfrak{f} ən.] – he's no good Christian at all.

2.15. In fig 2.3 (as well as in the second example of fig 2,4), we have the *inter*rogative protune, |z|, as well. This protune is a modification of the normal protune, and it anticipates on the rhythmic-group syllables of the protune the characteristic movement of the interrogative tune (although in an attenuated form).

Obviously, in the part specifically dedicated to the topic, we will be more explicit and more exhaustive. Here, we remark only that the interrogative protune is the same in all types of questions, whether these are TOTAL questions, like *Is his cousin's name Christian?*, or PARTIAL ones (containing a question word, such as *why, when, who, how...*), such as *Why is his cousin's name Christian?*

We must warn the reader that, contrary to what grammar books and writingbased teaching imply, not all questions have an interrogative tune, nor should they.

In fact, partial questions, in order to sound truly natural and authentic, should be pronounced with a conclusive tune (or at most, with the unmarked *continuative* tune, with pitch in the mid band, which will be seen in greater detail later on): Why *is his name Christian?* [¿wasız (h)ız'neım 'khııstʃən.] (or ['khııstʃən·], with a continuative tune).

2.16. Let us conclude this chapter by drawing attention, again, to fig 2.3. The left bottom part of it shows two more protunes and their typical movements. The imperative one, l_i/l_i , and the emphatic one, l_i/l_i , which do not need any explanation.

3. Galician vowels

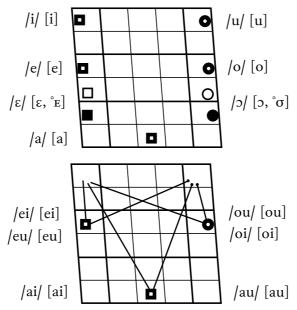
Neutral

3.1. fig 3.1 shows the vocalic realizations of *neutral* Galician, which has seven vowels, and numerous diphthongs of the /Vi, Vu/ type, by combining its basic vowels. The seven distinctive phonemes are: /i, e, ε , a, σ , o, u/ [i, e, ε , a, σ , o, u] with only two taxophones, [E, σ] for / ε , σ /, found in syllables without a primary or strong stress, ie either secondary or weak. fig 3.1.1-3 show the orograms, labiograms, and palatograms correponding to fig 3.1.

Here are some examples (including 'official' diphthongs): *filla* ['fi'ja], *inda* ['inda], *tres* ['treş], *dentro* ['dentro], *ferro* ['fɛrr:o], *sempre* ['şɛmpre], *cadro* ['ka'δro], *ancho* ['aṇtʃo], *home* ['ɔ'me], *conde* ['kɔnde], *mozo* ['mo'θo], *conto* ['konto], *azul* [a'θul], *xunta* ['ʃunta], *virus* ['biruş], *iglú* [i'ʒlu], *taxi* ['takşi].

Let us consider very carefully: *presa* ['pre'sa] (and its inflected form: *presiña* [pre-'si'ŋa]), *présa* ['pre'sa] (and its inflected form: *presiña* [pre'si'ŋa]), and: *bola* ['bo'la] (and its inflected form: *boliña* [bo'li'ŋa]), *bóla* ['bo'la] (and its inflected form: *boliña* [bo'li'ŋa]). Some repetitions may be of help.

fig 3.1. Neutral Galician: vowels and diphthongs.



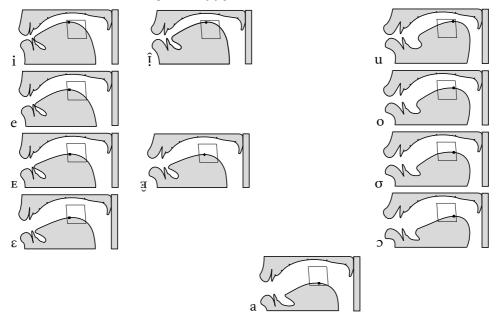
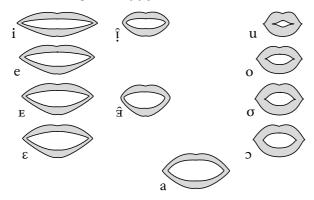


fig 3.1.1. Neutral Galician: orograms (cf fig 3.1 & 3.3).

fig 3.1.2. Neutral Galician: labiograms (cf fig 3.1 & 3.3).

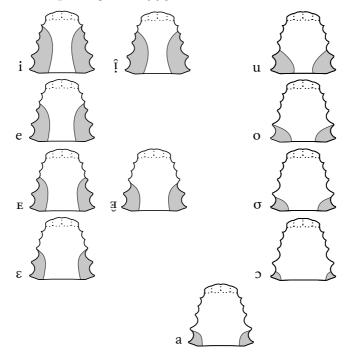


3.2. Diphthongs: queixo ['keiĵo], seu ['şeu], caixa ['kaiĵa], causa ['kauŝa], noite ['noite], pouco ['pouko]. Let us notice that eu ['eu] may be ['ɛu] in mediatic pronunciation, as also denso can, ['denso; 'dɛn-], while dente, as other words, is ['dente, 'dɛn-], in neutral pronunciation. In fact, the distinction between /e, ε ; o, \mathfrak{I} is seriously endangered, nowadays, due to regional differences and influence by Spanish, which only has '/E, \mathfrak{I} , $\mathfrak{$

Further examples: como ['ko'mo], comes ['kɔ'meş], come ['kɔ'me], comen ['kɔ'meŋ]; sirvo ['şirβo], serves ['şɛrβeş], serve ['şɛrβe], serven ['şɛrβeŋ]; lugar [lu'γar], sogro ['şoγro], sogra ['şɔ'γra], algunha [al'γu'ŋa], mel ['mɛl], bebo ['be'βo], mañá [ma'ɲa], macio ['ma'θjo], xente ['ʃente], pequeno [pe'ke'no], papel [pa'pɛl], montañés [ˌmõnta'ɲeş], ra ['r:a], mesmo ['mɛẓmo, 'mɛşmo], chamar [tʃa'mar], o gato [o'γa'to], cruz ['kruθ], maior [ma'jor].

Other examples: *ven* ['beŋ], *vén* ['bɛŋ], *póla* ['pɔ·la], *vaca* ['ba·ka], *alba* ['alβa], *album* ['alβuŋ], *conversar* [,komber'şar], *selo* ['şe·lo], *vida* ['bi·δa], *nuclear* [,nukle'ar], *ho*-

fig 3.1.3. Neutral Galician: palatograms (cf fig 3.1 & 3.3).



ra ['ɔra, 'ora], *irman* [ir'maŋ], *cova* ['kɔrβa], *min* ['miŋ], *corda* ['kɔrδa], *trato* ['trato], *botar* [bo'tar], *votar* [bo'tar], *oso* ['oṣo], *óso* ['ɔṣo], *carro* ['karro], *bonito* [bo'nito], *cordeiro* [kor'δeiro] (string-maker) vs [kor'δeiro] (lamb), *coller* [ko'ɟer], *collemos* [ko'ɟermoş], *nada* ['narδa], *nova* ['nɔrβa], *novo* ['nɔrβo] (mediatic also ['norβo]), *fuxo* ['furʃo], *foxo* ['forʃo], *foxa* ['fɔrʃa], *saltar* ['saltar], *chouto* ['tʃouto], *poboación* ['poßoa'θjoŋ].

3.3. In addition, fig 3.2 also shows some grammar-diphthongs, often wrongly described as if they were hiatuses (bisyllabic sequences). We will only show them here, in an unambiguous way, since they are formed by combining the vocalic elements already seen, also in the other accents that we will present.

Some examples: *escribiu* [¡eşkri'βiu], *período* [pe'rioδo], *día* ['dia], *paseo* [pa'şeo], *basea* [ba'şea], *deu* ['dɛu], *caen* ['kaeŋ], *moa* ['mɔa], *poida* ['pɔiδa], *boa* ['boa], *heroe* [E-'rɔe], *poesía* [poe'şia], *rúa* ['rːua], *vacúolo* [ba'kuolo], *incluen* [iŋ'klueŋ], *azuis* [a'θuiş].

It should not be necessary to recall that the sequences [jV, wV] are *not* at all 'diphthongs' (because [j, w] are *consonants*, certainly *not* vowels): who knows when,

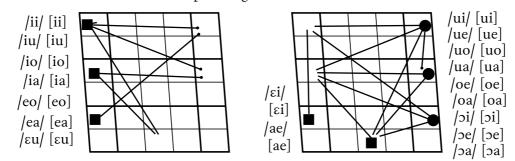


fig 3.2. Neutral Galician: further diphthongs not hiatuses!

at last, they will be fully recognized for what they really are, with no unscientific interference from spelling? The terms 'semivowel, semiconsonants' are disgraceful, uncivilized, and offensive conjurers' tricks, based on miserable traditional spelling!

Thus, let us consider some examples illustrating these /CV/ sequences (while waiting for 'experts' to wake up from their absurd and dangerous outdated 'beliefs'): *rabia* ['r:a⁻βja], *rabiar* [r:a⁻βjar], *ambiguo* [am'bi⁻γwo], *secuaz* [şe'kwaθ]. Of course, words like *biografía* and *muiñada* are [,bioγra'fia, mui'ɲarða], with *true diphthongs*, [io, ia, ui], certainly *not* with hilarious (and practically illiterate) 'bisyl-labic hiatuses'!

3.4. Although (as we have already told in advance) the distinction between $|e, \varepsilon|$ and $|o, \circ|$ is becoming more and more rare in Galician, in its *neutral pronunciation*, it is *still* present (even in unstressed syllables, as we have already seen and will see).

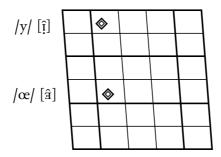
Thus: ven ['beŋ] (they see) *;ven!* ['beŋ] (come!), vén ['bɛŋ] (he/she/it comes), e [e] (and), é ['ɛ, $_{E}$] (is), pe ['pɛ] (P), pé ['pɛ] (foot), te ['tɛ] (T, you), té ['tɛ] (tea), ese ['eːşe], ese ['ɛːşe] (S), presa ['preːşa] (handful), présa ['prɛːşa] (haste), pero ['perro] (defect), pero ['pɛrro] (but).

And: *bola* ['bo'la] (roll), *bóla* ['bɔ'la] (ball), *fora* ['fora] (was), *fóra* ['fɔra] (outside), *oso* ['o'şo] (bear), *óso* ['ɔ'şo] (bone), *no* [no] (in the), *nó* ['nɔ] (knot), *nos* ['noş] (us), *nós* ['nɔş] (we), *vos* ['boş] (you, ye), *vós* ['bɔş] (you), *co* [ko] (with the), *cos* [koş] (with the [pl.]), *có* /kɔ/ [ko] (that the), *cós* /kɔs/ [koş] (that the [pl.]).

3.5. In unstressed syllables of inflected forms with original /ε, ɔ/, we find [E, σ]: *aceptar* [,aθEp'tar], *quentura* [kEn'tu'ra], *económico* [,Eko'nɔ'miko], *votar* [bơ'tar] (but *botar* [bo'tar]), *obrina* [σ'βri'na], *homazo* [σ'ma'θo], *guerrear* [,gErr:e'ar], *desovar* [,deşo'βar], *presiña* [pre'şi'ŋa], *perniña* [pEr'ni'ŋa], *peíño* [pE'i'ŋo], *xestiña* [şEş'ti'ŋa], *homiño* [σ'mi'ŋo], *poliña* [po'li'ŋa]... Let us also consider: *elector* [,ElEk'tor], *electoral* [E,IEkto'ral], *numerado* [,nume'ra'δo]... and *oír* [σ'ir], *oía* [σ'ia] (because of *oia* ['ɔ'ja])...

3.7. fig 3.3 shows two important xenophonemes (for careful speakers), which can be used especially in French, English, and German loans, as in: *flûte* ['flît, -it, -ut], *lycra* ['lîrkra, 'lir-], *flirt* ['flârt, 'flirt], *surf* ['şârf, 'şurf], *röntgen* ['r:ântgeŋ, 'rɔen-], *föhn* ['fâŋ, -ɔŋ].

fig 3.3. Two Galician vocalic xenophonemes.



Traditional

3.8. fig 3.4 presents the vocalic elements of *traditional* Galician. Comparing it with fig 3.1, we can see that it includes more taxophones. When vowels are followed by a nasal consonant, in a checked syllable, they are nasalized, with timbre differences in the case of $|eN^{\#}, oN^{\#}|$ [$\tilde{e}N^{\#}, \tilde{o}N^{\#}; \tilde{o}N^{\#}, \tilde{o}N^{\#}]$, $|eN^{\#}, oN^{\#}|$ [$\tilde{e}N^{\#}, \tilde{o}N^{\#}; \tilde{o}N^{\#}$], $|eN^{\#}, oN^{\#}|$ [$\tilde{e}N^{\#}, \tilde{o}N^{\#}; \tilde{o}N^{\#}$], $|eN^{\#}, oN^{\#}|$ [$\tilde{e}N^{\#}, \tilde{o}N^{\#}; \tilde{o}N^{\#}$].

When completely unstressed (including in word-final position), /e, a, o/ undergo reduction: [,1, ,e, ,v], including [,ĩN[#], ,ĩN[#]]. Some examples: *lingua* ['lĩŋgwe, -gue], *entre* ['Entri], *ben* ['bɛ̃ŋ], *tanto* ['tɛ̃ntv], *chama* ['t͡ʃɛ̄'me], *onde* ['õndi], *dimensión* [,di-mĩn'sjõŋ], *onte* ['ɔ̃nti], *punta* ['pũnte].

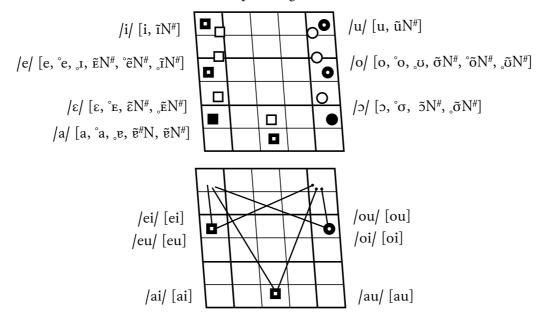


fig 3.4. Traditional Galician: vowels and diphthongs.

Colloquial

3.9. fig 3.5 presents the vocalic elements of *colloquial* Galician. Similarly to *tra-ditional* Galician, we can have nasalization of the vowels, when followed by nasal consonants, including /eN[#], $oN^{#}$ / [$\tilde{E}N^{#}$, $\tilde{e}N^{#}$; $\tilde{o}N^{#}$, $\tilde{o}N^{#}$] and (also in free syllables): /a/ [$\tilde{E}N^{#}$, $\tilde{E}^{*}N$]. In addition, all are also as [$\tilde{V}^{N#}$], with seminasal contoids, provelar before a pause, or homorganic to a following consonant, /n=C/.

In addition, in unstressed syllables, we normally have |a| [${}_{\circ}e$], and $|e, o| \downarrow [{}_{\circ}\iota, {}_{\circ}O]$. In *post*stressed internal (*ie* non-final) syllables, for |e, a, o|, it is also possible to have $\downarrow \downarrow [{}_{\circ}I, {}_{\circ}8, {}_{\circ}U]$.

3.10. The second vocogram in fig 3.5 shows two frequent taxophones found for /a/: [A, a], when followed by consonants with a patalal component (/p; tʃ, ʃ; ʎ; j/), and [a, A], when followed or preceded by consonants with a velar(ized) compo-

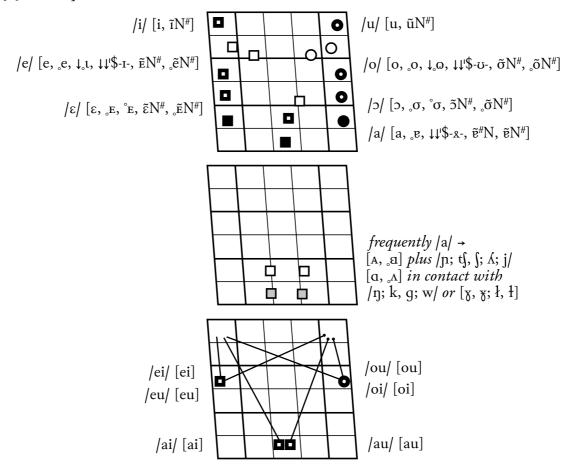


fig 3.5. Colloquial Galician: vowels.

nent (/p; k, g; w/ or $[\chi, \chi, \gamma, \gamma; l, l]$).

Some examples: *máximo* ['makşimo, 'mak-, ↓-mo], *peras* ['pereş], *herbívoros* [Er-'βi'βoroş, ↓↓-βuroş], *protagonista* [,proteyo'nişte, ↓,proteyo-, -tʌy-], *axuda* [e'ʃurðe, a-], *animal* [,enī'mał, -'mał], *traballo* [tre'βa'jo, 'βʌ'-, ↓-jo] (also [j, ɟ, gj, dʒ]), *símbolo* ['şĩmbolo, ↓↓-bu-, ↓-lo], *castro* ['kastro, 'kas-], *épocas* ['ɛ'pokeş, ↓↓-pu-, -kʌş], *último* ['ultimo, ↓-mo].

However, for the *consonants*, we find: $/f/ [f, f]; /s/ [s, s, s; z, z, z]; / / [j, j, j, gj, dz]; / <math>\theta/ [\theta, \theta]; [\delta, \partial; \chi, \chi, \gamma, \gamma]; [l, l, l]; / jV, wV/ frequently [jV, iV, wV, uV]; / <math>\eta^{\#}V/$ [# η V, #nV] (with *a*, *as*, *o*, *os*). We will see them better in Gh 4.

Mediatic

3.11. fig 3.6 presents the 'simpler' vocalic structure of *mediatic* Galician, including its main diphthongs. The most striking peculiarity is that (especially stressed) /e, o/ and / ε , ɔ/, [E, \circ e; σ , \circ o], may only be distinguished by a slight (though sufficient) height difference, inside of the same *canIPA* vocogram box, although with a diacritic under the symbol (for precision). In order to better show this difference, we could resort to special *canIPA* symbols: /e, o/ [e, σ] and / ε , ɔ/ [ε ,

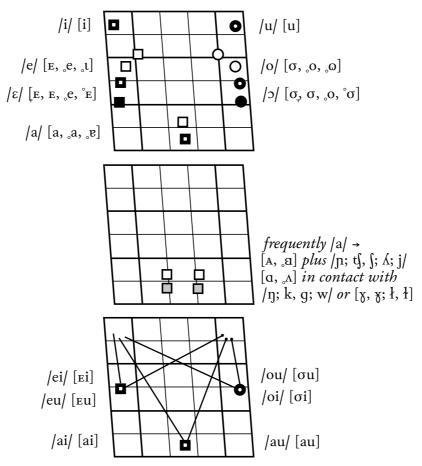
 \mathfrak{I} . Besides, unstressed /e, a, o/, can be [\mathfrak{l} , \mathfrak{e} , \mathfrak{o}].

However, the mediatic accent, in addition to many oscillations, may also possibly use neutral or colloquial realizations, including $[\varepsilon, \neg]$, although with peculiar distributions, not necessarily corresponding to the expected ones (but not explicitly shown in the vocogram).

3.12. Some examples: *prender* [pren'der, prın'-], *figura* [fi'γura, -re], *cidade* [θi'∂ade, -dı], *concello* [kon'θe'jo, kon-, -ŋ-, -jo], *algunha* [ał'γurŋa, ał-, ai-, e-, -ŋe], *mel* ['mel, -ł, -ł], *norte* ['nɔrte, -tı], *sobre* ['sʊßre, -ßrı], *posición* [,posiθi'oŋ, -'θjoŋ], *en francés* [,emfran'θes, ,eŋfraŋ-, -freŋ-], *verdadeiro* [,berða'ðeiro, -ðe-, -ro], *cousa* ['kousa, -se], *actual* [,aktu'al, ,ek-, ak'twal, ek-, -ł, -ł], *lexislatura* [,leſizla'tura, -le-, -re], *a guerra* [a'ɣerr:a, e-, -rre], *medio* ['me'ðio, -ðj-, -ω], *clase* ['kla'se, -sı], *noticias* [no'ti'θias, nω-, θjas, -es].

3.13. However, for the *consonants*, we find (concisely): /f/ [f, f]; /s/ [s, s, s; z, z, z]; / Λ / [j, j, J, gj, dz] (occasionally [Λ ,]], too); / θ / [θ , θ]; [∂ , δ ; γ , γ , γ , γ , γ]; /l/ [l, λ , 1]; /⁽¹⁾jV, ⁽¹⁾wV/ sequences are very often changed into /i⁽¹⁾V, u⁽¹⁾V/; / η [#]V/ [[#] η V, [#]nV] (with *a*, *as*, *o*, *os*). Final / η [#]/ [η , η , η , η], often also when followed by a continuous consonant, /f, θ , s, \int / (even in word-middle position).

fig 3.6. Mediatic Galician: vowels.



4. Galician consonants

Neutral and traditional consonants

4.1. In this chapter, we will provide examples of the *neutral* pronunciation of the Galician consonants and contoids, followed by the *traditional* ones (t), indicating mainly its differences, which will appear obvious. Let us observe, concisely, that traditional consonants are generally: $/s/[s, z], /g/[g, g, x, x], /\theta/[\theta]; /\Lambda/[\Lambda]; /jV, wV/ frequently [jV, iV, wV, uV]; /ŋ[#]V/ [[#]ŋV] (with$ *a*,*as*,*o*,*os*). fig 4.1 shows the main consonantal elements for these accents.

fig 4.1. Neutral Galician: main consonants.

m	[ŋ]]	[n]	n	[ŋ]	ր	[ŋ]	ŋ	
pb			t d			J	[ҟ g]	k g	
		(t	s dz)		tf (dz)				
	f	θ	ş	[ẓ] (ş) [ʐ]	(z)		[x ¥]	(x) [γ]	
[β]		[δ]		r		j	·	·	[w] w (h)
				1					(R)
			[1]	1	[Į]	(λ)	[1]	[1]	

For useful comparisons, fig 4.2 shows several other consonats, which occur in the other accents that we will deal with.

fig 4.2. Galician: complete consonant set.

[m] [r		[tt]	[₽]	[t]	[ŋ]	[ր]	[ŋ]	[ŋ]	[Ħ]	[M]
	[n] [r	n	[n]	[ů]	[ņ]	ր	[ŋ]	ŋ		
рb	t d					[J]	[ҟ g]			
	(ts dz)		tſ	[dʒ]		[gj]				
f	θ [δ] [s z]	[s z] s [z]	l	(z)		[j]	[¥]	[γ]	[<u>x</u>]	(<u>x</u>)
5.0.7	[š ź]		[<u>s</u>]					, ,	г. э г 1аз (1)
[β]						j		[w] [Ŧ]	₩ [¥ ¥]	(h) [ʔ h] [ʁ ĸ]
		r								[R]
		1								
	[1]	1	[ł] [ł]	[ļ]	[ļ]	$[\lambda]$				

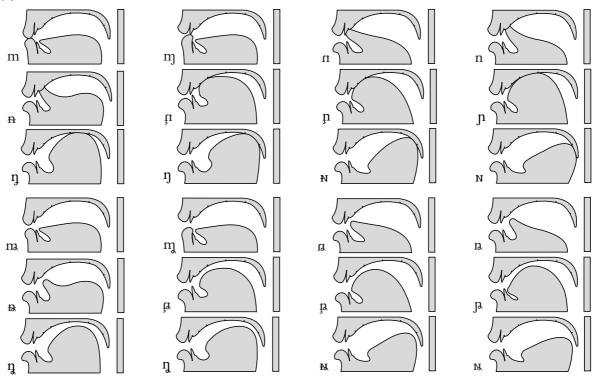
Nasals

4.2. Neutral Galician has four nasal phonemes (fig 4.3): /m/[m], /n/[n], /n/[n] (spelled as \tilde{n}), adding, to a seemingly 'typical' situation found in western Romance languages, velar /n/[n], n], which is found for intervocalic *nh* and word-final *-n*.

There is no change into /n/ for word-final /ŋ/, when followed by a vowel, [η ([#]V), η ([#]V)], except when followed by the (unstressed) articles and pronouns *o*, *os*, *a*, *as*, as / η V/ [[#] η V]: *se rexistran as temperaturas* [<code>iserr:e'fistra nasitemperaturas]</code> [<code>iserr:r'fistre nesitempire'tures]^t</code>.

Also, still in traditional pronunciation, *post*nuclear word-final /ŋ/ is [ŋ[#], ŋ[#]] (*semi*nasals, velar and prevelar, respectively). Examples: *mazá* [ma' θ a] [me-]^t, *como* ['kormo] [-mu]^t, *número* ['nurmero] ['nũrmɪru]^t, *ano* ['arno] [-nu]^t, *una* ['urna] [-e]^t, *uña* ['urŋa] [-e]^t, *unha* ['urŋa] [-e]^t, *ben* ['bɛŋ] ['bɛ̃ŋ]^t.

fig 4.3. Galician consonants: nasals (and seminasals).



4.3. Not just for /nC/ (and /mf/), but also for word-final /ŋ[#]C/, in normal speech, homorganic assimilation is regular. Examples: *un programa* [,umpro' γ ra-ma] [, $\tilde{u}mpro'\gamma r\tilde{v}rme$]^t, *en base* [em'basse] [$\tilde{n}m'bass1$]^t, *con todo* [kon'toso] [k $\tilde{v}n'tos0$]^t, *fin de semana* [,findeşe'marna] [, $findsr'm\tilde{v}re$]^t, *en canto* [eŋ'kanto] [$\tilde{n}h'\tilde{v}ento$]^t, *en Galicia* [,eŋga'li θ ja] [, $\tilde{e}nge'li<math>\theta$ je, - θ ie], *en Chile* [en'tfirle] [$\tilde{n}h'firli$]^t.

And: con forza [kom'fɔrθa] [kõm'fɔrθe]^t, con sal [kon'şal] [kõn'şal]^t, en xeral [,en_{e'ral} [,ēn_{I-]^t}; sempre ['şɛmpre] ['sɛmprɪ]^t, ámbolos ['amboloş] ['ɛmbʊlʊs]^t, xunto [' $_unto$] ['

[$_{1}$ mflu' $_{1}$ ndje, -' $_{1}$ en-, - θ ie]^t, danza ['dan θ a] ['d $_{1}$ nde]^t, ensino [en' $_{1}$ ino] [$_{1}$ n' $_{1}$ sino]^t, franxa ['fran $_{1}$] ['fr $_{1}$ en' $_{2}$]^t, enredar ['enre' $_{2}$ ar] [$_{1}$ enre']^t, canle ['kanle] ['k $_{1}$ en' $_{1}$]^t.

As many examples have already shown, in addition to the nasalization in /NVN/ $[N\tilde{V}N]$ (or at most [NVN]), *traditional* pronunciation also has nasalization in checked syllables with /m, n, η /: /VN[#]/ $[\tilde{V}N^{#}]$ (and even /a[#]N/ $[\tilde{e}^{#}N]$).

Stops

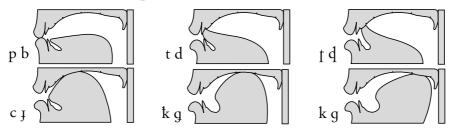
4.4. Galician has *three* pairs of diphonic stops (fig 4.4): /p, b; t, d; k, g/ [p, b; t, d; k, g, k, g] ([k, g] in contact with tautosyllabic front vowels or before /j/). In addition, modern neutral Galician, also has the voiced palatal stop /J/ [J], which, in traditional Galician, corresponds to '/ Λ /' [Λ]^t (voiced palatal lateral): *filla* ['fi'Ja] ['fi'Ae]^t.

Examples: parte ['parte] [-t1]^t, branco ['braŋko] ['brẽŋku]^t, terra ['tɛrr:a] [-r:e]^t, dous ['douş] ['douş]^t, claro ['klaro] [-ru]^t, gato ['garto] [-tu]^t, que ['ke, ke], guía ['gia] ['gie]^t, illa ['iŋa] [- Λ e]^t, muralla [mu'raŋa] [- Λ e]^t.

However, the voiced stops /b, d, g/, are realized as true stops only after a pause or following a nasal consonant, and in the homorganic sequence /ld/ [ld], as many examples have already shown. In fact, the normal realizations, in all the remaining context, are approximant, for /b, d/ [β , δ], and *semi*-constrictive, for /g/ [γ , γ] (unless one speaks slowly, with precision or emphasis). See, however, § 5.11.

Examples: breve ['brɛ'βe] [- β I]^t, entrada [en'tra'δa] [ĩn'tra'δe]^t, agora [a'γo'ra] [e'γo're]^t, o viño [o'βi'ŋo] [u'βi'ŋu]^t, o diamante [₁oδja'mante] [₁oδje'mẽntI, ₁oδie-]^t, a gastronomia [a₁'qaştrono'mia] [e₁'qaştrunũ'mia], seguir [şe'qir] [şI-].

fig 4.4. Galician consonants: stops.



Stopstrictives (or 'affricates')

4.5. Only one *stopstrictive* is native to the language (fig 4.5), the voiceless postalveo-palatal /tJ/[tJ].

However, loanwords can present /ts, dz; dz/ [ts, dz; dz]: chegar [tte'\ar] [tt1]^t, chambra ['ttambra] ['ttembre]^t, pechar [pe'ttar] [p1-]^t, rocha ['rz>rtta] [-e]^t, pizza ['pi'tsa, \'pittsa] [-e]^t, hertz ['erts, \'herts], mezzosoprano ['medzoşo'pra'no, \'meddzo-] ['medzoso'pra'no, \'meddzo-]^t, jeep ['dtip]. See also 5.12.

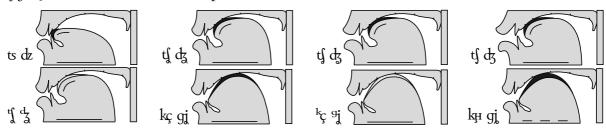


fig 4.5. Galician consonants: stopstrictives (or 'affricates').

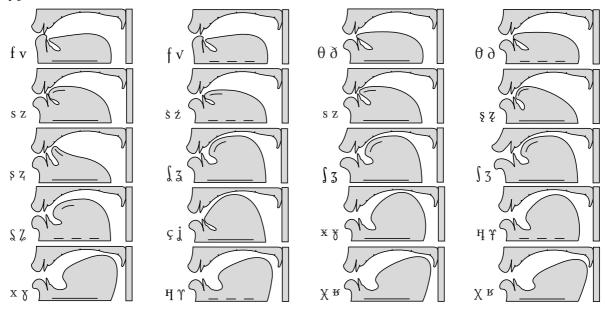
Constrictives (or 'fricatives')

4.6. Galician has six *constrictives* (fig 4.6): |f| [f]; $|\theta|$ [θ]; |s| [s], which is *lamino*alveolar, and [s]^t (apico-alveolar) in traditional pronunciation, both becoming voiced, before sonants and voiced consonants (but see § 5.11): [z, z_t^t]; $/\int$, z/ [\int , z]; and, finally, |x| [x, x] (/z, x/ are only found in loanwords). As in Spanish, v only represents /b/ [b, β], like b.

Examples: fin ['fiŋ] ['fiŋ]^t, fóra ['fɔra] [-re]^t, xefe ['ʃɛrfe] [-fɪ]^t, aforrar [,afor'r:ar] [-fur-]^t, zona ['θorna] [-ne]^t, cento ['θɛnto] ['θɛntu]^t, aceite [a'θeite] [e'θeitɪ]^t, acceso [ak'θɛrşo] [ek'θɛrşu]^t, sol ['şol] ['sol]^t, segundo [şe'γundo] [sɪ'γũndu]^t, estado [eş'tarδo] [ış'tarδu]^t, casa ['karşa], ['karşe]^t, presentación [,preşenta'θjoŋ] [,preşĩnte'θjõŋ, θi'õŋ]^t.

And: *turismo* [tu'riẓmo, -şmo] [tu'riẓmo, -şmo]^t, *desde* ['deẓõe, -şõe] ['deẓõi, -sõi]^t, *os nenos* [oẓ'ne noş, oṣ-] [uẓ'nẽ nuş, uṣ-]^t, *as rodas* [ar'r:ɔrõaş; aẓ'r:ɔr-, aş'r:ɔr-] [er'r:ɔrõeş, eẓ-'r:ɔr-, eş'r:ɔr-]^t, *as listas* [aẓ'liştaş, aş-] [eẓ'lişteş, eṣ-]^t, *mais* ['maiş] ['maiş]^t, *xenoma* [ʃe'nɔrma] [-'nɔ̃rme]^t, *xesto* ['ʃɛşto] ['ʃɛştu]^t, *réxime* ['r:ɛrʃime] [-mi]^t, *proxecto* [pro'ʃɛkto] [pru-'ʃɛktu]^t, *kolkhoz* [kol'xoş, †kal'xoş] [kol'xoş, kel'xoş]^t, *crómlex* ['krɔ̃mlɛx] ['krɔ̃mlɛx]^t.

fig 4.6. Galician consonants: constrictives (or 'fricatives').



38

Approximants

4.7. Galician also has two *approximant* phonemes (fig 4.7), /j, w/ [j, w] (palatal and velo-labial), mostly in tautosyllabic /[#]CjV, [#]CwV; [#]CjV, [#]CwV/ sequences, and in intervocalic positions /VjV, VwV/. However, these phonemes, in the traditional accent (and not just in this accent, as we will see), often become [i⁽¹⁾V, u⁽¹⁾V] ie [i, u] followed by another vocoid. It also has the laryngeal approximant /h/ [h], in loanwords: *hobby* ['5^rβi, ↑'h5⁻] (see §5.11, too).

Examples: *praia* ['pra'ja] [-jɐ]^t, *maior* [ma'jor] [mɐ-]^t, *serie* ['şɛrje] ['şɛrje, -ɾjɪ]^t, *va-riación* [,barja'θjoŋ] [,barjɐ'θjõŋ, -ɾiɐ-, -θi'õŋ]^t, *historia* [iş'tɔrja] [iş'tɔrjɐ, -ɾiɐ]^t, *cuali-ficar* [,kwalifi'kar] [,kwa-, ku₁ɐ-]^t, *continua* [kon'ti'nwa] [kõn'ti'nwe, -nue]^t, *pingüin* [piŋ'gwiŋ] [pīŋ'gwiŋ, pĩŋgu'ĩŋ]^t.

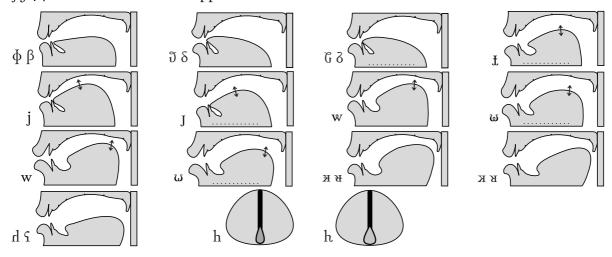


fig 4.7. Galician consonants: approximants.

Rhotics

4.8. Among the 'rhotics' (fig 4.8), we have the alveolar *trill* /r:/ (often hastily described as just being '/r/'), with three rapid tappings of the tip of the tongue against the alveolar ridge, and an alveolar *tap* /r/, with a single rapid alveolar contact: *raro* ['r:aro] [-ru]^{*t*}.

Intervocalically, also across word boundaries, /r:/ is always preceded by /r/, forming /rr:/, as for instance in *terra* ['tɛrr:a] [-re]^t, *a rama* [ar'r:a'ma] [er'r:ē'me]^t. The two phonemes, intervocalically, are also distinctive, as can be seen from minimal pairs such as *caro* ['karo] [-ru]^t, *carro* ['karro] [-ru]^t.

Similarly to Spanish usage, apart from the intervocalic context just seen, in word-initial position, only /*r, Vr*rV/ [*r:, Vr*r:V] can appear. We also find /r/ [r:] after a pause.

The same after a heterosyllabic consonant /n[#], $\eta^{#}$, $l^{#}$; $\eta^{#}$, $l^{#}$ / (mainly sonant, but including cases like *subrogar* [sub[#]r:o'\gar] [sub[#]r:o'\gar]; however, in this context, also plain [C[#]r] is common (even [C[#]r] may occur, in neutral pronunciation, too).

fig 4.8. Galician consonants: rhotics.



4.9. For /s[#]r; s[#]r/, as in Spanish, we have [rr:], except in overprecise speech. Instead, after a tautosyllabic consonant, we find /[#]CrV, [#]CrV/, and we also exclusively have /r/, in syllable- or word-final position, /Vr[#], Vr[#]/.

Here are some examples, to better show this mechanism: *ra* ['r:a], *radio* ['r:a' δ jo] [- δ jv, - δ iv]^t, *un rato* [un'r:a'to] [\tilde{u} n'r:a'tv]^t, *xeneral romano* [$\int ene'ral r:o'marno, ro-]$ [$\int eni'ral r:o'm<math>\tilde{v}$ nv, -rv-]^t, *honra* ['onr:a, -nra] [' \tilde{o} nr:e, -nre]^t; *Israel* [,ir:a'ɛl], *os reis* [or'r:eiş] [ur'r:eiş]^t; *frio* ['frio] ['friv]^t, *pedra* ['pɛ' δ ra] [- δ re]^t, *grande* ['grande] ['gran

Laterals

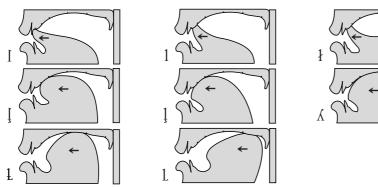
4.10. As for the *lateral* phonemes, we only have /l/ (fig 4.9): *fila* ['firla]. As already seen, phonetically, traditional Galician has a further lateral phoneme, '/J/ $[\Lambda]$ '^{*t*}, in place of modern Galician /J/ [J], but this realization is not very frequent anymore.

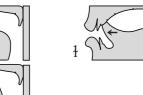
Examples: *lado* ['la δ o] [- δ u]^t, *largo* ['lar γ o] [- γ u]^t, *palabra* [pa'la β ra] [pe'la β re]^t, *falar* [fa'lar] [fe-]^t, *nivel* [ni' β ɛł], *especial* [,espe θ jal] [,espr θ jal, - θ i'al]^t.

Let us add that /l(#)C/ assimilates to the place of articulation of a following consonant, except with labial and labiodental consonants (which is not at all strange): so we have [I] before /t, d; θ /, [L] before /k, g/, [J] before /tJ, J/, [Λ , J] before /j/. In addition, it is important to know that we also have [L], before /k, g/, and in wordfinal position [L#].

Examples: *alto* ['alto] [-t υ]^t, *rolda* ['t::lda] [-d ε]^t, *alzar* [al' θ ar] [ε l-]^t, *balcón* [bal'koŋ] [bel'kõŋ]^t, *algo* ['al γ o] [- γ υ]^t, *indulxente* [,indul'ʃente] [,ĩndul'ʃent1]^t, *el ioniza* [, ε Ajo'ni· θ a, , ε l-] [, ε Aj υ 'ni· θ ε]^t. Some mostly traditional speakers have [L] also before bilabial consonants: *alma* ['alma] ['al-]^t.

fig 4.9. Galician consonants: laterals.







4.11. In short, *traditional* Galician generally has (as shown): /s/ [s, z], /g/ [g, g, χ , χ], / θ / [θ]; / Λ / [Λ]; /jV, wV/ frequently [jV, iV, wV, uV]; / η [#]V/ [[#] η V, [#] η V] (with *a*, *as*, *o*, *os*).

Colloquial consonants

4.12. In short, *colloquial* Galician has: $f/[f, f]; /s/[s, s, s; z, z, z]; /J/[j, j, J, gj, cdz]; /\theta/ [\theta, \theta]; [\delta, d; \chi, \chi, \gamma, \gamma]; [l, l, l]; /JV, wV/ frequently [JV, iV, wV, uV]; /ŋ[#]V/[[#]ŋV, [#]nV] (with$ *a*,*as*,*o*,*os*).

4.13. It is a fact that in colloquial Galician, the consonants are mostly oscillations that can be heard even from 'good' speakers. As we have seen before, we often have $/VN^{\#}/[\tilde{V}^{N\#}C, \tilde{V}^{\#}C, \tilde{V}^{\#}V, \tilde{V}^{\#}]$, ie nasalized vocoids followed by homorganic *semi*nasal consonants, and a velar one in final prevocalic and final prepausal positions.

Examples: elemento [,ele'mɛ̃ato, ↓-lı-, -'mɛ̃a-, ↓-to], membro ['mɛ̃mbro, 'mɛ̃m-, ↓-o, ↓↓-v], sangue ['sɛ̃nɡwe, -gue, ↓-1], ánfora ['ɛ̃mʃore, ↓-o-, ↓↓-v-], can ['kɛ̃n], extenso [ekş'tɛ̃nşo, ↓1-, ↓↓1-, -'tɛ̃n-, ↓-o, ↓↓-v], Henrique [ɛ̃n'r:i'ke, ↓-1, ↓↓-1], enlazar [,ɛ̃nlɐ'θar], lonxe ['lõ̃aʃe, ↓-ʃ1, ↓↓-1], pontón [põ̃a'tõ̃n].

As for, $|\eta^{\#}| [\eta^{\#}]$ before the personal pronouns *a*, *as*, *o*, *os*, we can have, in addition to $[^{\#}nV]$, instead of $[^{\#}\eta V]$ (which is more current, with the corresponding forms of the articles: *son as unicas excepcións* [sone'surnike sek@ep'@jõns]).

The taxophones of /d, g/ are: $[\delta, \partial]$, $[\chi, \chi, \gamma, \gamma]$, while /b/ $[\beta]$ does not change. Examples: *unidade* [,uni' $\delta a \delta e$, -' $\partial a \partial e$, - $\iota \iota$, $\iota \iota e^{-1}$], *agás* [$e^{i}\chi a \xi$; - γ -], *burgués* [bur' $\chi e \xi$, $\iota b \omega e^{-1}$, - ιe^{-1}], *labor* [$le'\beta or$]. As for /J/, we find several possibilities, in addition to [J]: [j, j, gj, d_{z}]. Examples: *batalla* [be'ta'je, -'tA-; -je, -gje, -dze], *vello* ['be'jo; -j-, -J-, -gj-, -dz-; ιe , $\iota \iota e^{-1}$].

4.14. However, one of the most peculiar characteristic of some speakers of this accent (and also of the mediatic and western regional ones, as we will see), is the presence, along with several possibilities and oscillations, of the so-called *gheada* phenomenon, where $/g/[g, g; \gamma, \gamma]$ (along with all its contextual taxophones), can change into [d] (a voiceless *pre*pharyngeal approximant), in the most typical accents, due to a well-known dialectal feature. But we can also find $[\pi, \pi]$, $[\pi, \pi]$, and $[\varsigma]$ (which is the voiced counterpart of [d]).

Examples: grupo ['drupo; 'ыг-, 'яг-, 'Гг-; t-0, tt-v], goberno [do'ßɛrno; ы-, я-, հ-] t[Co-, -no] tt[Cvo-, -nv], guitarra [di'tarræ; ы-, я-, հ-] [tCt-, ttCt-], liga ['li'dæ; -ие, -ие, -Ге], conseguir [kõnşe'dir; -'ыіr, -'яіг, -'бir; t-şt-, tt-şt-], lingua ['līndwe, -ue; 'lĩыя-, 'lĩыя-, 'lĩыհ-], and (of course) galego [dæ'le'do, ие'le'ио, ие'le'ио, бе'le'fo, -'lɛ-, t-0, tt-v]. Of course, not all speakers present this peculiarity, since it is perceived as a very broad and illiterate feature, socially degrading.

4.15. While /tʃ, dʒ/ [tʃ, dʒ] are 'normal', the *xeno*phonemes /ts, dz/ generally become [ts, dz] sequences: *pizza* ['pitsɐ], *mezzosoprano* ['medzoşo'pra'no] ↓[-ωşω-, -nω] ↓↓[-υşυ-, -nʊ]. For the *constrictives*, we can find some weaker articulations (*ie semi*constrictive, for [f; s, z]), in addition to stronger (fully constrictive) ones. For instance, /f/ [f, f], /s/, [s, z] (lamino-alveolar), [s, z] (apico-alveolar), [s, z] (dentalveolar), [s, z; s, z] (dental), / θ / [θ , θ] (slit dental), and / \int , z/ [\int , z].

Examples: *fósforo* ['fɔşforo, 'fɔşf-; -s-, -s-, -s-, -s-; $\downarrow \downarrow$ -fu-; \downarrow -ro], *situación* [sitwe'θjõŋ, -tue-, -θi'õŋ; ₁s-, ₁s-, s-, -ŝ-, -θ-], *certo* ['θεrto, 'θεr-, \downarrow -o, $\downarrow \downarrow$ -u]. *Javier* [Xɐ'βjɛr, Xɐβi'ɛr]. In addition, /R/ [R, R:] may individually be used in the following cases: /#r:, ŋ#r:, l#r:, VrV/, and /s#r:/ [R, R:].

As in traditional pronunciation, /⁽ⁱ⁾jV, ⁽ⁱ⁾wV/ sequences are very often changed into /i⁽ⁱ⁾V, u⁽ⁱ⁾V/: *familia* [fe'mi·lje, -lie], *cuartel* [kwer'tɛł, kuer-].

*Pre*vocalic /l/ is [l], while, instead of neutral [l], before velar consonants and pauses, we more often find [ł, ł]: *cálculo* ['kałkulo, 'kɑ-, -ł-, ↓-@, ↓↓-ʊ], *cal* ['kał, 'kɑ-, -ł], *tal* ['tał, 'tɑ-, -ł].

4.16. Obviously, with these accents, there are further possibilities and oscillations, also due to the attempts, from regional speakers, trying to become actual neutral (or traditional) speakers, without fully succeeding, especially for the latter accent.

Mediatic consonants

4.17. *Mediatic* Galician has: /f/ [f, f]; /s/ [s, ş, s; z, z, z]; / Λ / [j, j, J, gj, dʒ] (occasionally [Λ ,]], too); / θ / [θ , θ]; [∂ , δ ; γ , γ , χ , χ]; /l/ [1, 1, 1]; /⁽⁰⁾jV, ⁽⁰⁾wV/ sequences are very often changed into /i⁽⁰⁾V, u⁽⁰⁾V/; / η [#]V/ [[#] η V, [#]nV] (with *a*, *as*, *o*, *os*). Final / η [#]/ [η , η , η , η], often also when followed by a continuous consonant, /f, θ , s, \int / (even in word-middle position).

4.18. As this accent shares many consonantal similarities with the colloquial one, we will mainly analyze its differences. Let us state clearly that, even more possibilities and oscillations are possible with this accent, since, interferences, from the other (mostly non-regional) accents, are surely likely.

For instance, /J/, occasionally, can be $[\Lambda, 1]$, in addition to the possibilities already seen. Besides, we have /n[#]/ [n, n; n, n], often also when followed by a continuous consonant, ie /f, θ , s; \int , z; x; r:, 1/. The same can also happen, for word-internal /nC/, in those same contexts: [nC, nC; nC, nC].

Examples: *conflito* [koŋ'fli'to, koŋ-], *denso* ['deŋşo, 'deŋ-], *diferenza* [_idife'reŋθa, -'reŋ-], *laranxa* [la'raŋ[a, -'raŋ-], *Henrique* [eŋ'rːi'ke, eŋ-], *canle* ['kaŋle, 'kaŋ-], *un forte* [uŋ'fɔrte, uŋ-], *en sacarosa* [ˌeŋşaka'roşa, ˌeŋ-], *en Celanova* [ˌeŋθela'nɔβa, ˌeŋ-], *San Xoán* [ˌsaŋ[o'aŋ, ˌsaŋ-, -'aŋ], *en relación* [eŋ_irːela'θjʊŋ, eŋ-, -'θjʊŋ], *en latitude* [eŋ_ilati-'tu'de, eŋ-], *pan* ['paŋ, 'paŋ].

5. Galician structures

Metaphony

5.1. Galician (as Portuguese) has *metaphony*, by which *e*, *o*, may be /e, o/ or / ϵ , σ /, in inflected forms of the same roots (of verbs, nouns or adjectives), depending on their endings. It is a real challenge for foreigners, but even for natives it may present peculiar differences.

However, metaphony is less widespread and with frequent oscillations. In fact, especially for nouns and adjective (and participles) usage is rather unstable, including possible exchanges for the timbres used, in addition to intermediate ones, $[E, \sigma]$. A (growing) number of (especially younger) speakers do not have metaphony at all, or have mixed and confused usages, especially, but not only, in mediatic accents.

In fact, except for traditional pronunciation, and (though not systematically) for neutral pronunciation, metaphony seems to have become a sort of regional accent, mainly that of western Galicia.

5.2. But things are not so simple: a real pronunciation dictionary should accurately indicate all forms, showing their phonemes precisely... This is even more necessary for non-verbs (or nominal forms, ie nouns and adjectives).

In fact, their phonemes are not easily predictable (with the complication of geographical and personal differences). For instance, we have: *corpo* ['korpo], *corvo* ['kɔrβo], *martelo* [mar'tɛ'lo], *nobelo* [no'βe'lo]; but also: *mantelo* [man'tɛ'lo, -'te'-], *mantelo* [man'tɛl, -'tɛl], *carambelo* [ˌkaram'bɛ'lo, -'be'-], *ollo* ['oʌʎo, 'ɔʌʎo], *olmo* ['olmo] (elm), *olmo/-a* ['ɔlmo, -a] (soft), *novo* ['nɔʰβo; 'no·-], *nova* ['nɔʰβa], *morto* ['mɔrto; 'mor-], *morta* ['mɔrta]...

The variants shown after [;] are less preferable, often mediatic ones, often influenced by Portuguese, while the other mediatic 'deviation', more and more frequently using merged ['E, ' σ], instead or of 'proper' /'e, 'o/ or /' ϵ , '5/, are influenced by Spanish, in addition to intrinsic language evolution.

5.3. In general, feminin forms, with *-a*, *-as*, have /'ε, '5/, as also the endings *-el*, *-ol* (and their plurals *-eis*, *-ois*). Instead, the following endings usually have /'e, 'o/: *-edo*, *-eta*, *-eza*, *-eno*, *-ello*, *-eo*, *-és*, *-ón*, *-ono*, *-or*, *-oso*.

For non-verbal forms, we could safely indicate only: sogro ['soryro], sogra ['soryra],

at least until this couple does not officially change, as well. Usually, there is no metaphony for words (with /e, o/) ending in: *-edo/-eda*, *-ello/-ella*, *-eo/-ea*, *-or/-ora*, *-oso/-osa* (as: *fea*, *matadora*, *fermosa*). However, some speakers (especially traditional or regional ones) may have it.

Thus, we can certainly find both timbres (and, again, the intermediate ones) in words like (including plurals): *ela, aquela, pega, hora, boda, hora, soga, medo, posto, nobelo, martelo, mantel, mantelo, carambelo, carrelo, tornecelo, ollo, dente, tenda, tempo, fonte, ponte, morto, morta, novo, nova, galego, galega, elenco, conto, forza, sol, sobro, sobra.* Also verbal forms, like *quero.*

5.4. Nevertheless, for verbal forms, we can posit what follows $-|\epsilon|$ in: vende, -es, -en; but |e| in: vendo, -a, -as, -an; $|\mathfrak{I}|$ in: colle, -es, -en; but $|\mathfrak{I}|$ in: collo, -a, -as, -an. Also $|\epsilon|$ in: serve, -es, -en (but, of course, $|\mathfrak{I}|$ in: sirvo, -a, -as, -an), and $|\mathfrak{I}|$ in: dorme, -es, -en (but $|\mathfrak{I}|$ in: durmo, -a, -as, -an).

Generally, the same goes with $|\varepsilon, \circ|$, for: *-er*, *-era*, *-eras*, *-eres*, *-eran*, *-eren*, *-eron*; *-ese*, *-eses*, *-esen*, *-estes*, *-eches*, *-emos*, *-ermos*. Besides, imperatives in *-e* may oscillate (although /e, o/ are more typical): *bebe* ['bɛ[·]βe], *jbebe!* [$\frac{1}{h}$ 'be[·]βe; $\frac{1}{h}$ 'bɛ[·]-], *come* ['kɔ[·]me], *jcome!* [$\frac{1}{h}$ 'ko[·]me; $\frac{1}{h}$ 'kɔ⁻].

The following verbal endings cause $|\epsilon, b|: -e, -es, -en; -eses, -esen; -eches, -estes;$ -eron, -eras, -eran; -eres, -erdes, -ermos, -eren; -os, -on. Instead, the following have |e, b|'o/ or $|\epsilon, b|$, depending on their specific grammatical forms: -er (but infinitives have [er]), -era, -ese, -emos. The same for: for, fora, fose, fomos. Besides, we find |e, b| for -o, -a/-as (imperative).

In addition, forms with *e*, *o*, followed by /p, Λ , J, t \int , (including /ei/ *ei*) may tend to always keep /e, o/; the same for forms of *ser* and *ir* with *e*, *o*.

However, there are uncertainties and oscillations for different forms (mainly past ones) with: *-emos*, *-era*, *-ese* (including preterite and future *-er*).

Phone combinations

5.5. The combination of phones may produce things not clearly indicated by the current spelling, as in: *ciencia* ['θjɛnθja], *pousei* [pou'şei], *biografía* [,bioɣra'fia], *muiñada* [mui'ɲa·δa], *arrieiro* [,arr:i'eiro], *bidueiro* [,biδu'eiro], *oficiais* [,ofi'θjaiş], *i-guais* [i'ɣwaiş], *cambiei* [kam'bjei], *minguou* [miŋ'gwou], *arraiou* [,arr:a'jou].

In addition, clusters between words in phrases produce things like: *este idioma* [ˌeşti'δjo'ma], *este espectáculo* [ˌeşteşpex'ta'kulo], *este enigma* [ˌeşte'niɣma], *este apa-rello* [ˌeştapa'rejo], *este homiño* [ˌeşto'mi'ŋo], *este home* [ˌeşte'ɔ'me, eş'tjɔ'-], *este outeiro* [ˌeştou'teiro, ˌeştuu'-], *este uniforme* [ˌeştuni'fɔrme], *certa escola* [ˌθertaş'kɔ'la], *sube ar-riba* [ˌşuβar'rːi'βa].

More: *esta abella* [ˌeşta'βe'ɟa] (only very slowly or precisely: [ˌeşta'βe'ɟa], but never with [ɐ], as '[ˌeştɐ'βe'ɟa]', even in traditional, colloquial, mediatic, or regional accents), *ela mesma o di* [ˌela'mɛẓmʊ 'δi, -şmʊ; ˌE-], *boto o día* ['botʊ 'δia, -to'], *teño o necesario* ['te'ŋʊ ˌneθe'şarjo, -po'], *todo o mundo* [ˌtoδʊ'mundo, -δo'].

5. Galician structures

5.6. Let us also consider: *cantaba e bailaba* [kan'ta'βε βai'la'βa], *ía e viña de aquí para alí* ['iɛ' 'βi'ɲa· δa'ki pra'li], *enchera os petos de area* [eạ't͡ʃeroş 'pe·toẓ δa'rea], *a un lado e a outro da estrada* [σŋ'laδε' 'outro δaş'travδa].

5.7. Consonant clusters with /Cr, Cl/ are tautosyllabic: *abril* [a'βril], *atlas* ['artlaş]. In lofty words, we find prefixes with different phono-syllables, like: *abrogar* [_iabrio'ɣar], *subliñar* [iɣub-li'ɲar] (although, popularly, we also find 'regular': [ia-βro'ɣar, iɣu-βli'ɲar]).

In addition to what we have already said in (f_0, q_1) , clusters with -n+/C/a are homorganic in neutral Galician, except for -nn-, -nm- $/\eta n$, $\eta m/$ (and final $-n/\eta^{\#}/$), while the other accents may have $/\eta C/a$ lso with any other consonant, but with many oscillations.

Examples: non ['noŋ], nun ['nuŋ], neon ['nɛoŋ, 'neoŋ], en Narón [ˌeŋna'roŋ], innato [iŋ'na'to], inmenso [iŋ'menşo, -ɛn-] (also possible, although less frequently, [im-'m-]), man ['maŋ], función [fun'θjoŋ], but: mans ['manş], funcións [fun'θjonş]. In addition: infeliz [ˌimfe'liθ], ansia ['anşja], funxíbel [fuŋtʃirβel], ambiente [am'bjɛnte], dente ['dente, 'dɛn-], incansable [ˌiŋkan'şarβle].

5.8. Final $-n/\eta^{\#}/$ followed by a vowel in a phrase becomes syllable initial: *eu non oin iso* ['eu no-ŋo'i 'ŋi'şo]. However, when the words *ben* ['bɛŋ], *nin* ['niŋ], *non* ['noŋ], *sen* ['şeŋ] ('without', but not the two nouns *sen* ['şɛŋ]), *quen* ['kɛŋ], and *alguén* [al'gɛŋ], *ninguén* [niŋ'gɛŋ], *tamén* [ta'mɛŋ] (and verbal forms in *-n*, too) are followed by the PRONOUNS *a*, *as*, *o*, *os*, [ŋ] becomes [n]: *tamén o dixo* [ta,meno'δi'ʃo], *non o sei* [,nono'şei], *ben o sei* [,beno'şei].

Let us also consider: *dixome: 'non a vin'* ['di'ʃome· 'no na'βiŋ] (he/she said to me: 'I didn't see her'), but: *dixome 'non' a min* ['di'ʃome· "no ŋa'miŋ] (he/she said: 'no' to me').

In addition, when *-n* is followed by the ARTICLES *a*, *as*, *o*, *os*, in neutral and traditional accents, we find [n] again: *ven o neno* ['be no'nerno], *sen a vida* [ˌse-na'βi·δa], *tamén os años* [ta,meno'şarpoş].

5.9. However, in accents different from the neutral or traditional ones, we may certainly find either $[\eta, \eta]$ or $[\mu]$. The indefinite articles are: *un* $[u\eta]$, *uns* [uns], *unha* $[_iu\eta a]$ (also combined with *c*-, *d*-, *n*-) and *ningun*/*-nha* $[ni\eta'gu\eta, -'guns, -'guna]$ (including plural forms with *-s*), but in accents different from the neutral and traditional ones, we very often hear: $[_iu\mu a-]$ or *un home* $[u'\mu 2 mme]$, &c.

The same is true for any other /nC/ clusters, becoming /ŋC/ [ŋC, ŋC, ħC], including [mf, mb, mp] *inferno* [imˈfɛrno, iŋ-, iħ-], *inverno* [imˈbɛrno, iŋ-, iħ-], *sempre* ['sɛmpre, -ŋ-, -ħ-], *ponte* ['ponte, -ŋte, -ħte], *ansia* ['anşja, 'aŋ-, 'aħ-], *innato* [iŋ-'nato, iħ'n-].

5.10. Clusters in lofty words remain in neutral pronunciation, but they tend to be simplified in colloquial or less formal speech, but are certainly reduced in popular speech: *subsidio* [şub'şirδjo, şuβ'-, şu'-], *producto* [pro'δukto, -urto], *repugnanate* [,r:epug'nante, -puγ'nan-, -pu'nan-]. Word-initial lofty clusters are heterosyllabic, as can be easily heard in phrases with a vowel before them. Colloquially they can be simplified: *mnemotécnica* [m_inemo'tɛknika], *pneumático* [p-neu'martiko], *pseudónimo* [p-şeu'δɔrnimo], *xilófono* [k-şi'lɔfono], *clímax agradable* ['klimak ˌşaγra'δa'βle], *clubs antigos* ['klub şan'ti'γoş, -up], *afectar* [ˌafɛk'tar], *digno* ['dig-no, 'diұ-], *pigmeo* [pig'meo, 'piҳ-], *subliñar* [ˌşub-li'ɲar], *subrogar* [ˌşub-r:o-'γar]. Let us observe that, when such clusters are kept, they are pronounced with unreleased first elements, [C'C], as in *acto* ['ak'to], *director* [ˌdirɛk'tor], &c.

Further examples of colloquial, informal, or popular, simplification: *instituto* [,inști'turto, ,iști-], *opción* [op'θjoŋ, o'-], *pterodáctilo* [p,tero'δaktilo, ,tero'δartilo]. Besides, in informal and popular accents, /kC/ clusters become '[uC]': *lección* [lek'θjoŋ, le-, leu-], *perfecto* [per'fɛkto, -'fɛuto]. On the contrary, we may even find cases like: *absoluto* [,abşo'lurto, ,akşo-], *obxecto* [σb'ʃɛkto, σu'ʃɛuto].

5.11. Neutral and traditional Galician prefer stop taxophones for /b, d, g/, [b, d, g, g], when followed by a heterosyllabic consonant, instead of certainly possible (perhaps also due to Spanish usage) continuous ones, [β , δ , γ], as in: *obvio* ['obbjo, 'ob β jo, 'ob β jo], *admirar* [₁admi'rar, ₁a δ mi-], *adverso* [ad' β ɛrso, a δ ' β -], *segmento* [seg'mento, se γ -, -'mɛn-].

Also for *s* /s/ before voiced consonats, neutral and traditional Galician would prefer [ş]; but the common practice, from colloquial accents on (as in Spanish), is to use [z]: *esbozar* [,eşβo'θar, ,ezβ-], *ismos* ['işmoş, 'iz-], *esnacar* [,eşna'kar, ,ez-], *israeli* [,işr:ae'li, ,iz-, ,irr:a-], *islam* [iş'lam, -aŋ, iz-], *os dedos* [oş'δe'δoş, oz-], *dous iates* [,douş'jarteş, ,douz-].

In accents different from the neutral and traditional ones, instead of /Cr/ we often find [Cr]: *preto* ['preto, 'pre-], instead of [rr:] also [rr]: *carro* ['karro, 'karro]. In addition, instead of /p/ [p], we can hear $[\tilde{j}]$, or [p:], after the stressed syllable: *año* ['arpo, 'arjo, 'apro].

5.12. Of course, in loanwords, some xenophonemes are used, too: *adagio* [a'da'dʒo, a'δa'-, -tʃo], *pizza* ['pi'tsa, 'pitşa], *mezzosoprano* [,medzoşo'pra'no, ,meddzo-, ,med-zo-, ,medzo-], *majorette* [,mazo'rɛt], *hobby* ['hɔ'bi, 'hɔ'βi, 'ɔ'-], *stop* [ş'tɔp, eş'tɔp].

5.13. Except in neutral and traditional accents, peculiarities like the following ones are quite common in the other accents. Words with stressed /i, ei/ can make other vowels (especially /e, o/) to be articulated as /i, u/: *meniño* [me'nino, mi-], *peteiro* [pe'teiro, pi-], *espido* [eş'pi'δo, iş-], *domingo* [do'miŋgo, du-], *comida* [ko'mir-δa, ku-], *costume* [koş'turme, kuş-].

In addition, we can certainly find other peculiarities. Word-internal vowels, after a stressed syllable, may oscillate much, as for instance in: *número* ['numero, -me-, -mo-, -ma-, -me-].

Besides, it may happen that an unstressed /e/, before the stressed syllable, if in contact with a bilabial consonant, changes its timbre as in: *levar* [le' β ar, l \hat{a} -, lo-]. Furthermore, we may surely happen to find cases like: *a auga* [a'au χ a, a' \pm a-, a' β a-], *d*áo ['dao, 'da \pm o, 'da β o], *lévoo* ['l ϵ ' β oo, -o ω o -o β o],

Contractions

5.14. The prepositions *a* and *con* and the conjunction *ca* undergo phonic contraction when followed by the definite articles *a*, *as*, *o*, *os*. They are written \dot{a} , \dot{as} , \dot{o} , \dot{os} (the last two also *ao*, *aos*), pronounced [a, aş; σ , σ ş] (never '[e, eş; o, oş]' nor '[eu, eo, -ş]'!).

Also the prepositions *des* and *por*, followed by the same articles, become *dela(s)*, -o(s) and *pola(s)*, -o(s) and are pronounced [,dela(\S), ,delo(\S), , δ e-, dla(\S), dlo(\S), δ l-] and [,pola(\$), ,polo(\$), pla(\$), plo(\$)].

Even the preposition *para* combined with the articles, which may be written either *para* $a(s) \&_{c}$ or $pr\dot{a}(s)$, $-\dot{o}(s) \&_{c}$ are currently pronounced [pra(s), pro(s)], in addition to slower [,para(s), ,paro(s)]. Let us notice that *para* is generally reduced also in phrases like *para min* [pra'min] &c.

The contraction of the prepositions *de* and *en* with the articles gives da(s), do(s) and na(s), no(s), which are pronounced $[da(\varsigma), do(\varsigma), \delta$ -] and $[na(\varsigma), no(\varsigma)]$. The preposition *con* produces *coa(s)* [koa(ς), kwa(ς), kwa(ς)] and *co(s)* [ko(ς)].

5.15. The conjunction *ca* produces $c\dot{a}(s)$, $c\dot{o}(s)$ [ka(ş); k σ (ş)]. It can also combine –phonically– with the preposition *a* (even if together with an article), producing *ca a*(*s*) [ka(ş), k_±a(ş), ka^{*}(ş)], *ca* $\dot{o}(s)$ [k σ (ş), k_± σ (ş), ka σ (ş)].

Let us also notice cases with personal pronouns, like: *téñaa(s)* ['teṛpa(ş)], *téñoo(s)* ['teṛpơ(ş)], *lévao(s)* ['lɛ‑βơ(ş)], *cando o vin* ['kandơ 'βiŋ], *leva a túa* ['lɛ‑βa(') 'tua].

To avoid possible ambiguity, with a contracted [a], in addition to using the timbre [a], not [v], the speaker may choose to lengthen the vocoid into [ar]. The same in cases like *todo o mundo* ['to $\delta\sigma$ 'mundo, 'to $\delta\sigma$], if the timbre is [o].

Stress

5.16. For *stress*, Galician spelling is rather 'friendly', as in Spanish, although certain doubts exist, especially for foreigners. As is Spanish and Portuguese, adverbs in *-mente* have their first element more prominent than, for instance, in Italian: *cumpridamente* [kum'priða'mente], *cortesmente* [kor,teẓ'mente, -ş'm-]; the same, in general, for lexical compounds: *vichelocrego* ['bitʃelo'krɛ'ɣo], *malhumorado* ['malumo'ra'ðo], *esceneficación* [eş'θene,fika'θjoŋ].

5.17. Of course, grammemes (such as articles, prepositions, personal pronouns) are normally not stressed, or with a possible secondary stress if they are not monosyllables.

The position of stress can be distinctive, as in: *laido* ['laido] (ugly), *laído* [la'ido] (moan), *lucido* [lu'dido] (bright), *lucído* ['lu'dido] (lucid), *sabia* ['şa'ßja] ((one) predicts), *sabía* [şa'ßia] ((one) knew), *saia* ['şa'ja] (skirt), *saía* [şa'ia] ((one) went out), or verbal forms as: *cantaran* [kan'taraŋ], *cantarán* [kanta'raŋ], *cantarás* [kan'taraş], *cantarás* [kanta'raş], *cantará* [kanta'ra], *cantará* [kanta'ra]).

Let us also consider examples like the following ones: *roiades* [r:o'ja'deş], *roïades* [r:oi'a'deş], *saiamos* [şa'ja'moş], *saïamos* [şai'a'moş] (for '[şa'iamoş]', the correct spelling would be *saíamos*).

5.18. In Galician, the relation between sequences like [jV, 'jV, wV, 'wV] and [iV, iV, uV, uV] is rather unstable, although there certainly are more or less clear preferences. For instance, examples like the following ones are generally: *piar* [pi'ar], *suar* [şu'ar], *real* [r:e'al], *soar* [şo'ar], *reóstato* [r:e'ɔştato], *moeda* [mo'e'δa]. Especially, in tunes, they are practically so.

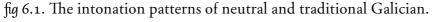
5.19. But, in protunes, they may surely become, respectively: ['pjar, 'şwar, 'r:jal, 'şwar, 'r:jɔştato, 'mwe'δa]. On the contrary, words like the following one are, normally: *cuadrivio* [kwa'δri'βjo], but in a tune, especially in slower speech, we can certainly hear also: [kua'δri'βio, -'dri'-].

This trend is more and more frequent, very often changing [j, w] into [i, u], or at least adding the new realizations, without much attention. It must be said, clearly, that such differences can actually also depend on the stress pattern of the particular words. In fact, let us consider: *piano* [pi'arno; 'pjar-], *pianola* [pia'nɔrla, pja-], *pianista* [pia'nişta, pja-], *pianissimo* [pja'nişimo, pia-].

6. Galician intonation & transcribed texts

Intonation

6.1. For *intonation*, fig 6.1 shows the four tunes and protunes of neutral (and traditional) Galician. It also includes the unmarked continuative tune, /, which



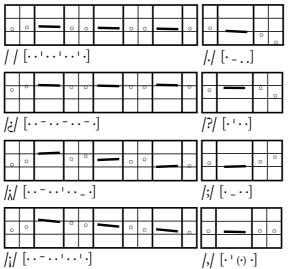
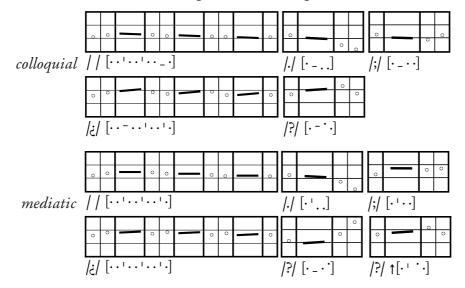


fig 6.2. The fundamental intonation patterns of colloquial and mediatic Galician.



is very similar in the other accents (and shown only here). fig 6.2 shows the colloquial and mediatic patterns tune (including a mediatic interrogative variant).

6.2. Galician spelling is also useful because –in addition to ? and !– it uses ¿ and j at the beginning of questions and prosodically marked sentences, as exclamations. Here are some sentences to be used to approach the neutral intonation patterns.

Quero falar galego ben. ['kero fa'lar γa'lerγο _βεŋ..] (['kεro]) (I want to speak Galician well)

Sabemos que chegaran o sábado. [şa'βermoş ke∫e'γara no_şa'βaδo..] ([-'γara ŋo-]) (We know they arrived on Saturday)

Moitas grazas. ['moitaẓ -γɾa[·]θaş..] (Thanks a lot)

¿E ti que pensas? [¿e⁻ti ke_pɛnşaş.] (And what do you think?)

¿Para onde imos? [¿para-onde _imoş.] ([¿pra-on-]) (Where are we going?)

¿Onde están os teléfonos? [¿ondeș⁻ta noște_lɛ⁻fonoș..] ([-'ta ŋoș-]) (Where are the telephones?)

¿Vostede fala galego? [¿boş⁻te⁻δe ⁻fa⁻la γa⁻le⁻γo··] (Do you speak Galician?)

¿O *seu irmán entende galego?* [¿o-şeuir -maŋ· ¿en'tɛnde·· լγa-le·γo...] (Does your brother understand Galician?)

¿Pilar estudia matemáticas? [¿piˈlar· ¿eş-turδja "mate'martikaş··] (Does Pilar study mathematics?)

Í*a dicírselo, cando sonou o teléfono.* [ˌiaδi'θirşelo· ˌkandoşo'nou te_lɛ⁻fono..] (I was about to tell it, whe the phone rang)

Cando cheguei á estación, o tren xa tíñase ido. ['kando ʃe'ɣei· aeşta_θjoŋ·· o'trɛn ʃa'ti'ɲaşe _i·δo..] (When I came to the station, the train had already left)

6. Galician intonation & transcribed texts

¿Imos en bus ou a pé? [¿-imo şem_buş… ¿oa_pɛ..] ([¿oua_pɛ..]) (Shall we go by bus or on foot?)

Ten un, dous, tres, catro, cinco. [te'ŋuŋ· 'douş· 'treş· _kartro·· _θiŋko..] (There are: one, two, three, four, five)

Ten un, dous, tres, catro, cinco... [te'ŋuŋ· 'douş· 'treş· 'ka'tro· 'θiŋko·] (There are: one, two, three, four, five...)

Se non pode vir o domingo, non pasa nada. [ˌşenom'pɔ'δe 'βi'ro δo'miŋgo· nom'pa'şa _na'δa..] (If you can't come on Saturday, there's no problem)

¿Imos en coche, tren ou bus? [¿-imo şeŋ'kɔrtʃe· ¿-trɛŋ·· ¿ou-βuş..] (Shall we go by car, train, or bus?)

Este é un dicionario moderno. ['eşteEun diθjo'narjo mo_δεrno..] (This is a modern dictionary)

Este é un dicionario moderno. [[,]"eşte· εun_idiθjo'narjo mo₋δεrno..] (*This* is a modern dictionary)

Este é un dicionario moderno. ['eşteeun· ¡diθjo"naːrjo· mo_δεrno..] (This is a modern *dictionary*)

Este é un dicionario moderno. ['eşteeun diθjo'narjo· kmo=δειno..] (This is a modern dictionary)

«Non», dixo el, «eu non falo galego». [[,][=noŋ··¹ +di∫o'el·· | 'eu nom'farlo γa_le γo..] ('No', he said, 'I don't speak Galican')

«En realidade», díxome, «do mañá non hai certeza». [^ren_ir:eali'δa·δe·¹ +'di·ĵome·+ doma'ɲa· no_inaiθεr_te·θa..] ([no_iŋai-, nõ_iai-]) ('Really', he told me, 'there's no certainty of tomorrow')

Témonos reunido, señores, para discutir o balance. ['termo_inor r:eu_ni[·]δo·· _işe'poreş[·]] _ipara_iδişku'ti roβa_lanθe..] ([pra_iδiş-]) (We assembled, Sirs, to discuss the budget)

O *meu curmán, o da dereita, é director de banco.* [o₁meukur¹maŋ[·] ¹o₁δaδe_reita^{···} ¹ ε₁δire^k¹tor δe₋βaŋko_{..}] ([ε₁δire¹tor]) (My cousin, the one on theright, is a bank manager) Díxome: «ás veces perdendo, gáñase», e despediuse. ['dirʃome· aẓ'βe·θeṣ· per_δεndo·· -gaːɲaṣe.. teıδeṣpe_δjuːşe..] (He told me: 'Sometimes, by losing, you win', and went away)

The North Wind and the Sun

The following text is habitually used by the International Phonetic Association (*IPA*) to illustrate the pronunciation of different languages and accents. Here is its non literal English version.

The North Wind and the Sun were disputing which was the stronger, when a traveler came along wrapped in a warm cloak. They agreed that the one who first succeeded in making the traveler take his cloak off should be considered stronger than the other.

Then the North Wind blew as hard as he could, but the more he blew the more closely did the traveler fold his cloak around him; and at last the North Wind gave up the attempt. Then the Sun shone out warmly, and immediately the traveler took off his cloak. And so the North Wind was obliged to confess that the Sun was the stronger of the two.

Did you like the story? Do you want to hear it again?

There follows the Galician version, with the *canIPA* phonotonetic transcription.

O vento do norte e mailo sol porfiaban sobre cál deles era o máis forte, cando cadrou de pasar un viaxeiro envolto nunha ampla capa. Conviñeron en que o que antes conseguise facerlla quita-la capa ó viaxeiro sería considerado o máis forte.

O vento do norte soprou con gran furia, e canto máis sopraba máis se envolvía o viaxeiro na súa capa; finalmente o vento do norte abandonou o seu empeño. Entón o sol quentou con forza e inmediatamente o viaxeiro sacou a capa. E daquela o vento do norte tivo que recoñece-la superioridade do sol.

;Gostouche o conto?;Repetímolo?

[o'βεπτο δο'nɔrte· e,mailo_şol·· porfi'a⁻βan ,şoβrekal'de⁻leş· ,eraomaiş-fɔrte· ,kandoka'δrou δepa'şarum bia'ʃei roem'bɔlto nu'ŋampla _ka⁻pa.] ,kombi'ɲero ŋeŋ,keoke-'anteş ,konşe'⁻γi⁻şe· fa'θerje ki'ta'la 'ka⁻paʊ βia_feiro·· şe_rriakon,şiδe'ra⁻δo maiş-fɔrte.]]

([bia'ʃei rom'bolto ınuŋa'ampla / 'ka·pσ / -konışiδe'ra·δoo maiş-]) o'βεπτο δο'nɔrte· şo'prou konıgram'furija·| ε'kanto ımaişşo_pra·βa·· ımaişşembol-

'βiσ βia'seiro· naşua_ka pa. || final_mente··| o'βεπτο δο'nɔrte· a'βando'nouo şeuem-_peŋo. || en,tono'şol· ken'tou kom_forθa. | ε,iŋme'δjata'mente· ,oβia'seiro şa'koua _ka pa. || εδa'ke'la·| o'βεπτο δο'nɔrte· 'ti'βo kerr:e,kope'θe la,supe,rjori'δa δe δo'şol. ||

([ˌmaişıembol'βiao / Eˌim:eˈδjata'mente· / ˌEδa'kɛ·la·])

¿goş-tou∫eo 'konto··| ¿repe'ti molo··].

A short conversation

Let us end with a short conversation. Boas tardes. ;É vostede Lucrecia Mascato? Son. ;E vostede quen é? Eu son o inspector Concheiro, da policía. ;Coñecía vostede a Ramiro Recouso? Coñecía, ;e logo pasoulle algo? Pois, tivo un accidente.;É vostede familiar del? Non, son amiga. ;Está grave? ;Morreu? Lamento decirlle que morreu. ;Sabe se tiña inimigos? E por que me pregunta iso? E logo non foi un accidente? Aínda non o sabemos. ;Tivera problemas con alguén? Pois, mire, inspector, non lle sei. Sí? ¡Se cadra debería vostede investiga-lo caso, no canto de perde-lo tempo de conversa comigo! ['boaş _tarδeş.] εβοş-terδe lu-krεθja maş_karto..] $[-son..|]_{iE}\beta oster \delta e_{ikE_nE..|]$ [eu,sono,inspek'tor kontfeiro da,poli-θia.] ¿kone-θia βoş-te bear ra-miror re-_kouşo.] ([eu_işoŋo_iişpeⁱtor]) [kone_ θia ··] ϵ =lorru pa-şoute _alro.]] ['poiş·| 'ti'ßou nakşi_dente.]] ¿Eßoş'te'de fami_ljardel··] ([nakşi_dente.]) [<code>i=noŋ...</code>] soŋa-mi'γa...] ¿eşta-γra'βe··] ¿mor_r:εu··]] [la'mento δe'θirte kemor_r:εu.] -sa'βe şe'ti'pai ni_mi'yoş.]]] ([la'mɛnto]) [.epor-ke mepre-γunta _i.o.;]. [.o. oγ cl-a;].o. oγ-cl-a;].o. oγ-cl-a;]. [.o. oγ-cl-a; [a'inda nonoşa_βε·moş..||¿ti-βε·ra pro-βle·maş konal-γεη··|] ([pro-βlε·maş]) $[i_{i}poi_{z}-mire_{i}i_{i}nspek'tor_{i}]$ [¦··iş-ن] (şe'karδra·| ,deβe'ria βoş'te δe· ,imbeşti'ra lo_karşo... ,no'kanto ,δeper'δe lo"tempo· _λδekom'bεrşa ko=mi'γo..||] ([lo"tempo·]) Good evening. Are you Lucrecia Mascato? I am. And who are you? I'm inspector Concheiro, police. Did you know Ramiro Recouso? I did, so did anything happen to him? Well, he had an accident. Are you his family member? No, I'm a friend. Is he serious? Did he die? I'm sorry to tell you that he died. D'you know if he had any enemies? But why d'you ask me that? So it wasn't an accident? We don't know yet. Did he have any problems with somebody? Well, look, inspector, I don't know. Yes?

Perhaps you should investigate the fact, instead of waisting time talking to me.

7. Regional accents

Galician accent map

7.1. The three regional accents of Galician (ie western, central, and eastern), which derive from their more numerous local dialects, will be shown by figures, for their *vowels* and *intonation* patterns: see the map on fig 7.1.

7.2. The *consonants* have some peculiarities, but also a common core, mostly shared both with the colloquial and mediatic accents, including possible oscillations towards either the neutral or traditional accents. In fact, in addition to the consonants of fig 4.1, they more often use those of fig 4.2, which shows newer articulations, besides a number of common ones. We will provide only few examples, in fact, it is easy to find others.

fig 7.1. Regional Galician: map.



Western Galician accent

7.2. The vowels of the western Galician accent (or West Galician) is shown in fig 7.2. For its vowels, it is worth noticing that /e, ε ; o, \mathfrak{I} are often neutralized as [E, σ], in stressed positions, although also [e, ε ; o, \mathfrak{I}] can certainly be present, although not always according to neutral usage.

Unstressed /e, o/ are [e, o]. But, in word-final unstressed positions, in addition to \uparrow [e, o], for *-e*, *-o*, *-es*, *-os*, we often also find [1, \downarrow i] and [υ , \downarrow u], especially after stressed [i, u]: *seguirme* [se⁺yirme, -1, -i], *músculos* ['muskulos, - υ s, -us]. Final unstressed /a/ is [a, \downarrow e]: *casa* ['karsa, -se]. Before a pause, /CV[#]|/ frequently becomes [CV[#]].

/⁽ⁱ⁾jV, ⁽ⁱ⁾wV/ sequences can frequently change to [i⁽ⁱ⁾V, u⁽ⁱ⁾V]. Such sequences are decisely not 'diphthongs' (although they are graphically written with two vowel *letters*, the first ones being *i* or *u*).

Thus, they are certainly /CV/, not /VV/ -ie not 'diphthongs'- so we may call them *conphthongs* /'komp@oŋz/ (trying to keep a connection with true *diphthong*, *monophthong*, *and triphthong*, in spite of its fundamental deep difference). Examples: *ciencia* ['@jɛn@jɐ, @i'ɛn@iɐ], *cuarto* ['kwarto, ku'arto].

Consonants: |b| [b; β], |d| [d; ∂ , δ], |g| [g, g; χ , χ , γ , γ], $|\theta|$ [θ , θ], |s| [s, s, ξ , ξ] (and [z, z, χ , χ] before $/\zeta$ /, although oscillating before sonants, including cases of \downarrow [z, z, χ , χ], between vowels), besides, often [ξ , χ] (semi-constrictive) in word- or

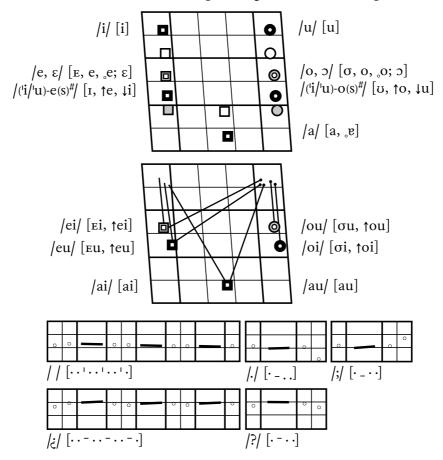


fig 7.2. Regional Galician: western vowels, diphthongs, and intonation patters.

syllable-final position. For /b, d, g, p, t, k/, before a consonant, [b, d, g, g; p, t, k, k] are usual. We have $n\equiv C/$; n/[p, p]; $\lambda/[\Lambda, d_{z}, j]$ (including [gi, i, i]); r/[(Vr)r] (but often $n(^{\#})r/[nr]$).

Gheada may be very frequent, with different realizations for /g/, mainly [χ , χ , \varkappa , \varkappa , d]. In addition, seseo ($|\theta| \rightarrow |s|$) is typical, especially before vowels: ceo $|\theta \varepsilon o| \rightarrow |s \varepsilon o|$, less frequently after vowels: dez $|d\varepsilon \theta| \rightarrow |d\varepsilon s|$ (this last mostly in northwest-ernmost areas).

The typical intonation patterns are also shown in fig 7.2.

Central Galician accent

7.3. The central Galician accent (or Mid Galician, or simply Galician) is shown in fig 7.3. For its vowels, it is worth noticing that /e, ε ; o, \mathfrak{I} are often neutralized as [ε , σ], in stressed positions, although also [ε , ε ; o, \mathfrak{I}] can certainly be present, although not always according to neutral usage.

Unstressed /e, o/ are [e, o]. But, in word-final unstressed positions, in addition to \uparrow [e, o] (independently both from the kind of stressed vowel a word may have, and from the kind of final consonant there may be), we have /_e(C)[#], _o(C)[#]/ [e, ↓1, ↓↓i]; [o, ↓v, ↓↓u]: *pero* ['pero, ↓-v, ↓↓-u], *ano* ['arno, ↓-v, ↓↓-u], *caído* [ka'i·δo, ↓-v, ↓↓-u],

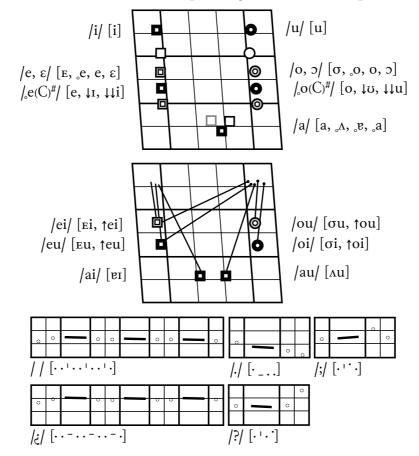


fig 7.3. Regional Galician: central vowels, diphthongs, and intonation patters.

 $\begin{array}{l} \textit{copiaron} \ [ko'pjaron, \downarrow \mbox{-}vn, \downarrow \mbox{-}run] \ (also \ typical \ is \ [Vn^{\#}, Vn^{\#}], \ including \ [Vn^{\#}, Vn^{\#}]). \\ /i^{(i)}V, \ u^{(i)}V/ \ sequences \ can \ frequently \ change \ to \ [^{(i)}jV; \ ^{(i)}wV, \ ^{(i)}wV], \ and \ /e^{(i)}V, \ o^{(i)}V/ \end{array}$

to [(')_JV; (')_wV, (')_wV]: *saltear* [salte'ar, sal'tjar]. Final unstressed /a/ is variably [a, e, Λ]: *casa* ['ka'sa, -e, - Λ]. Before a pause, /CV[#]|/ frequently becomes [CV[#]].

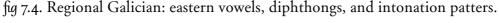
Consonants: /b/ [b; β], /d/ [d; δ], /g/ [g, g; χ , χ], / θ / [θ , θ], /s/ [s, ς , ς] (and [z, z, z] before /Ç/, although oscillating before sonants, including cases of \downarrow [z, z, z], between vowels). For /b, d, g, p, t, k/, before a consonant, [b, d, g, g; p, t, k, k] are usual. Before a pause, in addition to [$\mathring{\eta}$, $\mathring{\eta}$], also [η , r, \mathring{l}] may occur. /j/ [j, j]; / Λ / [Λ , J, j, d χ]; /r/ more often [(Vr)r] than [(Vr)r:], but also /rC/ [rC], or [r·C]); in addition, /r/ [κ] is possible, too.

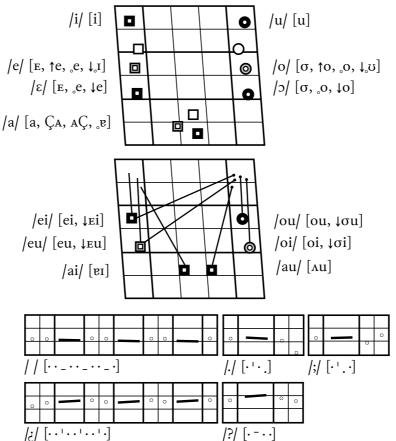
Gheada may be present, except in easternmost areas, with different realizations, especially $[x, x, \chi, \chi]$. The same for prevocalic seseo ($(\theta V) \rightarrow (sV)$): ceo $|\theta \varepsilon 0| \rightarrow (s\varepsilon 0)$. The turnical interaction patterns are shown in fazz.

The typical intonation patterns are shown in fig 7.3.

Eastern Galician accent

7.4. The eastern Galician accent (or East Galician) is shown in fig 7.4. For its vowels, let us notice that $|\varepsilon, \rangle$ do not typically have the timbres of the neutral or traditional accents, except as a possible personal choice, with oscillations. In fact,





we usually find $[E, \sigma]$ both for $|e, \varepsilon|$ and $|o, \sigma|$, although including cases of [e, o] for |e, o|, but also for $|\varepsilon, \sigma| \downarrow [e, o]$.

In unstressed syllables, we generally find [e, o], both for /e, ε / and /o, σ /, but including \downarrow [1, υ] especially for /e, σ / (not only in final syllables). Let us notice that /a/ often is [A] in contact with /Ç/, ie /p, Λ , j; tʃ, ʃ/: *año* ['Arpo, -n-, - υ], *palla* ['pArjA], *cacho* ['kArtʃo, - υ], *xa* ['ʃA].

Consonants: |b| [b; β], |d| [d; δ], |g| [g, g; χ , χ] (with continuous postvocalic taxophones used rather systematically); |f| [f, f]; $|\theta|$ [θ , θ], |s| [s, ς] (and [z, z] before $|\zeta|$, very frequently before sonants).

For /b, d, g, p, t, k/, before a consonant, the continuous taxophones are almost systematic, except for emphasis; often we find /d/ [\emptyset], especially in *-ado*: *prado* ['pra'\dots, \$\$\psi'pra'\dots, \$\$\$\psi'pra'\dots, \$\$\psi'pra'\dots, \$\$\psi'p

Gheada is not present, but Spanish loans may also have $/\chi/[\chi, \chi, \varkappa, \varkappa]$. *Seseo* is possible for individual speakers.

The typical intonation patterns are shown in fig 7.4.

8. Galician accent of Spanish

8.1. Different Galician speakers have different knowledge and usage of Spanish and its pronunciation. The first vocogram in fig 8 refers to the accent of typical Galician speakers, with their 7 vocalic phonemes.

Of course, the Spanish phonemes /e, o/ are realized using the six different timbres of Galician, [e, ε ; o, σ] [° ε , ° σ], according to language analogies and speakers capabilities/sensibilities, not rarely with peculiar results.

Besides, vowel nasalization between nasals (or even just before them) may characterize a broad Galician accent: *mano* [\$'mã'nu], *nombre* [\$'nõmbr1], *mancar* [\$mẽŋ-'kar], *tener* [\$tẽ'ner], *cine* [\$'Oĩ'n1], *teniente* [\$tẽ'njɛ̃nt1], &c.

The second vocogram shows better realizations for *e*, *o* in stressed syllables, realized as $[E, \sigma]$, certainly more suitable for Spanish: *resto* [\uparrow 'r:Esto], *tambien* [\uparrow tam-

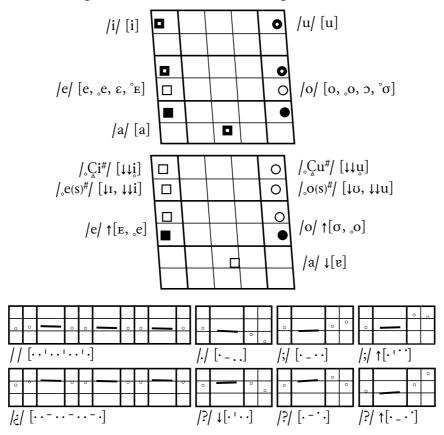


fig 8. Galician accent of Spanish: vowels and intonation patterns

'bjen], medio [↑'me^xδjo], costo [↑'kosto], generación [↑_iχenera'θjon], todo [↑'to^xδo], &c. But it also shows broader realizations for word-final /e, o/ \downarrow [1, υ], as in deporte [\downarrow de'portI], influjo [\downarrow Im'flurd υ] (or [- \varkappa υ , - $h\upsilon$], in addition to a more suitable [- χ υ]).

We can even find [i, i, v, u], in unstressed final syllables, for /i, e, o, u/ preceded by voiceless consonants: *taxi* [↓↓'takşi], *caqui* [↓↓'ka*ki], *espíritu* [↓↓eş'piritu], *deporte* [↓↓de'porti, -ti], *influjo* [↓↓ĩm'flurdv, -u], &c. Unstressed /a/ may become [v]: *la cama* [↓lv'karmv].

8.2. As for the *consonants*, such bilingual speakers, in different ways, may present some or all the following realizations. Final $-n/n^{\#}/[\eta, \eta]$, or even $[\eta, \eta]$, and with different degrees of nasalization on the preceding vowels or diphthongs: *bien* ['bjɛŋ, 'bjɛ̃ŋ; -ŋ], *sin* ['siŋ, 'sĩŋ; -ŋ], *traen* ['traeŋ, 'trãeŋ; -ŋ], *colisión* [koli'sjoŋ, -'sjõŋ, -ŋ].

Also for /nC/, we may find homorganic nasal or seminasal contoids, in addition to possible $[\eta, \eta]$ before continuous contoids.

Examples: *un papel* [,umpa'pɛl, ,um-], *siempre* ['sjɛmpre, 'sjɛmpre], *campo* ['kampo, 'kam-], *un tiempo* [un'tjɛmpo, uɪa'tjɛmpo], *en cuanto* [eŋ'kwanto, eŋ'kwaato], *canto* ['kanto, 'kaato], *cinco* ['θiŋko, 'θiŋko], *unión civíl* [u'njon θi'βil, u'njoŋ], *ciencia* ['θjɛnθja, 'θjɛŋ-], *en su mayoría* [,ensu,madʒo'ria, ,eŋ-], *denso* ['dɛnso, 'dɛŋ-], *en julio* [en'du'ljo, eŋ-], *conjunto* [kon'dunto, koŋ'duato].

8.3. Especially, between vowels (or in contact with /r, 1/), we may find: /b/ [β , β], /d/ [∂ , δ , δ], /g/ [γ , γ , γ , γ], /f/ [f, f], / θ / [θ , θ , ς , ς , s, s], /s/ [ς , ς , s, s, s; z, z, z], /x/ [d, π , π , x, x, χ , χ], /j/ [dz, gj, gj, j, j, j], / Δ / [dz, gj, gj, j, j, j, j, j, λ , $\frac{1}{2}$], /1/ [1, I, $\frac{1}{2}$, $\frac{1}{2}$, $\frac{1}{2}$], Notice that [θ , δ] are semiconstrictives.

Examples: *trabajo* [tra'βardo, -'θa-], *cable* ['ka·βle, -θle], *árbol* ['arβol, -θol], *rede* ['r:e·∂e, -δe, -δe], *verdad* [ber'∂a∂, -'δaδ, -'∂aδ], *soldado* [sol'da·∂o, -δo, -δo], *agosto* [a-'γosto, -'yos-], *embargo* [em'barγo, -yo], *regla* ['r:e·γla, -yla], *fin* ['fiŋ, 'f-], *tráfico* ['trafiko, -fi-], *zarzuela* [θar'θwɛ·la, θar'θwɛ·-; şar'şwɛ·-, şar'şwɛ·-, sar'swɛ·-], *hacer* [a'θer, -'θer, -'şer, -'şer, -'ser], *seda* ['se·∂a, 'ş-, 's-], *oso* ['o·so], *mismo* ['mizmo, -z-, -z-, -z-], *tras* ['tras, -ş, -s, -s].

And: *junio* ['durnjo, '¤-, 'x-, 'χ-], *imágen* [i'mardeŋ, -¤eŋ, -xeŋ], *ya* ['dʒa, 'gja, 'gja, 'ja, 'ja, 'ja], *mayo* ['mardʒo, -gjo, -gjo, -jo, -jo, -jo], *llamar* [dʒa'mar, gja-, gja-, ja-, ja-, ja-, ja-; λa-, ļa-], *calle* ['kardʒe, -gje, -ge, -je, -je, -je, -je; -λe, -ļe], *lado* ['la-do], *falta* ['falta], *el chino* [eļ'tʃirno], *palco* ['pałko, 'pał-, 'pal-], *algo* ['ałgo, 'ał-, 'al-], *miel* ['mjɛł, -ł, -Ł], *sal* ['sał, -ł, -L].

For /b, d, g; p, t, k/, followed by any consonant, it is frequent to have full stops, instead of the more suitable continuous taxophones, in cases like *bs*, *ps*, *cc*, *pt*, *bm*, *pm*, *dm*, *tm*, *tl*, *bd*, *cn*, *gn*, *gm*, &c: *absoluto* [,abso'lurto], *lapso* ['lapso], *acceso* [ak'θε-so], *adaptar* [,aδap'tar], *administrar* [,adminis'trar], *ritmo* ['r:itmo], *atlantico* [a'tlantiko], *abdominal* [,abdomi'nal], *tecnología* [,teknolo'dia], *signo* ['signo], *estigma* [es-'tigma].

The *intonation* patterns are shown, with some variants.

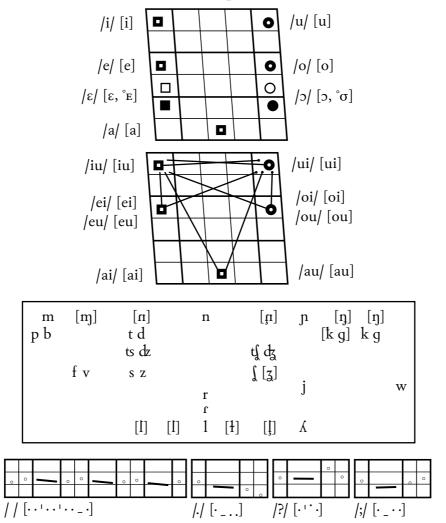
9. Medieval Galician

9. *Medieval Galician* (Rom., IE) had the seven short vowels and eight diphthongs given, which were all phonetically nasalized when followed by nasal consonants, even in free syllables (including the diphthongs).

The vocalic situation was very similar to that of modern Galician, as can be seen, with a strong nasalization as in the modern traditional and colloquial accents.

In addition to $[Vd_{\chi}V]$ the variant $[V_{\chi}V]$ was frequent, and in other contexts too, as in $[^{\#}d_{\chi}V, ^{\#}zV]$; /l/ was $[IV, IC, I^{\#}]$.

fig 9. Medieval Galician: vowels and intonation patterns



10. Phonopses of 26 languages (for comparisons)

10.1. According to the phonetic method, the pronunciation of another language is done contrastively, by comparing the characteristics of the language to be studied and those of one's own mother tongue.

For the latter, at least its neutral accent is presented, although in a simplified way. In fact, only the diphthongs which are not just simple combinations of existing phonemes are here shown, possibly as independent phonemes, often with unpredictable realizations. In more complete books (with specific teaching purposes), also the regional accents of both languages are presented.

10.2. However, in this book it is not possible to provide everything and for several languages. The books already published (and those in preparation, indicated in the bibliography), which belong to the series *X Pronunciation & Accents*, are thought to be useful. They are on: English, German, Dutch, French, Spanish, Portuguese, Italian, Russian, Greek, Chinese, Japanese, Hindi, Turkish, Arabic, Hebrew.

10.3. Therefore, here, we will at least provide the iconic phonopses of 26 languages, as for their *vowels*, *consonants* and *intonation*, a little simplified (but still more accurate than what can be found in so many other books). They are derived from those books or from *Handbook of Pronunciation* and *Natural Phonetics* & *Tonetics*, where much more can be found in comparison with what has been provided here. In fact, here, for tonal languages, we have also omitted their tonemes, while showing their marked tunes, with further simplifications.

10.4. Thus, it will be useful to carefully compare the phonopses of one's own language (and also those of other languages one wants to know), to see directly what is similar or different. In the indicated books, there are more than 300 such phonopses. fig 10.27.1-7 give a number of orograms of the contoids which are necessary to facilitate the comparison between different languages.

10.5. Symbols given between [] are important taxophones (or combinatory variants), while those between () are possible additional phonemes or xenophonemes. Since we do not consider clusters like /Ch/ as unitary phonemes in possible opposition to simple /C/, they do not appear in the consonant tables provided.

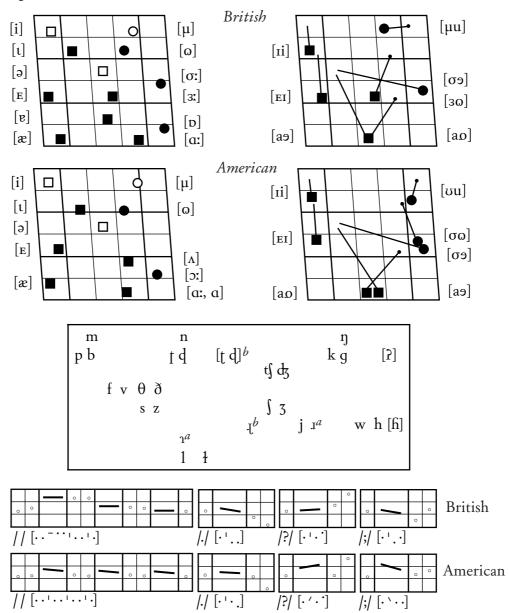


fig 10.1. English.

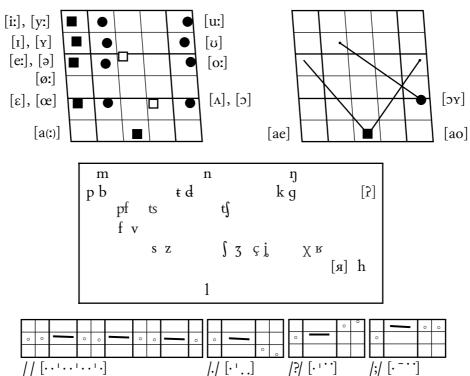
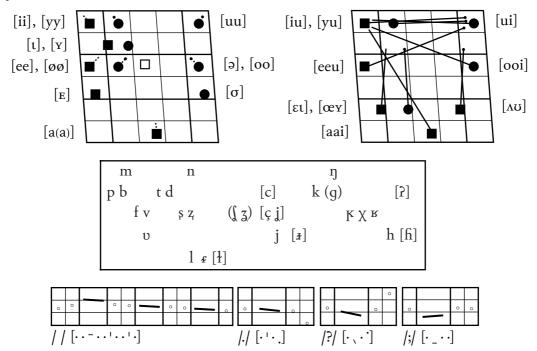


fig 10.2. German.

fig 10.3. Dutch.



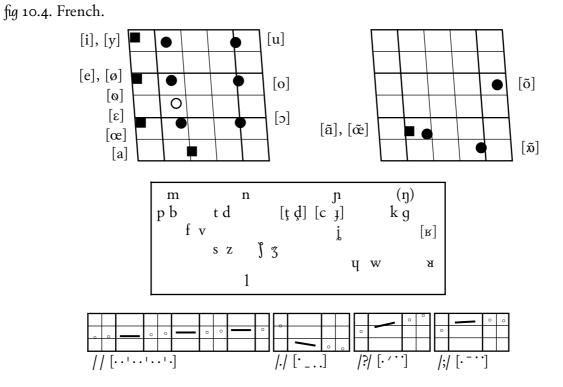


fig 10.5. Spanish.

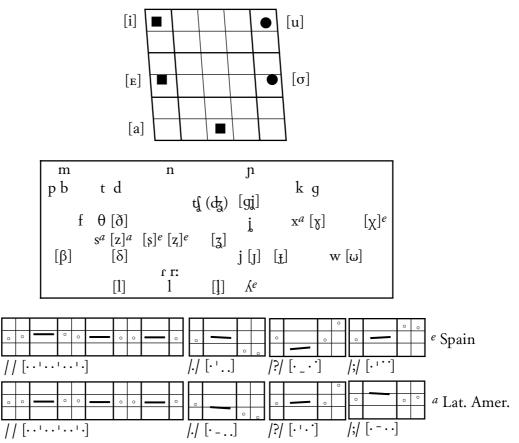


fig 10.6. Portuguese.

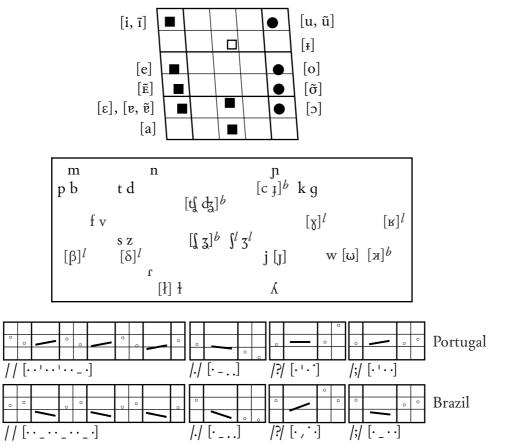
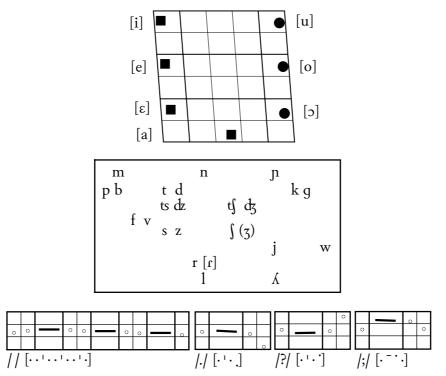


fig 10.7. Italian.





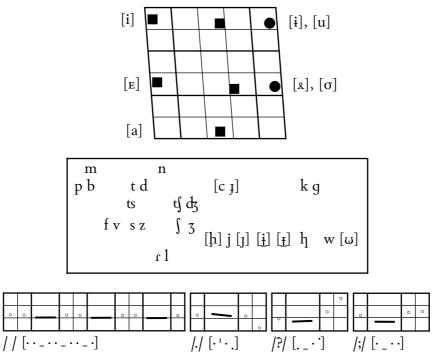


fig 10.9. Russian.

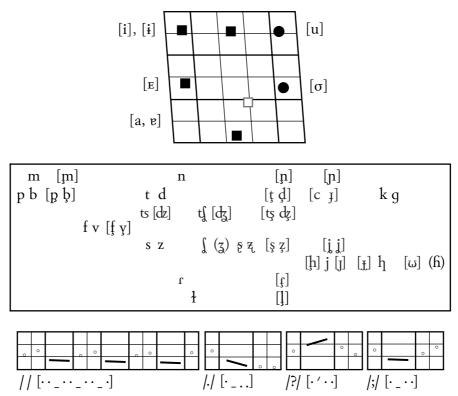


fig 10.10. Czech.

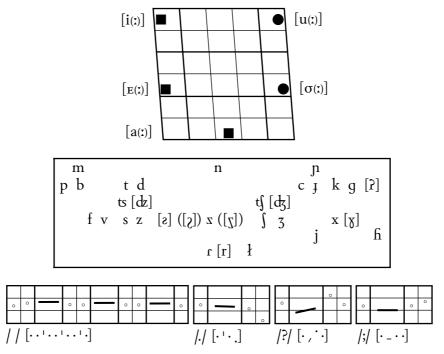
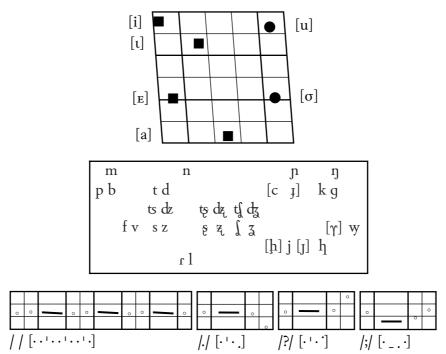


fig 10.11. Polish.



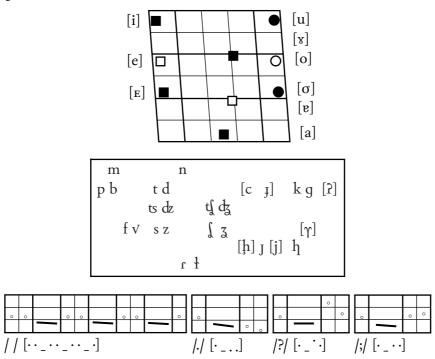


fig 10.13. Greek.

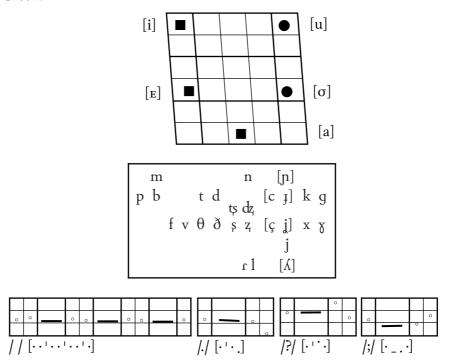


fig 10.12. Bulgarian.

fig 10.14. Hungarian.

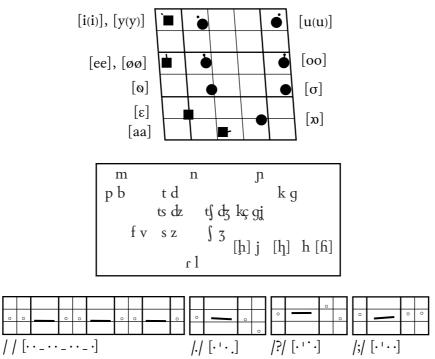
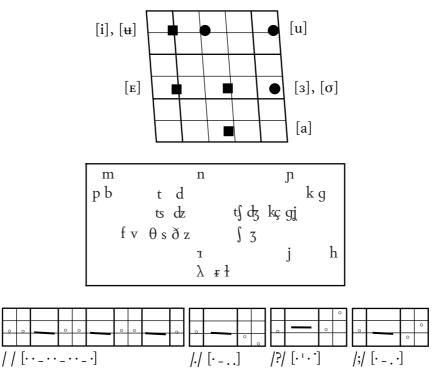
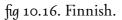


fig 10.15. Albanian.





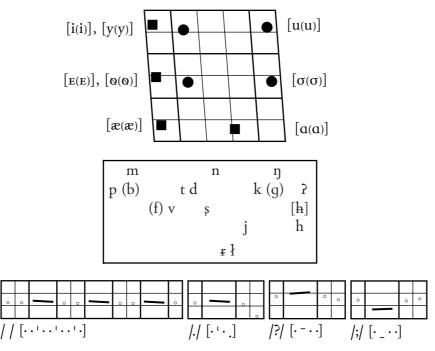


fig 10.17. Arabic.

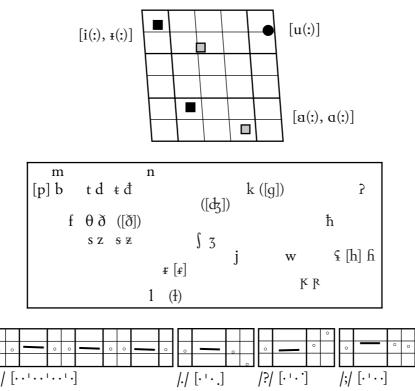


fig 10.18. Hebrew.

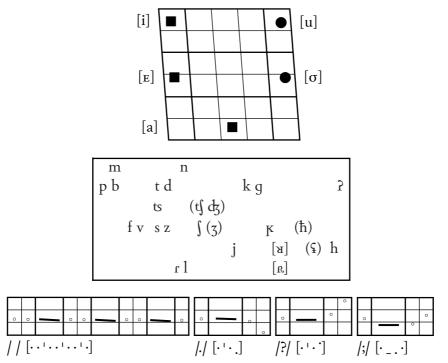
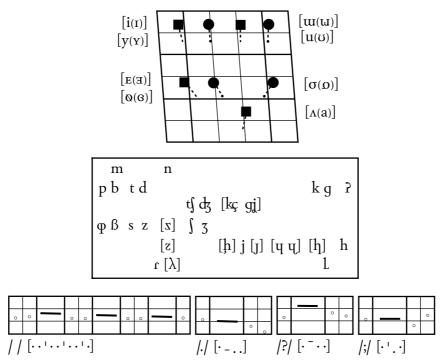


fig 10.19. Turkish.



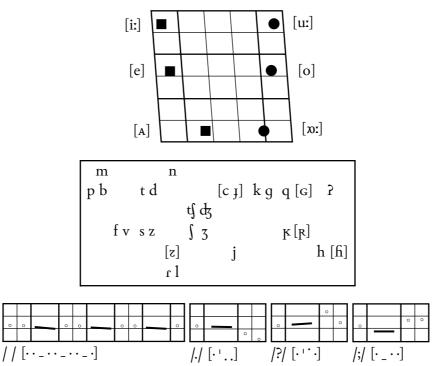


fig 10.21. Hindi.

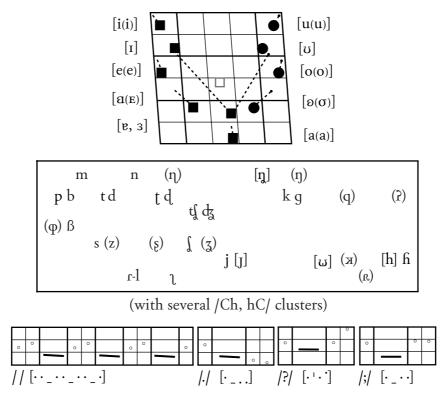
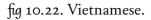


fig 10.20. Persian.



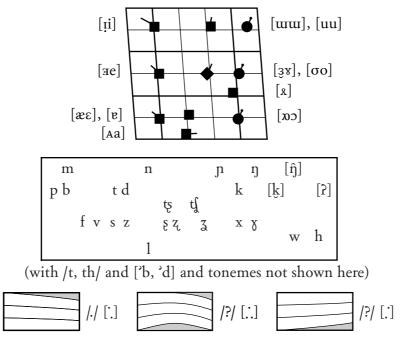
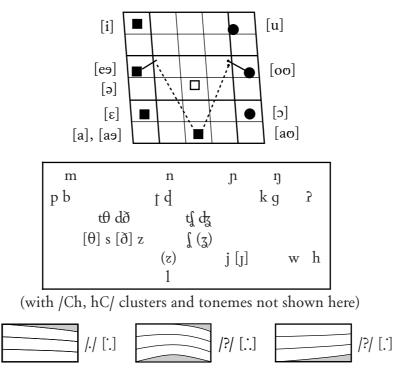


fig 10.23. Burmese.



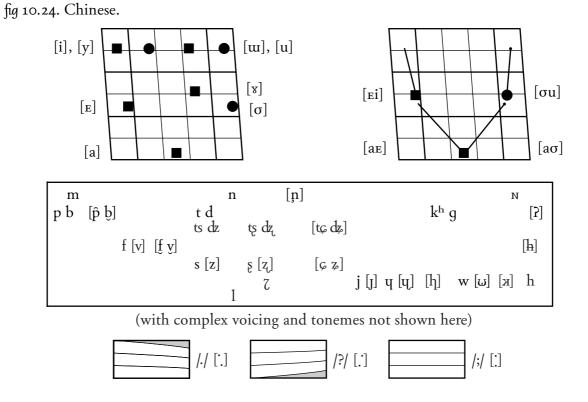


fig 10.25. Korean.

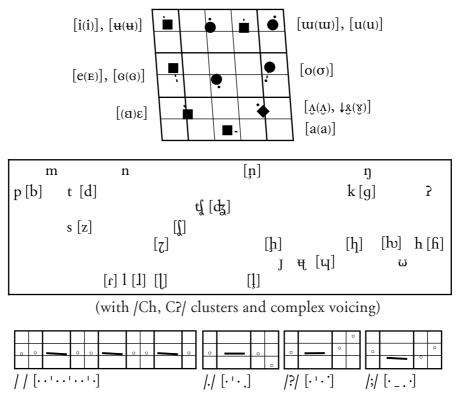
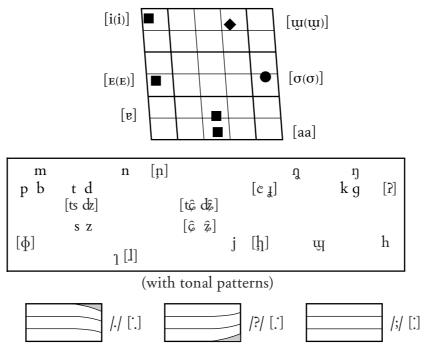
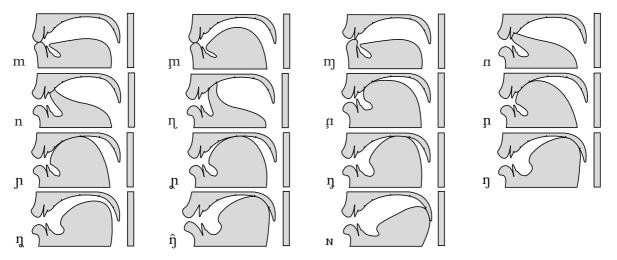


fig 10.26. Japanese.



Main consonant orograms

fig 10.27.1. Main nasals.



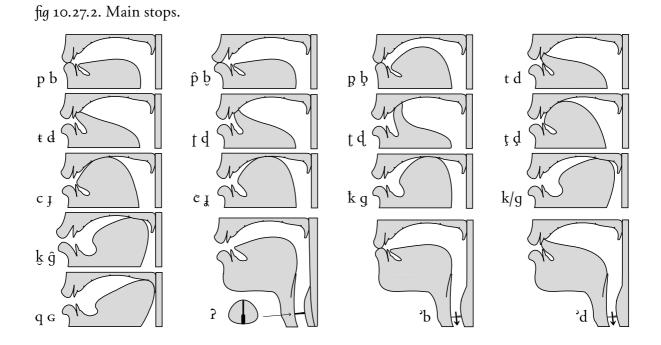
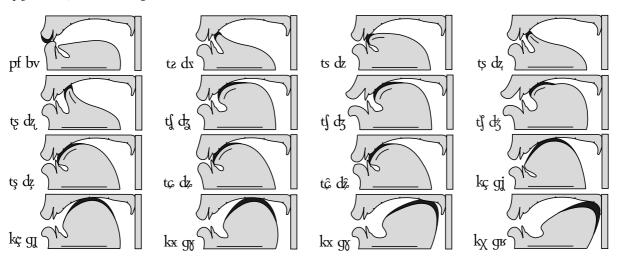


fig 10.27.3. Main stop-strictives (or 'affricates').



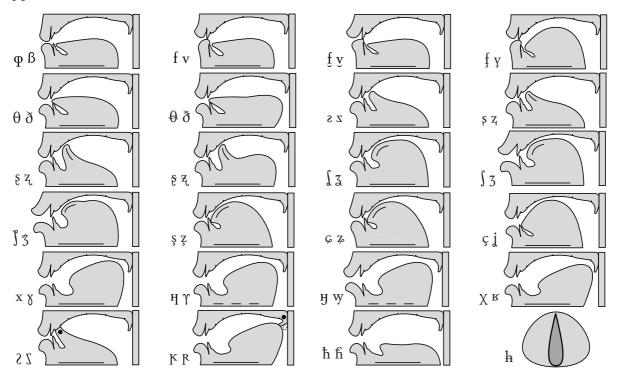
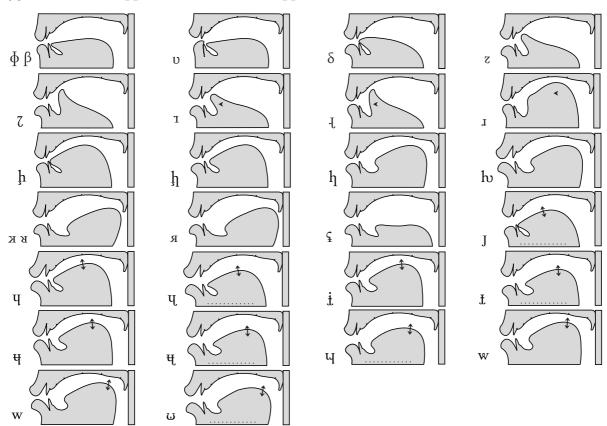


fig 10.27.4. Main constrictives (or 'fricatives').

fig 10.27.5. Main approximants (and semi-approximants).



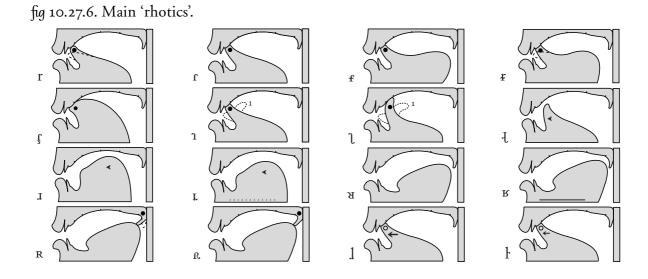
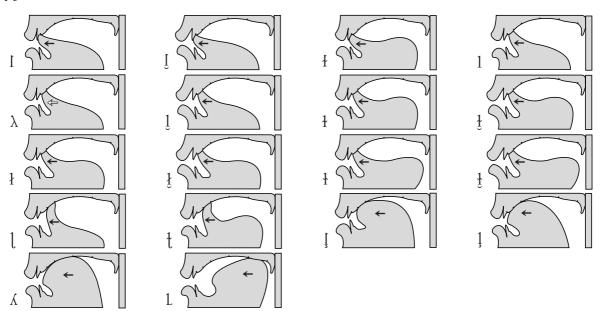


fig 10.27.7. Main laterals.



11. Bibliography

11. A number of our examples have been taken from some of the few pertinent titles listed in this Bibliography, including Wikipedia, but they have been retranscribed (or transcribed, if needed), following our *canIPA* method. Of course, less useful (or, rather, useless) books and articles do not appear here.

- Álvarez, R. & Monteagudo, H. & Regueira, X.L. (1986) *Gramática Galega*. Vigo: Galaxia; not *IPA*.
- BOUQUIAUX, L. *et alii* (1976) *Initiation à la phonétique*. Paris: PUF/ORSTOM; a vinyl record to be used in connection with THOMAS *et alii*; expanded *IPA*.
- CANEPARI, L. (1983) *Phonetic Notation | La notazione fonetica*. Venezia: Cafoscarina; with 2 enclosed audiocassettes; almost *canIPA*.
- (1986³) *Italiano standard e pronunce regionali*. Padua: CLEUP; with 2 enclosed audiocassettes, the second one is about regional pronunciations, aslo downloadable from our *canipa.net* website; almost *canIPA*.
- (2000/2009) *Dizionario di pronuncia italiana*. Bologna: Zanichelli; 60,000 forms with transcription and pronunciation variants, which correspond at least to 180,000 actual words; with many variants and degrees of acceptability: *modern* neutral, *traditional* neutral, *acceptable*, *tolerated*, *slovenly*, *intentional* and *lofty*; *canIPA*.
- (2004²) Manuale di pronuncia italiana. Bologna: Zanichelli; with 2 enclosed audiocassettes, aslo downloadable from our *canipa.net* website; it introduces *modern* neutral pronunciation, in addition to the *traditional* one, besides other types, including 22 regional koinés; *canIPA*.
- (2007) *Pronunce straniere dell'italiano ProSIt*. München, Lincom; precise descriptions of the foreign accents of 43 language groups, not only European, with intonation and more or less marked internal variants; *canIPA*.
- (2007²) A Handbook of Pronunciation. English, Italian, French, German, Spanish, Portuguese, Russian, Arabic, Hindi, Chinese, Japanese, Esperanto. München: Lincom; ^{can}IPA transcriptions, as in this book.
- (2007) Natural Phonetics & Tonetics. Articulatory, auditory, and functional. München: Lincom; updated edition of previous title; the first part gives a complete presentation of the ^{can}IPA method and symbolization; while, the second part provides accurate phonosyntheses of 241 living languages and 71 dead ones; on our website, the latter are 81, freely downloadable.
- (2012) *Vietnamese Pronunciation*, in the *canipa.net* site; *canIPA*.

- (2014^3) Korean Pronunciation, in the canipa.net site; ^{can}IPA.
- (2016²) English Pronunciation & Accents. München: Lincom; with more than 200 different accents [L1: 121 native with variants], bilingual [L2: 63], foreign [LS: 30]; canIPA.
- (2016²) *German Pronunciation & Accents*. München: Lincom; neutral, mediatic, traditional, international, regional and foreign accents, not only in Germany, Austria and Switzerland; *canIPA*.
- (2017) Danish Pronunciation, in the canipa.net site; canIPA.
- (2017) *French Pronunciation & Accents*. München: Lincom; neutral, mediatic, traditional, international, regional and foreign accents, not only in France; *canIPA*.
- (2017) Norwegian Pronunciation, in the canipa.net site; canIPA.
- (2017) Portuguese Pronunciation & Accents. München: Lincom; neutral, mediatic, traditional, and international pronunciations, 22 regional and several foreign accents; *canIPA*.
- (2017) Swedish Pronunciation, in the canipa.net site; canIPA.
- (2018) *Italian Pronunciation & Accents*. München: Lincom; neutral, traditional, mediatic pronunciations, with 22 regional and 43 foreign accents, not only European, with intonation and more or less marked internal variants and subvariants, with further chapters on Italian dialects, Latin and other diachronic stages, and many downloadable sound files from our *canipa.net* website; *canIPA*.
- (2019) *Hebrew Pronunciation & Accents*. München: Lincom; international, neutral, mediatic, traditional pronunciations, with Jerusalem and five 'ethnic' accents, including 40 'return-regional' accents, and a couple of diachronic stages; *canIPA*.
- (2019) *Thai Pronunciation*, in the *canipa.net* site; *canIPA*.
- (2020) *Greek Pronunciation & Accents*. München: Lincom; international, traditional, neutral, mediatic pronunciations, with six regional accents; including ancient Greek; *canIPA*.
- --- (2020) *Persian Pronunciation & Accents*. München: Lincom; communicative, neutral, mediatic, traditional, international pronunciations, with regional and bordering accents; *canIPA*.
- (2020) *Sanskrit Pronunciation & Accents*. München: Lincom; classical neutral pronunciation, with 'modern' regional accents in the Indian subcontinent; *canIPA*.
- (forth.) Ancient Greek Pronunciation. München: Lincom; canIPA.
- (forth.) Italian Pronouncing Dictionary | Dizionario di pronuncia italiana moderna. Rome: Aracne; updated and expanded full version of the 2000/2009 DíPI edition; ^{can}IPA.
- --- (forth.) *Latin Pronunciation & accents*. München: Lincom; classical neutral pronunciation, with ecclesiastical and national accents; *canIPA*.
- & BALZI, F. (2016) *Turkish Pronunciation & Accents*. München: Lincom; neutral, mediatic and international pronunciations, and regional accents; *canIPA*.
- & CERINI, M. (2016²) *Dutch & Afrikaans Pronunciation & Accents*. München: Lincom; neutral, mediatic, traditional, international, and regional accents, not only in the Netherlands, Flanders, and South Africa; *canIPA*.
- & (2017²) *Chinese Pronunciation & Accents*. München: Lincom; neutral and mediatic Mandarin, with 10 regional and Taiwanese accents; *canIPA*.

- & (2020²) Arabic Pronunciation & Accents. München: Lincom; neutral and mediatic accents, including 'regionational' accents; ^{can}IPA.
- & GIOVANNELLI, B. (2012⁴) *La buona pronuncia italiana del terzo millennio*. Rome: Aracne; neutral pronunciation, with a CD containing recordings, also downloadable from the *canipa.net* website; *canIPA*.
- & MAGGI, F. (forth.) *Latin Pronouncing Dictionary*. Rome: Aracne; presented and realized according to useful phonic principles; *canIPA*.
- & MIOTTI, R. (forth.) *Spanish Pronunciation & Accents*. München: Lincom; neutral, mediatic, traditional, international, and regional accents, not only in Spain and Latin America; English version corresponding to Miotti & Canepari's Pronunciación y acentos del español; ^{can}IPA.
- & MISCIO, F. (2017²) *Japanese Pronunciation & Accents*. München: Lincom; neutral, mediatic and international pronunciations, and 20 regional accents; *canIPA*.
- & (2018) Japanese Pronouncing Dictionary. From Transliteration to Phonotonetics. München: Lincom; ^{can}IPA.
- & PUGLIESE, M. (2018) A note on MBG pronunciation: 'multicultural Berlin German', in the canipa.net site; ^{can}IPA.
- & (2018) A note on MBG pronunciation: 'multicultural London English', in the canipa.net site; ^{can}IPA.
- & (2018) A note on MPF pronunciation: 'multicultural Paris French', in the canipa.net site; ^{can}IPA.
- & (2019) *Finnish Pronunciation*, in the *canipa.net* site; *canIPA*.
- & (2020) Welsh Pronunciation, in the canipa.net site; ^{can}IPA.
- & SHARMA, G. (2017²) *Hindi Pronunciation & Accents*. München: Lincom (neutral, mediatic and international pronunciations, and 16 regional accents; *canIPA*).
- & VITALI, D. (2018) *Russian Pronunciation & Accents*. München: Lincom; neutral, mediatic, traditional, international, and some regional accents; *canIPA*.
- CATFORD, J.C. (1988) A Practical Introduction to Phonetics. Oxford: Clarendon Press; guided drills to develop phonetic kinesthesia, to be performed accurately, step by step; however, the 2001 edition should be avoided because of too many technical problems during its unsuccesful updating; *IPA*.
- CHAPMAN, W.H. *et alii* (1988³) *Introduction to Practical Phonetics*. Horsleys Green: Summer Institute of Linguistics; substantially *IPA*.
- Duden Aussprachewörterbuch (2015⁷, 1962¹) Berlin: Dudenverlag; the 'DUDEN 6'; also gives person, family, and place names belonging to various languages, with their original pronunciation, but unfortunately, with *intra*linguistic rather than *inter*linguistic transcriptions, and sometimes in an outdated style; *IPA*, with /a, a:/, but /r/, however, now, at last, it accepts '/r/-'vocalization' also after short vowels, although it continues using only /r/; nothing on intonation, and a very short section on reduced forms; *IPA*.

However, its first edition was our best 'friend' during school time, bringing there interesting books on languages and phonetics, rather than the boring expected ones, not to waste precious time. Among the preferred books there were various Linguaphone courses –set up by renowned phoneticians and also recorded by selected radio speakers– which had a whole disc out of sixteen devoted to the phonetics of the language taught, with full *IPA* transcriptions of the various examples, accurately chosen to show the phonic structure; later on, we used those same lists, adequately completed, also for our studies on the different accents, including the social, regional, and foreign ones. Unfortunately, after the sixties, those courses became like all others, practically with no attention to phonetics.

- Galego-Castelán & Castellano-Gallego, Dicionario bilingüe esencial (2019⁵) Barcelona: Larousse Editorial; IPA for the entries, but not for inflected or metaphony forms.
- GAMBINI, D. (1986) *Introduzione alla linguistica galega*. Perugia: Università degli Studi di Perugia; not *IPA*.
- *Handbook of the International Phonetic Association* (1999). Cambridge: C. Univ. Press; although it should be a reliable and advisable guide for transcribing and describing the pronunciation of languages, it honestly cannot be considered such; *IPA*.
- HAUDRICOURT, A.G. & THOMAS, J.M.C. (1976) La notation des langues. Phonétique et phonologie ['Language notation. Phonetics and phonology']. Paris: Inst. Géographique National; with 2 enclosed vinyl records; adapted *IPA*.
- JONES, D. (1956) *Cardinal Vowels*. London: Linguaphone Institute; 2 [78 rpm] records with booklet; now face A of both records are downloadable; *IPA*.
- (1967³) *The Phoneme: its Nature and Use.* Cambridge: Heffer; still better than so many more or less recent productions, woolily trying to deal with this serious subject, denying it; *IPA*.
- LAVER, J. (1980) *The Phonetic Description of Voice Quality*. Cambridge: CUP; with a non-enclosed audiocassette; *IPA*.
- MIOTTI, R. & CANEPARI, L. (forth.) *Pronunciación y acentos del español*. München: Lincom; neutral, mediatic, traditional, international, and regional accents, not only in Spain and Latin America; Spanish version of Canepari & Miotti's *Spanish Pronunciation & Accents*; *canIPA*.
- & (forth.) *Spanish Pronouncing Dictionary/Diccionario de pronunciación española*. München: Lincom; *canIPA*.
- MURA, R. (2008) *Dicionario de pronuncia dos macrotopónimos galegos*. Torino: Università degli Studi; 3-14; with fonts, and general material and figures provided by L.C.; *canIPA*.
- PÉREZ BOUZA, J.A. (1966) *El gallego*. München: Lincom; *IPA*, but with some wrong official symbols.
- REGUEIRA, X.L. (1996) Galician, in JIPA (119-122; IPA).
- (2010) Dicionario de pronuncia da lingua galega. A Coruña: Real Academia Galega; with some variants, but not useful for verbal metaphony, which in Wikipedia is dealt with better than in this dictionary or in current grammars; *IPA*.
 et alii (1998) Os sons da lingua. Vigo: Xerais, with 2 CD's, *IPA*.
- SMALLEY, W.A. (1964²) *Manual of Articulatory Phonetics*. Terrytown (NY): Practical Anthropology; with 33 non-enclosed [18 cm, 19 cm/s] reels, lasting 32 hours; non-IPA.
- Тномая, J.M.C. *et alii* (1976) *Initiation à la phonétique* ['Introduction to Phonetics']. Paris: PUF; completed by the vinyl record BOUQUIAUX *et alii*; expanded *IPA*.
- VÁZQUEZ CUESTA, P. & MENDES DA LUZ, M.A. (1971³) *Gramática portuguesa*. Madrid: Gredos; Gallego: 105-113; not *IPA*.
- VEIGA, A. (1976) Fonología gallega. Valencia: Bello; not IPA.

Wikipedia 'the free encyclopedia' (2020): *Galician phonology* & *Help:IPA/Galician* & *Galician language*.

INTERNATIONAL PHONETIC ALPHABET (official: 1993, corrected in 1996, and updated in 2005)

CONSONANT (PULMONIC) (Let												Ly(a)									
	Bilabial		Labio	dent.	t. Dental		Alveolar Postalve		Postalveol	. Retroflex		Palatal		Velar		Uvular		Pharyng.		Glottal	
Plosive	р	b					t	d		t	d	с	J	k	g	q	G			2	
Nasal		m		ŋ				n			η		ր		ŋ		N				
Trill		В						r									R				
Tap or Flap				v				ſ			t										
Fricative	φ	β	f	v	θ	ð	S	Z	$\int 3$	ş	z	ç	j	x	y	Х	R	ħ	٢	h	ĥ
Lateral fric.							ł	z													
Approxim.				υ				ĩ			ŀ		j		щ						
Lateral app.								1	1		1		λ		L					.1.1	

Where symbols appear in pairs, the one to the right is voiced. Shaded areas denote articulations judged impossible.

CONSONANTS (NON-PULMONIC)

Clicks	Voiced implosives	Ejectives
🛈 Bilabial	6 Bilabial	' as in:
Dental	d Dental/alveol.	p' Bilabial
! (Post)alveolar	∫ Palatal	t' Dental/alveol.
‡ Palatoalveolar	∫ Velar	k' Velar
Alveol. lateral	d Uvular	s' Alveol. fricat.

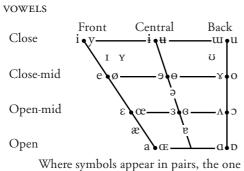
OTHER SYMBOLS

w Voiced labial-velar app.

- Voiceless epiglottal fric. Н
- £ Voiced epiglottal fric.
- £ Epiglottal plosive

& Voiceless alveolo-palatal fric.

- M Voiceless labial-velar fric. z Voiced alveolo-palatal fric.
 - J Voiced alveolar lateral flap
- \boldsymbol{q} Voiced labial-palatal app. $\boldsymbol{\mathfrak{h}}$ Simultaneous \int and \boldsymbol{x}
 - ts Affricates and double articulat.
 - can be represented by two sym-
 - $\widehat{\mathbf{kp}}$ bols joined by a tie bar if necess.



to the right (and U) is rounded.

TONES & WORD ACCENTS

		LEVEL			CONTOUR
ő	or 7	Extra-high	ŏ	or /	Rising
ó	-	High	ô	N	Falling
ō	-	Mid	ŏ	1	High rising
ò	_	Low	ŏ	k	Low rising
ö		Extra-low	ő	1	Rising-falling
1	Down	step (relative)	7	Globa	l rise
Ļ	Upstep	o (relative)	И	Globa	l fall

DIACRITICS (Diacritics can be placed above a symbol with a descender, $eg \dot{\eta}$)

ţd
t d
t d
õ õ
dn
dı
. d'
ive)
ant)
iv

SUPRASEGMENTALS

- Primary stress
- Secondary stress:
- ¦foʊnə'tı∫ən ar
- Long ľ Half-long a'
- Extra-short ă
- Syllable break: ıi.ækt
- Minor (foot) group
- Major (intonation) gr. Linking (absence of a
 - break)

