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Portuguese Pronunciation & Accents

Geo-social Applications of the Natural Phonetics & Tonetics Method

Appendixes

5.
Vowels & vocoids

5.1. As far as the *vocalic elements* are concerned, let us recall that from a phonetic point of view it is more convenient to use the term *vocoids*, while reserving the more traditional term *vowels* for *phonemes* and *graphemes* (or more generally).

fig 5.1 will help to 'reconstruct' the typical modalities for the production and identification of vocoids, which have *three* fundamental components that – concisely– are: the *fronting* and *raising* of the dorsum (or central part of the tongue), with different degrees of jaw opening, and different *lip* positions (since adding lip rounding doubles the number of all possible vocoids).

5.2. Let us notice that our *vocogram* is different from the currently official *trapezoid*, which we decided to abandon because of its partially unsatisfactory shape and conception (for more details and general information, *cf* Ch 8 of our *NPT –Natural Phonetics & Tonetics–* also on the ^{can}IPA website).

In addition, the vocogram is subdivided into a considerable number of boxes, 30, which renders it more precise a tool than the overly vague official one (which can be seen at the end of this book).

Furthermore, the two low vocoids are –more realistically– [æ, ɑ], not '[a, ɑ]', corresponding to ^{can}IPA [ᴀ, ɑ] (as acoustic phonetics can also easily prove).

fig 5.1. *Orograms* of the four extreme points for vocoid articulations (with corresponding *labiograms*) and the *vocogram*. Note that rounded vocoids (such as [u]) have round *markers*, instead of square ones.
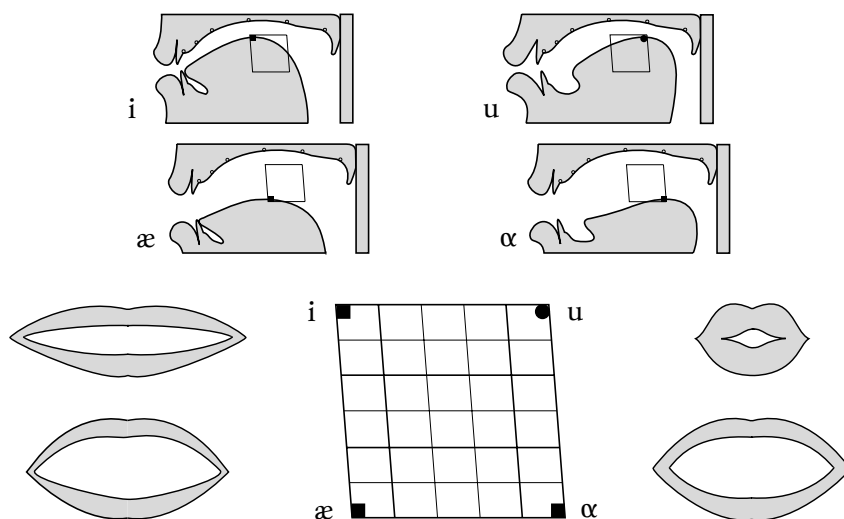
5.3. In addition, *fig* 5.2-5 will complete our general view, by providing all possible vocoids (both unrounded and rounded), again in *orograms* containing a miniature *vocogram*, representing differences and subtle nuances better.

fig 5.2. All vocoids and their palatograms.

	front	front-central	central	back-central	back		front rounded	front-central round.	central rounded	back-central round.	back rounded	
high (A)	i	ı̧	ɨ	ɯ	ɯ		ʏ	y	ʉ	ɥ	u	} CLOSE
lower-high (B)	ɪ	ɩ	ɨ	ɯ	ʟ		ɥ	ʏ	ʊ̈	ɷ	ʊ	
higher-mid (C)	e	ə	ə	ɤ	ɤ		ø	ø	ɵ	ɵ	o	} MID
lower-mid (D)	ɛ	ɜ	ɜ	ʌ	ʌ		ɶ	ɵ	ɞ	ɵ	ɔ	
higher-low (E)	ɛ	ɐ	ɐ	ʌ	ʌ		œ	œ	ɞ	ɞ	ɔ	} OPEN
low (F)	æ	ʌ	a	ɑ	ɑ		ɶ	Œ	ɐ	ɒ	ɒ	
	0	1	2	3	4		5	6	7	8	9	
	unrounded						*rounded*					

PALATOGRAMS

i, i̥, ʏ   ı̧, î̥, y   ɨ, ɨ̥, ʉ   ɯ, ɯ̥, ɥ   ɯ, ɯ̥, u

ɪ, ɪ̥, ɥ   ɩ, ɩ̥, ʏ   ɨ, ɨ̥, ʊ̈   ɯ, ɯ̥, ɷ   ʟ, ʟ̥, ʊ

e, e̦, ø   ə, ə̦, ø   ə, ə̦, ɵ   ɤ, ɤ̥, ɵ   ɤ, ɤ̥, o

ɛ, ɛ̦, ɶ   ɜ, ɜ̦, ɵ   ɜ, ɜ̦, ɞ   ʌ, ʌ̦, ɞ   ʌ, ʌ̦, ɔ

ɛ, ɛ̧, œ   ɐ, ɐ̧, œ   ɐ, ɐ̧, ɞ   ʌ, ʌ̧, ɞ   ʌ, ʌ̧, ɔ

æ, æ̧, ɶ   ʌ, ʌ̧, Œ   a, a̧, ɐ   ɑ, ɑ̧, ɒ   ɑ, ɑ̧, ɒ

The Germanic languages have quite complex vowel inventories, due to the large number of elements and mainly because vowel length is phonemic. This is true especially in comparison with the vowel inventories of Romance languages – and even more so with a few (relatively) exotic ones, like Arabic or Japanese).

Therefore, it is not useless to have a more general outlook of how vocoids are produced, which is going to prove particularly useful when dealing with peculiar, marginal, or local pronunciations.

5.4. For vocoids, voice is the normal type, so much so because voicelessness is considered to be a 'marked' rare characteristic for vowels.

Some of all the vocoids shown are much more used than some others. However, it is better to show all of them.

5.5. In order to facilitate the necessary comparisons, which are an essential part of the *Natural Phonetics & Tonetics Method*, fig 5.6 shows the monophthongs and diphthongs of the neutral accents of British and American English.

They are presented in a simplified way, without their taxophones (but one can find all of them in our *English Pronunciation & Accents*). Note that the three white markers (in fig 5.6) stand for *unstressed* vocoids.

fig 5.3. Orograms of unrounded (or spread, or normal) vocoids.

fig 5.4. Orograms of rounded vocoids.

ʏ	y	ʉ	ʉ	u
ʮ	ʏ	ʉ	ɵ	ʊ
ø	ø	ɵ	ɵ	o
ɞ	ɞ	ɞ	ɔ	ɔ
ɶ	œ	ɞ	ɵ	ɔ
ɶ	œ	ɒ	ɒ	ɒ

fig 5.5. Comparisons between vocoid lip positions (including different kinds of *rounding*).

spread	neutral (or normal)	half--round(ed)	vertically rounded	round(ed)
i	į ɨ ɯ (ɯ)	(į ɨ̧ ɯ̧)	ʏ (ʉ μ)	y (ʉ μ) u
ɪ	ɪ ɨ ɯ (ɯ)	(ɪ̧ ɨ̧ ɯ̧)	ʮ (ʉ ω)	ʏ (ʉ ω) ʊ
e	ə ɘ ɤ (ɤ)	(ȩ ɘ̧ ɤ̧)	(ø ɵ ω)	ø (ɵ ω) o
ɛ	ɘ ɜ ɤ (ɤ)	(ɛ̧ ɜ̧ ɤ̧)	(ɞ ɵ ω)	ɵ (ɵ ω) ɔ
ɛ	ʌ ɐ ʌ ɐ	(ɛ̧ ɐ̧ ʌ̧)	(œ ɞ ə)	ɔ (ɵ œ ɞ)
æ	ʌ ɑ ɑ ɑ	(æ̧ ɑ̧ ɑ̧)	(ɶ ɑ ɒ)	ɒ (ɑ ɒ) ɒ
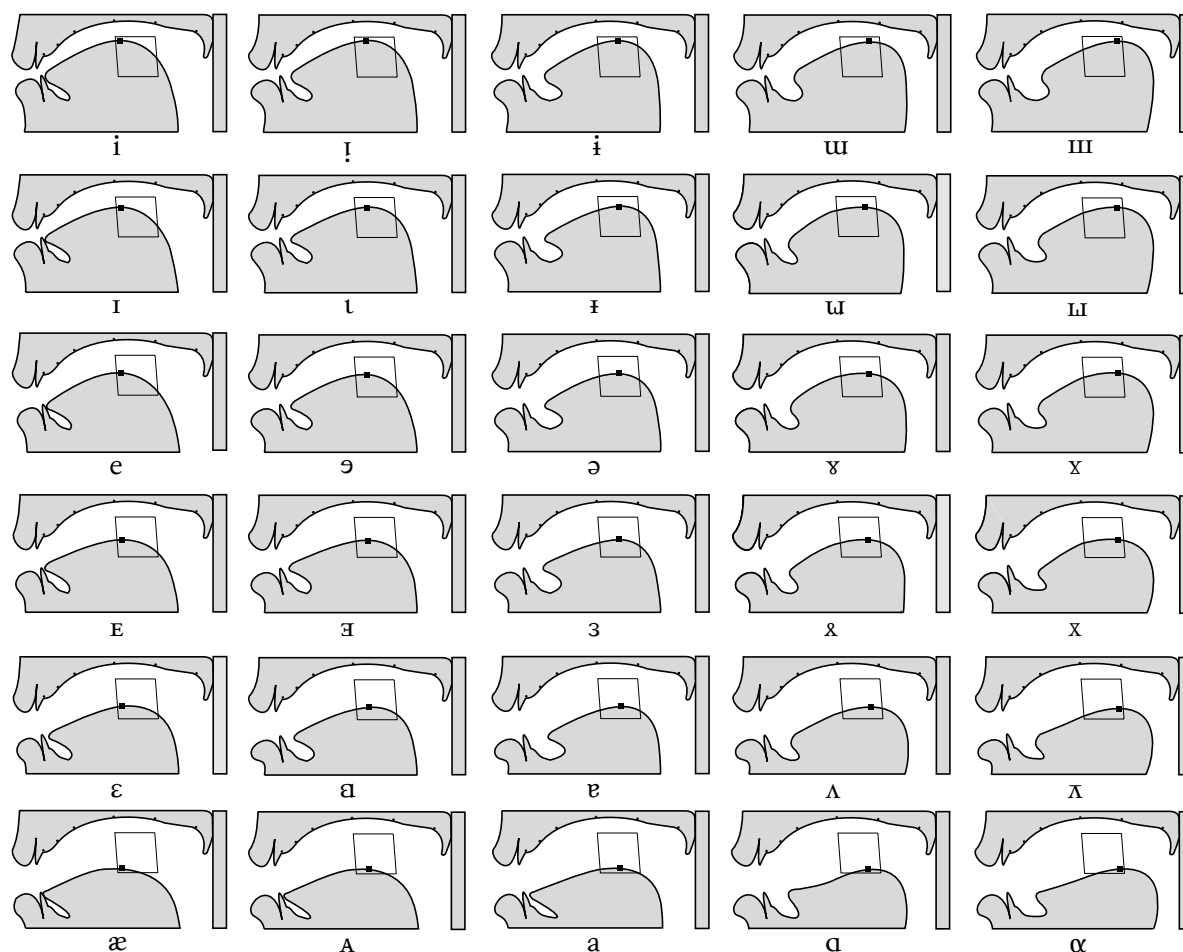
fig 5.6. The fundamental realizations of the neutral accents of British and American English.
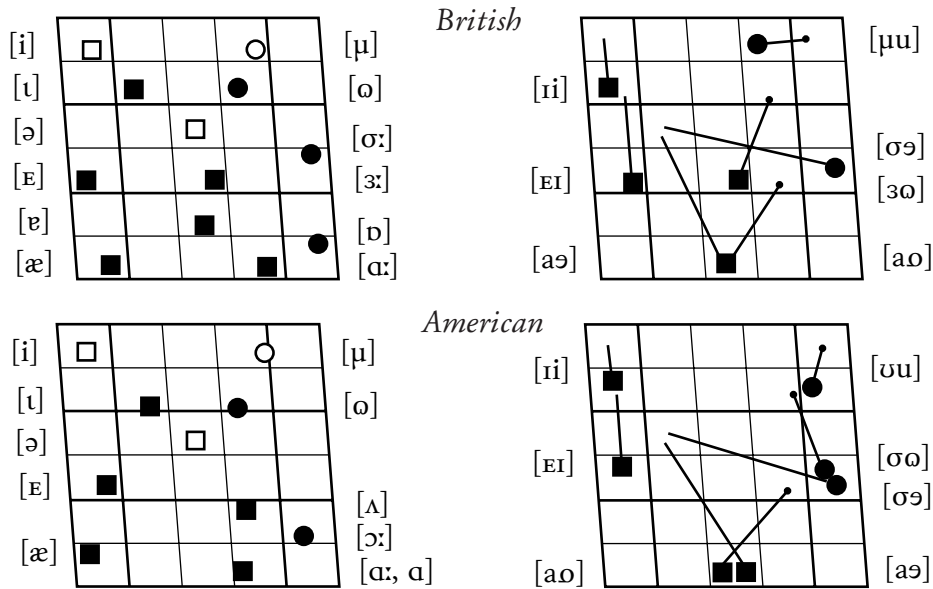
fig 5.7. The monophthongs of international Spanish, in stressed syllables.
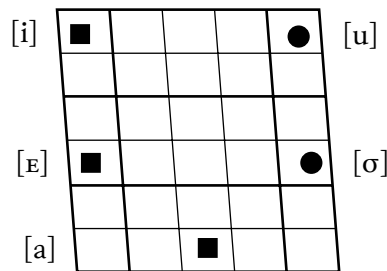
5.6. Just to get a more general view of the use of vocograms, *fig* 5.7 shows the vocogram of a language with a remarkably simpler vowel inventory, such as Spanish, with only five monophthongs in stressed syllables – and diphthongs, combining some of the vowels with /-i, -u/. Of course, sequences as /ja, wa/ are no 'diphthongs' at all, being just the simple combination of a consonant with a vowel (not unlike /na, pa, sa, la/)!

5.7. Portuguese has some nasalized vocoids (although we can *not* possibly consider them to be true nasalized *phonemes*, as unwisely they still are too often), as we will see soon. It is very important to know how *nasalized vowels* are produced and distinguished from plain oral ones, and from seminasalized vowels, as well.

In a general way, by using the four extreme vocoids in the vocogram, *fig* 5.8 shows the mechanism to obtain nasalized vocoids starting from oral vocoids, by simply lowering the velum. So, let us compare carefully the first, second, and third rows, looking at the positions of the velum, respectively for oral, seminasalized, and (fully) nasalized vocoids.

fig 5.8. The four extreme vocoids in the vocogram: *oral, seminasalized* and *nasalized*.
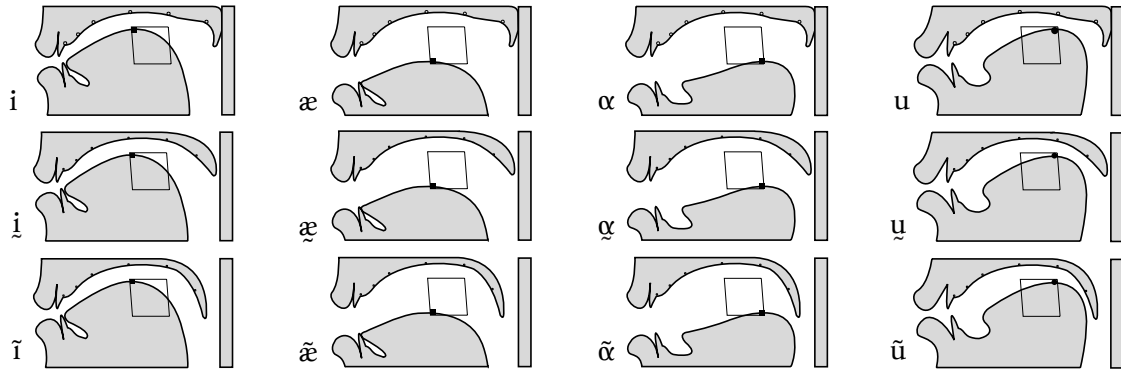
The vowels of international Portuguese

5.8. International Portuguese pronunciation features *eight* vowel phonemes (as shown in *fig* 5.9.1.1-4): /i, e, ɛ, a, ɐ, ɔ, o, u/ realized as the following *ten* vocoids: [i, e, ᴇ, ɛ, a, ɐ, ɔ, σ, o, u], which occur either stressed or unstressed (first vocogram). But notice that both unstressed and destressed (*ie* when deprived of their strong stress) /ɛ, ɔ/ are realized closer, [ᴇ, σ]. These symbols are also needed for stressed nasalized /eN, oN/ [ẽN, õN]. Afterwards, we will explain the use of /N/ [N] (*ie* nasal consonantal elements).

Portuguese also has a number of diphthongs, which are usually formed by the juxtaposition of the usual vocoids (just seen) [i, u], all representing the corresponding phonemes, as shown in the second and third vocograms in *fig* 5.9.1.4. Thus, this is no problem, while the diphthongs of English (or German) are not biphonemic (by joining two existing vowels), but monophonemic.

International English has: /ii, ᴇɪ, aᴇ, aσ, σᴇ, σω, uu/, realized exactly as [ii, ᴇɪ, aᴇ, aσ, σᴇ, σω, uu], but neutral American (given first when different) and British En-

fig 5.9.1.1. International Portuguese vowels: orograms.
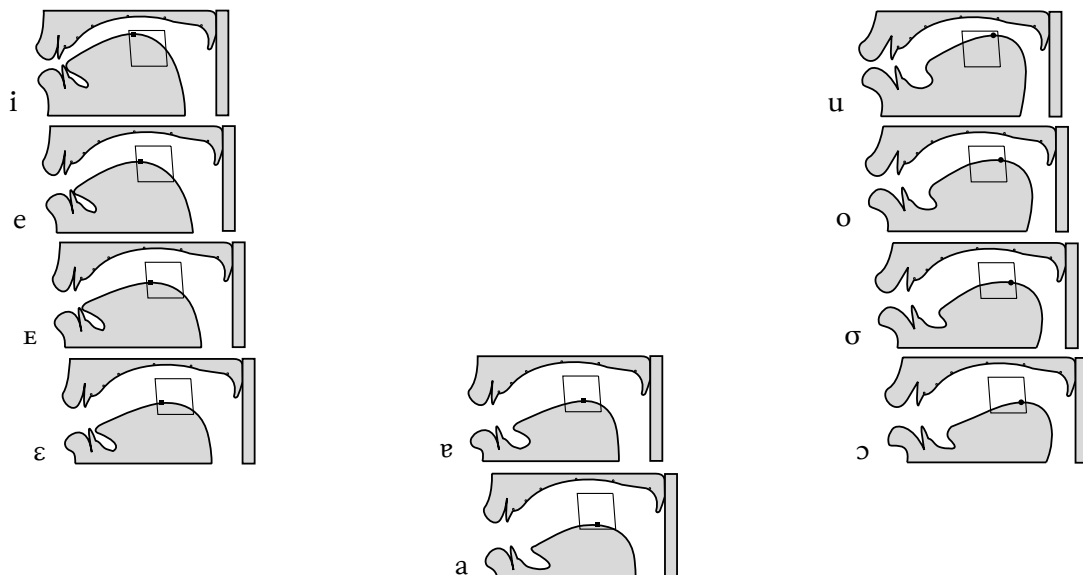
glish have [ɪi, ɛɪ, aɘ, ɔɘ, aʊ, ɔɷ/ɜɷ, ʊu/ɰu]. They have to be considered monophone-mic because they vary incredibly in different (native) accents (cf our *English Pronunciation & Accents*). Just to give a few examples, let us consider some typical English regional accents (choosing only one possibility for each) for /ii, ɛɪ, aɛ, aʊ, ɔɛ, ɔɷ, uu/: London [əɪ, ʌɘ, ɒɪ, ɛɤ, ɐʊ, ɔɪ, əɰ], Scotland [ii, ee, aɪ/ɐi, ʌɰ, ɔi, oo, ɰɰ].

5.9. We will, now, see some examples for all (international) Portuguese vowel phonemes: *rico* ['riˑku], *sim* ['sĩŋ], *medo* ['meˑdu], *lentamente* [ˌlẽnta'mẽnti], *pedra-pomes* [ˌpɛdɾa'pɔˑmis], *seta* ['sɛˑta], *secar* [se'kaɾ], *casa* ['kaˑza], *banana* [ba'nɐna], *sambando* [sẽm'bẽndu], *copo* ['kɔˑpu], *corta-bolsas* [ˌkɔrta'boɫsas], *confronto* [kõŋ-'frõntu], *moço* ['moˑsu], *luta* ['luˑta], *mundo* ['mũndu].

As already said, some examples show the occurrence of [ɛ, ɔ] (for unstressed, or rather, destressed /ɛ, ɔ/), and of stressed [ẽN#, õN#] (for /eN#, oN#/).

For the diphthongs (keeping in mind that, also in unstressed syllable, /ei, ai, au,

fig 5.9.1.2. International Portuguese vowels: labiograms.
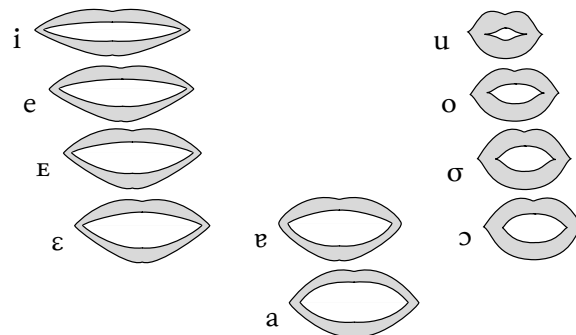
fig 5.9.1.3. International Portuguese vowels: palatograms.
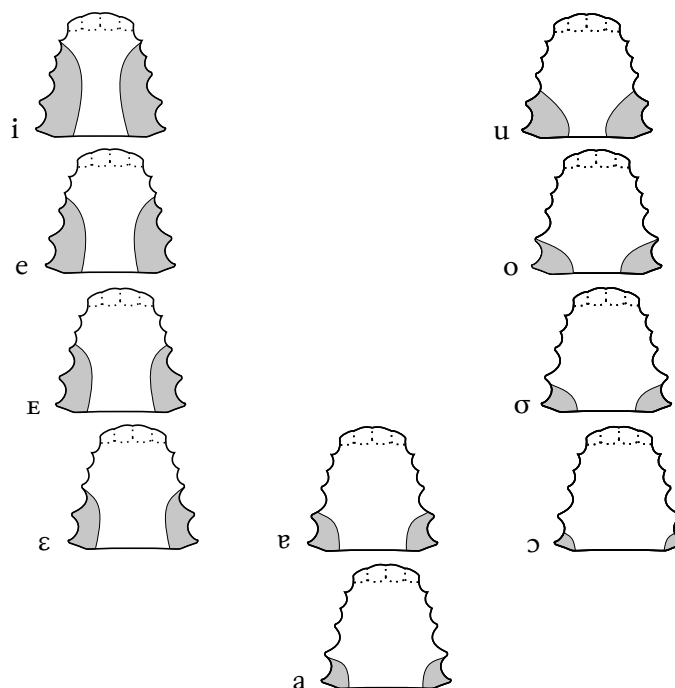
fig 5.9.1.4. International Portuguese vowels: vocograms.
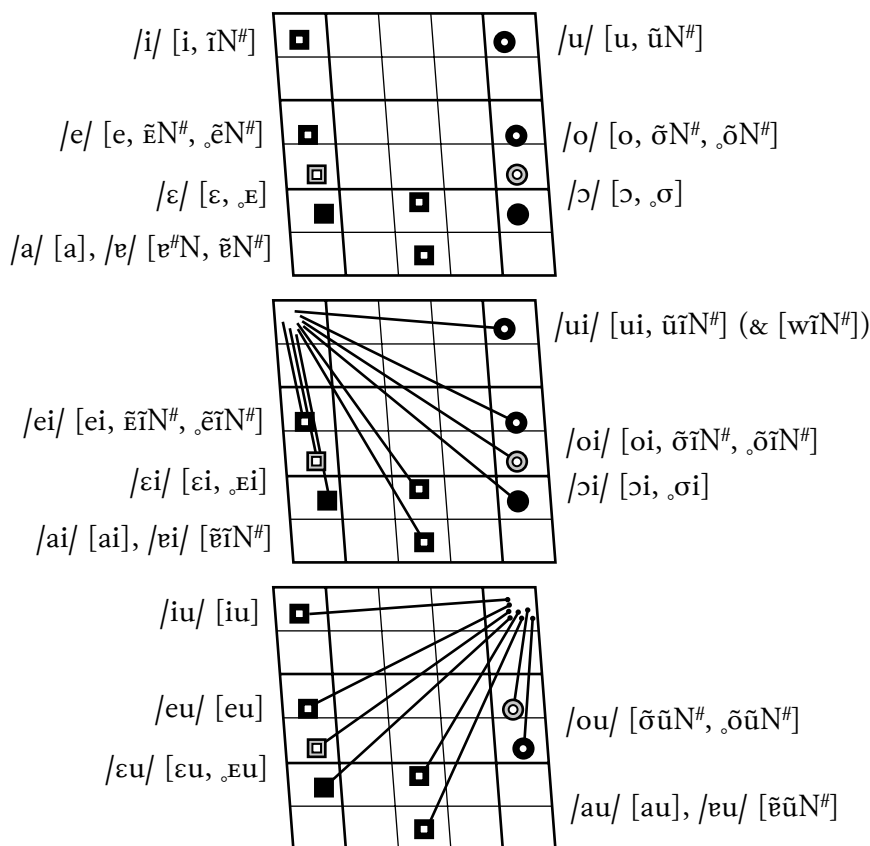
oi/ are not reduced, not even in Lusitanian), we have: *riu* ['riu], *reis* ['reis], *reinar* [rei'naɾ], *reizitos* [ʀɛi'ziˑtus], *réis* ['ʀɛis], *seu* ['seu], *veuzinho* [vɛu'ziˑɲu], *céu* ['sɛu], *pai* ['pai], *gaivota* [gai'vɔˑta], *pau* ['pau], *aumento* [au'mɛ̃ntu], *sois* ['sɔis], *heroicamente* [i,ʀɔika'mɛ̃nti], *sois* ['sois], *afoiteza* [,afoi'teˑza], *fui* ['fui].

It is clear that /ei, ɛi/ are two different diphthongs (*ei, éi*), even in traditional Lusitanian pronunciation. Let us also notice *vou* ['vo], which in mediatic accents and many regional ones is ['vou, 'voʊ], thus '/oʊ/'.

For the nasalized diphthtongs: *viagem* ['vjaˑʒẽĩŋ], *bem* ['bẽĩŋ], *mãe* ['mẽĩŋ], *mãe-zinha* [,mẽĩŋ'ziˑɲa], *pão* ['pẽũŋ], *moram* ['mɔˑʀẽũŋ], *leões* ['ljõĩŋs], *ladrõezinhos* [la-,dɾõĩŋ'ziˑɲus], *bom* ['bõũŋ], *bom dia* [bõũn'dia], *muito* ['mũĩntu] (& ['mwĩntu]). The examples given above clearly show that also /eiN, ɐiN/ are two different diphthongs, in spite of previous *pre-*^canIPA 'descriptions' (even in traditional Lusitanian pronunciation, although close, but certainly not alike).

5.10. *fig* 5.9.2 shows further (morphonological) diphthongs, which often occur word-finally, when grammeme endings are added (also as plural, with *-s*). They are *six* with a second element /a/: [ia, ea, ɛa, aa, oa, ua] phonically stressed (also [aa] even unstressed) and [uu, ou]. Here are some examples, for these last diphthongs, too: *teria* [te'ria], *lua* ['lua], *ruas* ['ruas], *fruo* ['fruu], *moo* ['mou], *há-a* ['aa], *haja-a* ['aʒaa], *sou-a* ['soa], *é-a* ['ɛa], *sê-a* ['sea]. The frequent *ao(s)* grammemes are also shown in their most recommendable forms, even in international Portuguese: [ɐʊ(s), ʊ(s)].

fig 5.9.2. International Portuguese: morphonological diphthongs (including *ao(s)* [ɐσ(s), σ(s)], *cf* § 9.9).

/ia(s)#/ [ia(s)]   /uu#/ [uu]
                    /ua(s)#/ [ua(s)]

/ea(s)#/ [ea(s)]   /ou(s)#/ [ou(s)]
                    /oa(s)#/ [oa(s)]

/ɛa(s)#/ [ɛa(s)]   /ɐu(s)#/ [ɐσ(s), σ(s)] *ao(s)*

                    /aa(s)#/ [aa(s)]
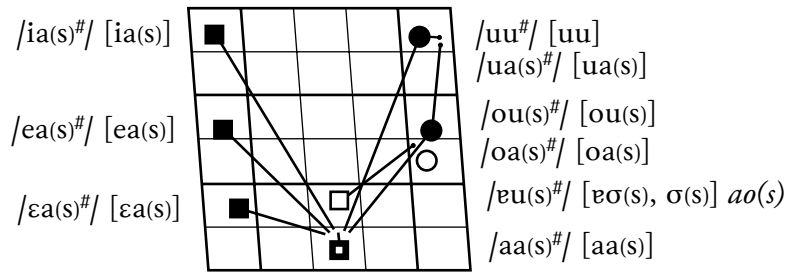
5.11. In addition, *fig* 5.9.3 shows some triphthongs and tetraphthongs (or double diphthongs), either oral or nasalized. The last two vocograms show *false triphthongs*, which must not be confused with the true diphthong given in the vocograms right above. As a matter of fact, those are sequences of consonants and diph-

fig 5.9.3. International Portuguese vowels: triphthongs and tetraphthongs.

[ɛ̃ẽ̃ĩŋ]   [ɛ̃ĩẽ̃ĩŋ]

[õẽ̃ĩŋ]   [õ̃ĩẽ̃ĩŋ]

['iei, 'ĩẽ̃ĩŋ]   ['ĩẽ̃ũ̃ŋ]

['jei, 'jẽ̃ĩŋ]   ['jẽ̃ũ̃ŋ]
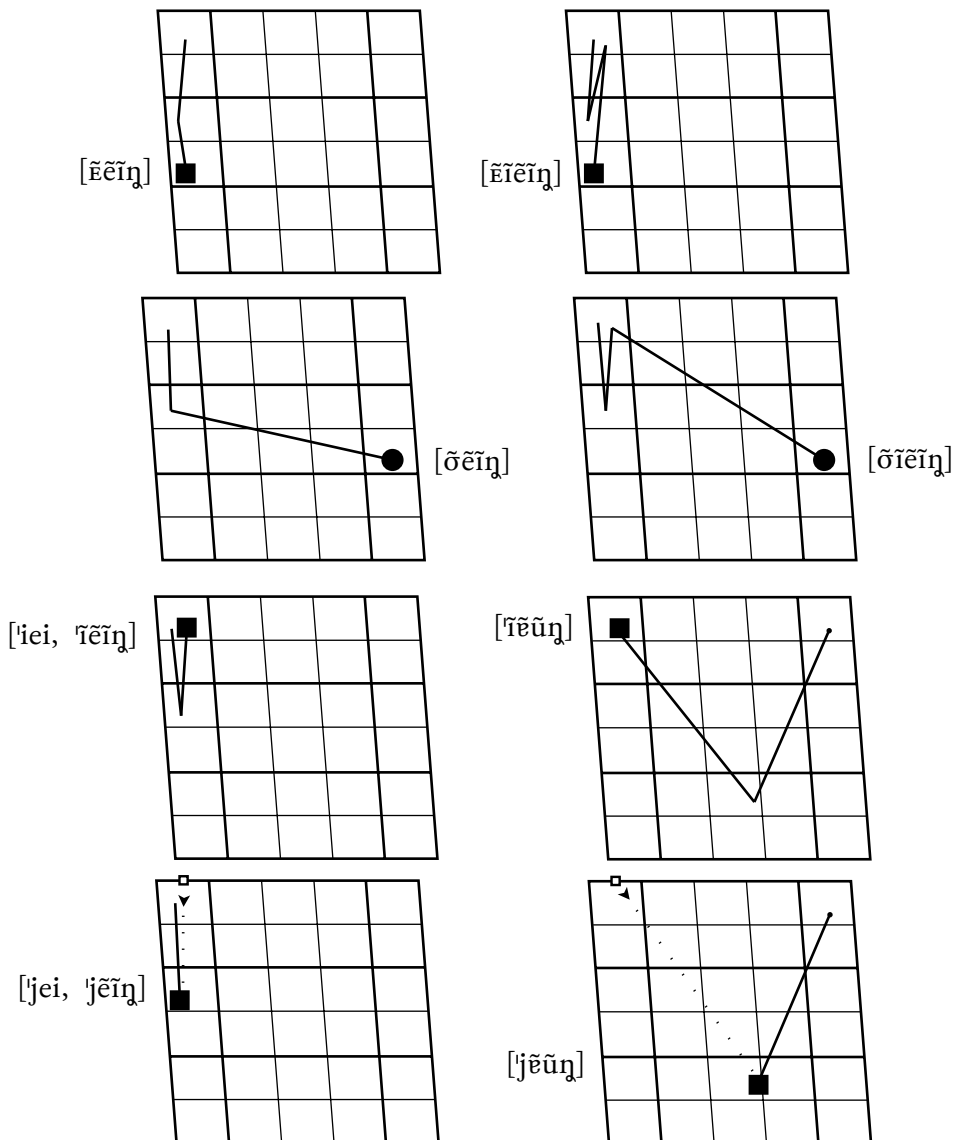
thongs, as for instance [ˈjei]. Against true science, grammars (and phonologists and unexperienced phoneticians), owing to harmful influence of spelling, keep on considering them as true triphthongs, as, legitimately, [ˈiei] is. But there is an obvious difference, either listening to them or looking at a good transcription (sadly, more and more difficult to find)!

Let us consider some further examples. Starting with /ɐ/ [ˈɐᴺN, ˈɐ̃Nᵈ, ˌɐ̃Nᵈ]: *bananas* [baˈnɐnas], *cantando* [kɐ̃ɾˈtɐ̃ɳdu], also *mana* [ˈmɐna], *mamã* [maˈmɐ̃ɳ], *mãe* [ˈmɐ̃ĩɳ], *mão* [ˈmɐ̃ũɳ].

Further examples: *a batata* [ˌabaˈtaˑta], *as batatas* [ˌazbaˈtaˑtas], also in [aˈV]: *sair* [saˈiɾ], including the [ai, au] diphthongs, phonically stressed or not: *baixo* [ˈbaiʃu], *baixar* [baiˈʃaɾ], *causa* [ˈkauza], *causar* [kauˈzaɾ].

5.12. The use of *transcriptions* is fundamental for the *natural phonetics method*. Once people succeed in overcoming initial perplexity (and, perhaps, mistrust), it is ovbious that it is not an additional useless toil. On the contrary, it allows to free onself from the noxious dependence on *spelling*, and to clearly separate and distinguish the two levels. Obviously, the fundamental (and truly linguistic) thing is the phonic one, although a misleading feeling is still prevailing that the genuine language is the one ambiguously indicated by (artificial) spelling. After all, do not illiterate people speak, or do not they?

It is also appropriate to clearly indicate the length of Portuguese vowels, not to inadequately assign them foreign peculiarities. For instance, we have [ˈCVˑCV]: *seda pura* [ˈseˑda ˈpuˑra], or [ˈCVCCV]: *tanto tempo* [ˈtɐ̃ɳtu ˈtɐ̃mpu] (not more nor less than that). Also: *festival* [ˌfestiˈvaɫ], *sim* [ˈsĩɳ], *amém* [aˈmɐ̃ĩɳ, aˈmɛn], *bis* [ˈbis], *dizer* [diˈzeɾ], *amor* [aˈmoɾ].

Metaphony

5.13. The Portuguese vowel system has an important phenomenon that we have to consider well, in spite, and just because, of its upsetting influence on pronunciation: *metaphony*. It concerns the exact timbre of stressed vowels depending on the kind of vowels which appear in the (grammatical) endings of words.

It is a diachronic phenomenon, which dates back to the archaic stage of Portuguese, due to the influence of Latin endings. Of course, native speakers (both Brazilian and Lusitanian) use it automatically and rather homogeneously, although its application is defective and by categories. It is further complicated by not few exceptions. All this, also in neutral pronunciation, while, in mediatic (and regional) accents, things are even more complicated and with oscillating timbres.

Those foreigners who become aware of it find it to be a major learning obstacle for Portuguese pronunciation. It would be fundamental to be able to rely on a good (and complete) pronunciation dictionary, with phonemic transcription and with clear metaphonic indications.

Metaphony also has an effect on /e, o/ which become /i, u/, as spelling shows.

So, this is no real problem when reading, although it is not always easy for foreigners to 'guess' its morphological changes: *dormir* 'to sleep' *ⁱ*[dorˈmiɾ] (*ᵇ*[doɹˈmiɹ] *ˡ*[duɾˈmiɾ]), *durmo* 'I sleep' *ⁱ*[ˈduɾmu] (*ˡ*[ˈduɾmu] *ᵇ*[ˈduɹmu]), *dorme* 'he/she/it sleeps' *ⁱ*[ˈdɔɾmi] (*ᵇ*[ˈdɔɹmi] *ˡ*[ˈdɔɾmɨ]).

5.14. By simplifying a little our exposition, we can say that metaphony applies differently to *verbs* and *nouns* (ie substantives and adjectives, inclunding certain personal pronouns – in other words *non-verbs*). Furthermore, it is necessary to distinguish between *e* and *o*.

For *non-verbs* with a stressed *e*, the endings that make timbres close are *-o, os* /-u, -us/: *capelo(s)* [kaˈpeˑlu(s)], but *capela(s)* [kaˈpɛˑla(s)].

However, we must not expect that all feminine forms have /ɛ/; indeed, very often, it is not so: *zebra* [ˈzeˑbɾa], *seda* [ˈseˑda]. On the other hand, not every masculine forms have /e/: *belo* [ˈbɛˑlu], against *negro* [ˈneˑgɾu]. All these also in their plural and feminine forms.

5.15. For *non-verbs* with stressed *o*, only *-o* /-u/ (m. sing.) can make timbres close: *porco* [ˈpoɾku], while we find: *porcos* [ˈpɔɾkus] and also *porca(s)*: [ˈpɔɾka(s)]. In addition: *novo* [ˈnoˑvu], but *novos* [ˈnɔˑvus] and *nova(s)* [ˈnɔˑva(s)], *formoso* [foɾˈmoˑzu], but *formosos* [foɾˈmɔˑzus] and *formosa(s)* [foɾˈmɔˑza(s)] – and like this for all adjectives in *-oso*. However, we have: *esposo(s)* [isˈpoˑzu(s)] and *esposa(s)* [isˈpoˑza(s)]; but *esposos* [isˈpɔˑzus] for the 'couple'!

Furthermore, we also find several cases with no variation at all, as: *adobo(s)* [aˈdoˑbu(s)], *gordo(s), -a(s)* [ˈgoɾdu(s), -a(s)]. Naturally, there are also cases with /ɔ/: *modo(s)* [ˈmɔˑdu(s)], *foco(s)* [ˈfɔˑku(s)]; also feminine forms with /o/: *gota(s)* [ˈgoˑta(s)], *força(s)* [ˈfoɾsa(s)].

5.16. For *verbs*, the endings that make timbres close are: *-o, -a, -as, -am* /-u, -a, -as, -auŋ/ (for forms with stress on their stem, belonging to the second conjugation, but *not* to the first!): *devo* [ˈdeˑvu, -a, -as, -ẽũŋ], *movo* [ˈmoˑvu, -a, -as, -ẽũŋ]…

In checked syllables ending in a nasal consonant, the effect of mataphony is neutralized: *vendo* [ˈvẽndu], *vende* [ˈvẽndi]. However, in free syllables, in international and Lusitanian Portuguese, the timbres are distinct, but it is not so in Brazilian, because of nasalization: *temo* *ⁱ/ˡ*[ˈteˑmu] *ᵇ*[ˈtẽˑmu], *teme* *ⁱ*[ˈtɛˑmi] *ᵇ*[ˈtẽˑmi] *ˡ*[ˈtɛˑmɨ], *como* *ⁱ/ˡ*[ˈkoˑmu] *ᵇ*[ˈkõˑmu], *come* *ⁱ*[ˈkɔˑmi] *ᵇ*[ˈkõˑmi] *ˡ*[ˈkɔˑmɨ].

For the same reason, we also find this very pattern with nouns: *sénior* (*ᵇsê-*) *ⁱ*[ˈsɛˑnjoɾ] *ᵇ*[ˈsẽˑnjoɹ] *ˡ*[ˈsɛˑnjoɾ], *ⁱ*[ˈkɔˑmiku] *ᵇ*[ˈkõˑmiku] *ˡ*[ˈkɔˑmik̬u] *cómico* (*ᵇcô-*). Of course, this fact has consequences on (always overestimated) spelling.

Lastly, we have *personal pronouns*: *ele(s) ela(s)* *ⁱ*[ˈeˑli(s), ˈɛˑla(s)] *ᵇ*[ˈeˑɫi(s), ˈɛˑɫa(s)] *ˡ*[-ɫɨ, -ɫɨʃ, -ɫɜ(ʃ)], *este(s), esta(s)* *ⁱ*[ˈesti(s), ˈɛsta(s)] *ᵇ*[ˈestʃi(s), ˈɛsta(s)] *ˡ*[ˈeʃtɨ, -ɨʃ, ˈɛʃtɜ(ʃ)]. The same for: *esse(s), essa(s)*, and *aquele(s), aquela(s)* (also with prefixed *d-* or *n-*). For further indications, and exceptions, good grammars (especially *not* recent ones) answer rather exhaustively.

Good Portuguese verb books indicate the timbres of stressed vowels (although

sometimes only in footnotes, instead of next to their forms – but, without a systematic treatise, some doubts may remain).

5.17. Of course, in *international* pronunciation, and even more in *neutral* Brazilian and Lusitanian pronunciations, /e, ɛ; o, ɔ/ are fairly systematic in their lexical distribution, including metaphony alternations.

However, somehow independently from their exact regional accents, different native speakers –more than by pure chance– can certainly use different timbres both for simple words and for the use of metaphonic rules.

This seems to vary more in more periferal areas, often independently from the speakers' degree of education, but less so from their particular geographical origin.

In *mediatic* accents, this influence can certainly be less obvious, but not fully absent.

However, the situation of incomplete respect of the timbre distribution of /e, ɛ; o, ɔ/ is more similar to what happens in southern Italian regional accents, than in northern Italian accents. In fact, these last ones –in spite of similar basic koiné peculiarities– are more subject to individual 'eccentricities', even within members of single families, including twins.

It is true that this apparent situation of clear instability can make the task of foreign speakers less difficult and less necessary, somehow allowing them to use the timbres they like better or that they can actually use. However, good Portuguese has its own rules and choices, which should be respected as far as possible.

9.
Brazilian vowels

9.1. In Portuguese, the difference between *neutral* and *mediatic* pronunciations is not very considerable, either within Brazil or Portugal. So, we certainly have to deal with these two nations separately, but not for what their neutral and mediatic accents are concerned. However, of course, we will use separate figures, which will succeed in clearly showing their actual differences well, even if sometimes they may be very slight. Indeed, normally, also specialistic descriptions of Portuguese pronunciation are not at all aware of their existence.

Neutral Brazilian pronunciation

9.2. *fig* 9.1 shows the vocalic realizations *neutral* Brazilian Portuguese, including diphthongs, /Vi, Vu/. It is interesting to observe that, by comparing *fig* 9.1 and *fig* 5.9.1.4, there are very few differences.

We find eight phonemes, /i, e, ɛ, a, ɐ, ɔ, o, u/ [i, e, ᴇ, ɛ, a, ɐ, ɔ, σ, o, u], with small differences in their taxophones, as, for instance, the addition of ᵇ[ɑu, ɑɫ#, ɑɫC] and [ĩN; ₒẽN, 'ᴇ̃N; ɐ̃N; 'õN, ₒõN; ũN] for /iN, eN, ɐN, oN, uN/, that is, for /VN/ sequences, either in checked syllables (/VN#CV/) or in free ones (/V#NV/).

Here are our first examples: *difícil* ⁱ[diˈfiˑsiɟ] ᵇ[ʤiˈfiˑsiɫ], *ele* ⁱ[ˈeˑli] ᵇ[ˈeˑɫi], *ela* ⁱ[ˈɛˑla] ᵇ[ˈɛˑɫa], *batata* ⁱ/ᵇ[baˈtɐˑta], *nova* ⁱ/ᵇ[ˈnɔˑva], *novo* ⁱ/ᵇ[ˈnoˑvu], *chuva* ⁱ[ˈʃuˑva] ᵇ[ˈʃuˑva]. However, it is important to think over [ɑ]: *pau* ⁱ[ˈpau] ᵇ[ˈpɑu], *audaz* ⁱ[auˈdas] ᵇ[ɑuˈdas] (ˡ[ɑuˈδaʃ]), *mal* ⁱ[ˈmaɟ] ᵇ[ˈmɑɫ] (ˡ[ˈmɑɫ]), *altura* ⁱ[aɟˈtuˑra] ᵇ[ɑɫˈtuˑra] (ˡ[ɑ̥ˈtuˑɾɜ, -ɐ‖]).

Let us remeber that it is also important to distinguish cases like the following (which may be either metaphonetic or not): *seca* ⁱ/ᵇ[ˈseˑka] 'dry' (f. adj.) and ⁱ/ᵇ[ˈsɛˑka] 'dryness; tediousness', *cerco* ⁱ[ˈseɹku] ᵇ[ˈseɹku] 'circle; siege' and ⁱ[ˈsɛɹku] ᵇ[ˈsɛɹku] 'I (en)close', *lobo* ⁱ[ˈloˑbu] ᵇ[ˈɫoˑbu] 'wolf' and ⁱ[ˈlɔˑbu] ᵇ[ˈɫɔˑbu] 'lobe', *fosso* ⁱ/ᵇ[ˈfoˑsu] 'ditch' and ⁱ/ᵇ[ˈfɔˑsu] 'I dig'.

With nasalization, we have: *sim* ⁱ/ᵇ[ˈsĩŋ], *lengalenga* ⁱ[ˌlẽŋgaˈlẽŋga] ᵇ[ɫẽŋgaˈɫẽŋga], *bem* ⁱ/ᵇ[ˈbᴇ̃ĩŋ], *homem* ⁱ[ˈɔˑmᴇ̃ĩŋ] ᵇ[ˈõˑmᴇ̃ĩŋ], *amanhã* ⁱ[ˌamaˈɲᴇ̃ŋ] ᵇ[ˌᴇ̃mᴇ̃ˈɲᴇ̃ŋ], *bombom* ⁱ/ᵇ[bõmˈbõũŋ], *honra* ⁱ[ˈõŋra] ᵇ[ˈõŋɹa], *alguns* ⁱ[aɟˈgũŋs] ᵇ[ɑɫˈgũŋs]; *caminho* ⁱ[kaˈmiɲu] ᵇ[kẽˈmĩˑɲu], *fenómeno* (ᵇ-*ôme*-) ⁱ[feˈnɔˑmenu] ᵇ[fẽˈnõˑmẽnu], *telefonema* ⁱ[ˌtelefoˈneˑma] ᵇ[ˌteɫefõˈnᴇ̃ˑma], *único* ⁱ[ˈuˑniku] ᵇ[ˈũˑniku].

fig 9.1. Brazilian vowels: *neutral* vowels and diphthongs.
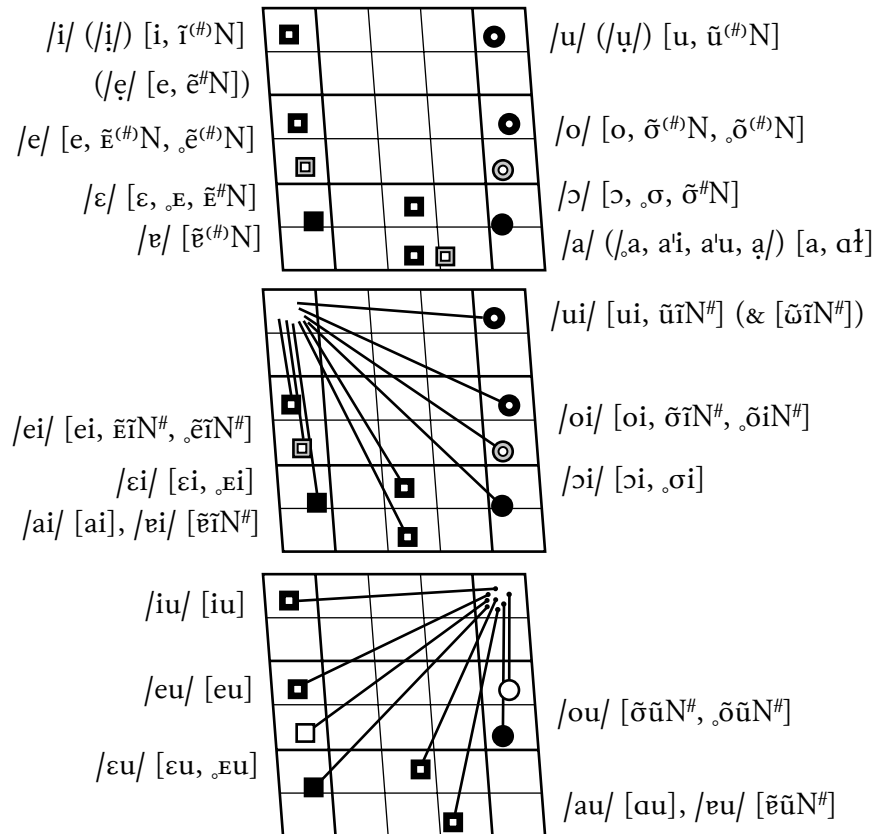
9.3. Nasalization slightly changes certain timbres in comparison with the oral ones: in particular, stressed /eN#, oN#/: [ˈẽN, ˌẽN; ˈõN, ˌõN].

As in international pronunciation, in word-final position, we find real diphthongs for what (too often and too hastily) is simply transcribed as '/ẽ, õ/', *i/b*[ˈɛ̃ĩŋ, ˌẽĩŋ; ˈõũŋ, ˌõũŋ]. Instead, in the same position, /ɐ̃ŋ#/ [ɐ̃ŋ] is in phonemic opposition with /ɐ̃uŋ#/ [ɐ̃ũŋ]: *órfã i*[ˈɔɾfɐ̃ŋ] *b*[ˈɔʁfɐ̃ŋ], *órfão i*[ˈɔɾfɐ̃ũŋ] *b*[ˈɔʁfɐ̃ũŋ]. Afterwards, we will also see futher diphthongs, both oral and (phonetically) nasalized, too.

We must state that in Brazilian pronunciation (either *neutral* or *mediatic*) the vocoids are always clearly nasalized (also in diphthongs). This happens when the vowels are followed by a nasal consonant, either in the same syllable or not. Thus, both in checked and free syllables, and, what is more, either in stressed or unstressed syllables: *amanhã i*[ˌama̍ɲɐ̃ŋ] *b*[ˌẽmẽˈɲɐ̃ŋ], *banho i*[ˈbɐ̃ɲu] *b*[ˈbɐ̃ɲu], *fino i*[ˈfĩ·nu] *b*[ˈfĩ·nu].

Instead, in Brazilian *traditional neutral* pronunciation, nasalization only occurs in checked syllables in a nasal consonant, either stressed or not. But with the inconvenient possibility that nasalization may be present or not, in free stressed syllables followed by (heterosyllabic) /ɲ/ (besides with [ˈɐNV], but [ˌaNV], as the examples will show): *amanhã i*[ˌama̍ɲɐ̃ŋ] *tb*[ˌama̍ɲɐ̃ŋ], *banho tb*[ˈbɐ̃ɲu, ˈbɐɲu], *fino tb*[ˈfĩ·nu].

Finally, in Brazilian *mediatic* pronunciation, on the contrary, nasalization occurs not only in checked syllables with /N/ (either stressed or not), but also in stressed free syllables followed by (heterosyllabic) /N/. In this case, however, it conveniently occurs even in /ˌVɲV/ (ie in unstressed free syllables followed by /ɲ/): *amanhã* [ˌama-ˈɲɐ̃ŋ] *ᵐᵇ*[ˌamɐ̃ˈɲɐ̃ŋ, ˌama-], *banho* *ⁱ*[ˈbɐɲu] *ᵐᵇ*[ˈbɐ̃ɲu], *fino* *ᵐᵇ*[ˈfĩˑnu, ↓ˈfĩˑ-].

The vocogram in *fig* 9.2.1 corresponds to that of *fig* 5.9.2, and shows morphonological diphthongs, without real differences.

fig 9.2.1. Brazilian vowels: *neutral* morphonological diphthongs.

/ia(s)#/ [ia(s)]
/ea(s)#/ [ea(s)]
/ɛa(s)#/ [ɛa(s)]
/uu#/ [uu]
/ua(s)#/ [ua(s)]
/ou(s)#/ [ou(s)]
/oa(s)#/ [oa(s)]
/aa(s)#/ [aa(s)]
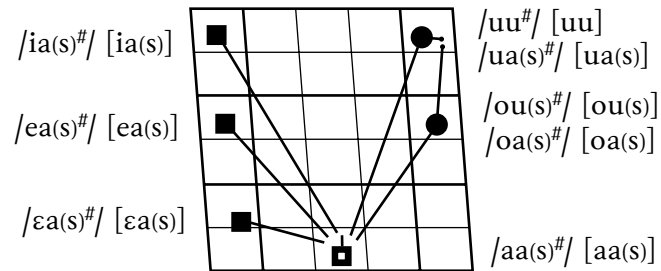
fig 9.2.2. Brazilian vowels: *neutral* morphonological diphthongs: *ao(s)* (cf § 9.9).

ao(s) /ɐu(s)/ [ˌo-, ˌσ-, ˌɐu-, ˌaσ-, ˌau-]
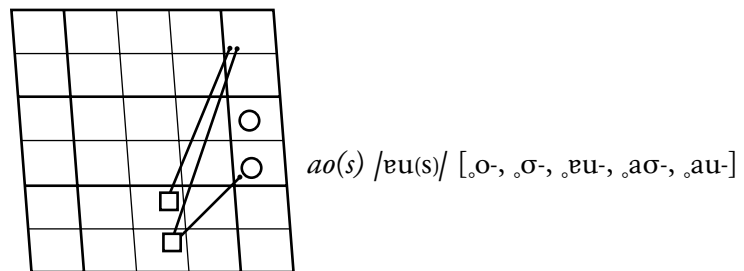
Mediatic Brazilian pronunciation

9.4. *fig* 9.3 presents the vocalic elements of *mediatic Brazilian*. By comparing it with *fig* 9.1, we can see that their main differences consist in: /ɐ/ [ɐ̞, ɐ̃ŋ], which is slightly higher and backer, but sufficiently so as to change both its box and symbol in the vocogram: *camas* [ˈkɐ̃·mɐʃ], also for /ɐuŋ/ [ɐ̃ũŋ], while it is only slightly higher for /ɐiŋ/ [ɜ̃ĩŋ]: *não* [ˈnɐ̃ũŋ], *mãe* [ˈmɜ̃ĩŋ].

Another difference, which can be seen in the second vocogram, consists in /ˌi̥(s)#/ [ɪ(ʃ)], /ˌa(s)#/ [ɐ(ʃ), ɐ‖], /ˌu(s)#/ [ʊ(ʃ)]: *oje* [ˈoˑʒɪ], *novo* [ˈnoˑvʊ], *lua* [ˈɫuɐ]. Besides, in the broadest accent, it is possible to have /i, u/ [ɪ, ʊ] in all unstressed syllables, even if with nasalization: *dividir* ↓[ˌd͡ʒɪvɪˈd͡ʒiɐ], *pintar* [pɪ̃ɳˈtaɐ], *um futuro* [ʊ̃ŋfʊˈtuˑrʊ].

9.5. The first three vocograms in *fig* 9.4, show the morphonological diphthongs, correspondent to the one in *fig* 9.2.1 (and to that in *fig* 5.9.2, too), for *-a, -as, -o, -os*, and some further combinations. The morphonological diphthongs with *-a, -as* grammemes, have /Va#, Vas#/ [Vɐ, Vɐʃ], but [Vɐ‖], if they occur before a pause (cf § 9.4). In addition, we find /Vu/ [Vʊ], since, somehow, final grammemes are interpreted as independent elements: [ˈɐuɐʃ, ˈmoʊ] *ruas, moo*.

The fourth vocogram in *fig* 9.4 shows purely phonetic (not morphonological) diphthongs, for /Vs#/, in final position (either stressed or not, with three different vocoids for the second element of the diphthong, depending on the height of the preceding

fig 9.3. Brazilian vowels: *mediatic* vowels and diphthongs.

/i/ (/i̥/) [i, ˌɪ(ʃ)#, ĩ(#)N] (↓[ˌɪ, ɪ̃(#)N])   /u/ (/u̥/) [u, ˌʊ(ʃ)#, ũ(#)N] (↓[ˌʊ, ũ(#)N])

(/e̝/ [e, ẽ#N])
/e/ [e, ˈɛ̃(#)N, ˌẽ(#)N, ↓ẽ(#)N]   /o/ [o, ˈõ(#)N, ˌõ(#)N, ↓õ(#)N]
/ɛ/ [ɛ, ˌɛ, ɛ̃#N]   /ɔ/ [ɔ, ˌɔ, ɔ̃#N]
    /ɐ/ [ɐ̃(#)N]
/a/ (/ˌa, aˈi, aˈu, ḁ/) [a, ˌɐ‖, ˌɐ(ʃ)#]

/ei/ [ei, eɪ, e, ẽĩN#, ˌẽĩN#]   /ui/ [ui, ũĩN#] (& [ũ̃ĩN#])
/ɛi/ [ɛi, ˌɛi]   /oi/ [oi, o, õĩN#, ˌõĩN#]
/ai/ [ai], /ɐi/ [ɜ̃ĩN#]   /ɔi/ [ɔi, ˌɔi]

/iu/ [iu]
/eu/ [eu]   /oṷ/ *ou* [o, oʊ, ou]
    /ou/ [õũN, ˌõũN]
/ɛu/ [ɛu, ˌɛu]   /ɐu/ [ɐ̃ũN#]
    /au/ [ɑu]
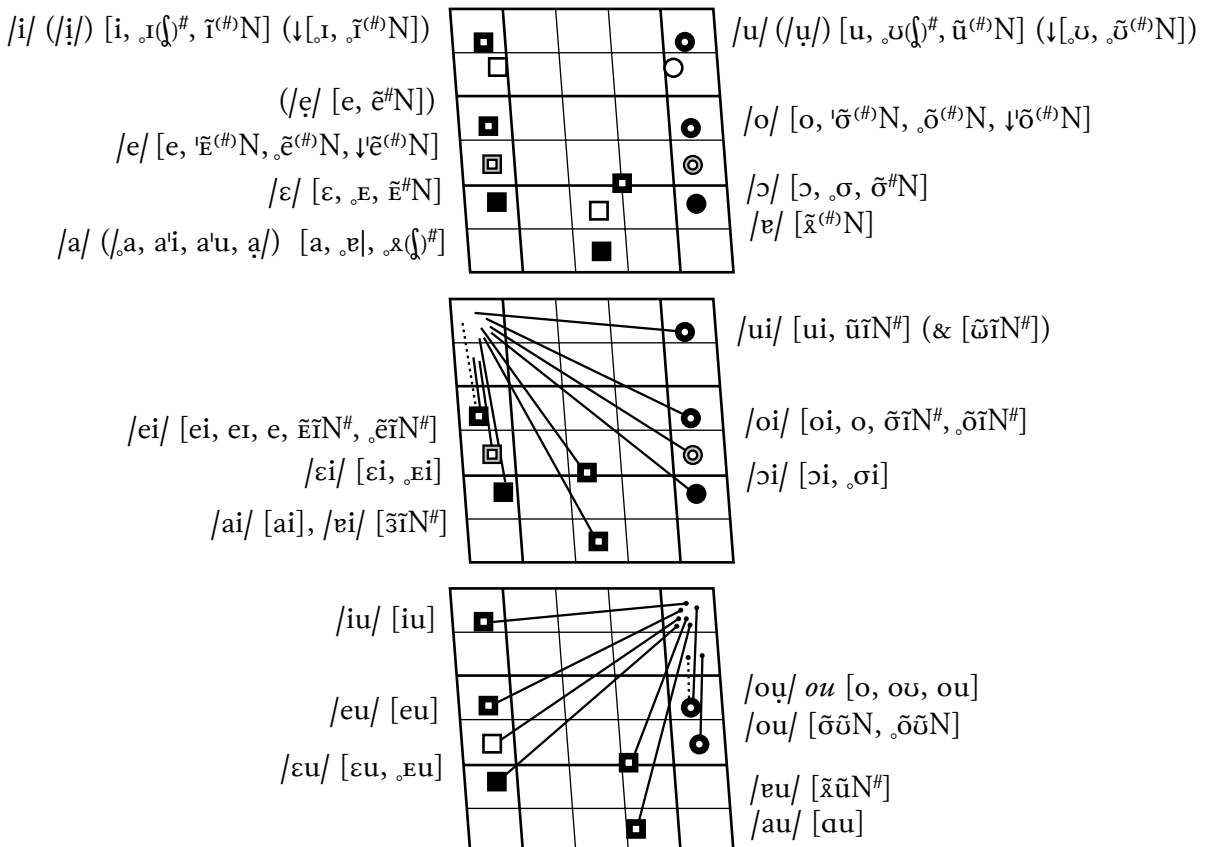
vowel (also if with nasalization) [iʧ, eʧ, uʧ], [ɛəʃ, ɛəʃ, oəʃ, oəʃ, ʁəʃ], [ɔəʃ, aəʃ]: *giz* [ˈʒiʧ], *alguns* [aɫˈgũĩŋʃ], *tons* [ˈtõũĩŋʃ], *revés* [ʁeˈvɛəʃ], *paz* [ˈpaəʃ].

However, let us notice that there are certain (considerable) differences in comparison with true phonemic diphthongs (and variants): *seis* [ˈseiʃ], [ˈseɪʃ], [↓ˈseʃ]; *pais* [ˈpaiʃ]; *dois* [ˈdoiʃ]; *azuis* [aˈzuiʃ].

fig 9.4. Brazilian vowels: *mediatic* morphonological diphthongs.
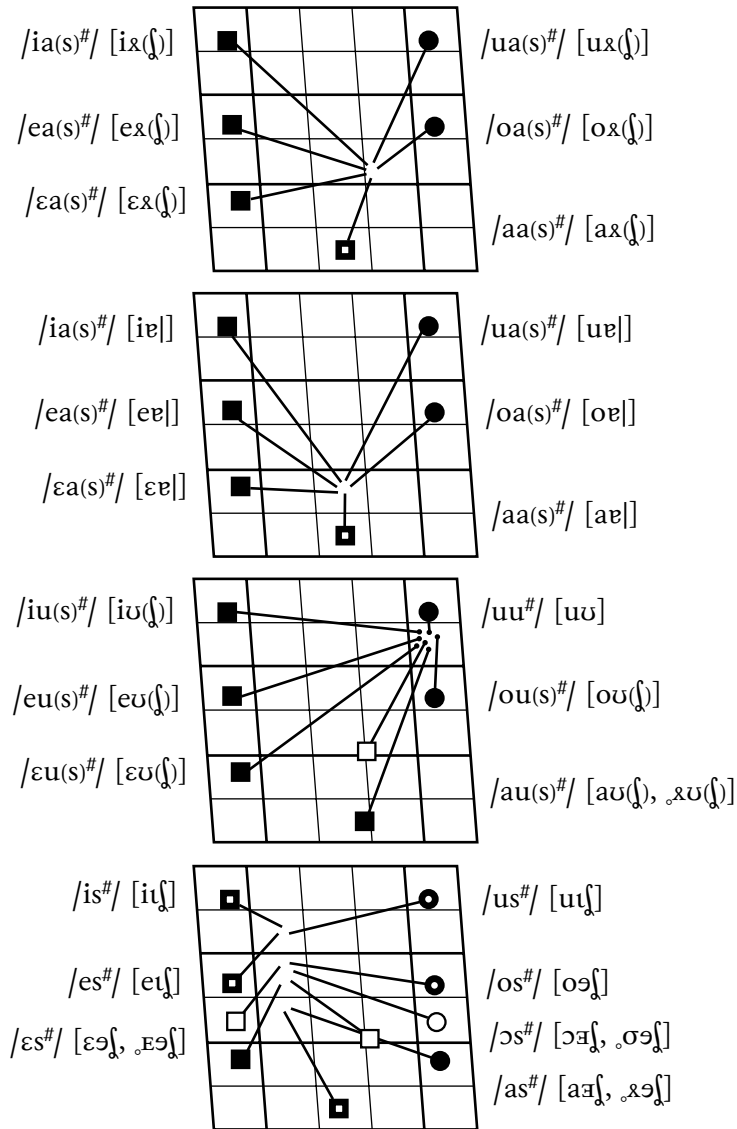
fig 9.5. Brazilian vowels: *mediatic* vocalization of /l#, lC/.
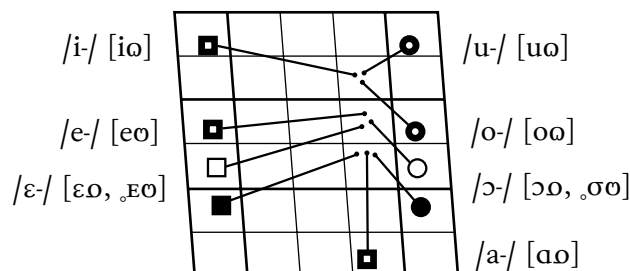
9.6. Lastly, *fig* 9.5 gives the phonetic diphthongs which are produced by the vocalization of /Vl#, VlC/, with three different vocoids, depending on the height of the vowels, [iʊ, uʊ, oʊ], [eʊ, ɛʊ, ɵʊ], [ɛʊ, aʊ, ɔʊ]: *Brasil* [braˈziʊ], *feltro* [ˈfeʊtɾu], *mel* [ˈmɛʊ], *geral* [ʒeˈɾaʊ], *sol* [ˈsɔʊ].

9.7. As for the 'diphthongs' that we usually find in grammars, let us clarify (as already seen) that we treat them as diphonemic sequences, not as supposed unitary phonemic entities. In fact, usually, their ends coincide with the already known vocalic elements.

In addition, we must keep in mind that true diphthongs can only be those formed by two vowels, /VV/, as /ai/, in *pai* [ˈpai], certainly not sequences of a contoid and vocoid, /CV/, as /ja/, in *piar* *i*[ˈpjaɾ] *b*[ˈpjaʁ] *l*[ˈpjaɾ]. On the other hand, even sequences like /VˈV/ are certainly not diphthongs (but hiatuses): *país* *i/b*[paˈis] *l*[pɜˈiʃ]. But cases like *pais* *i/b*[ˈpais] *l*[ˈpaiʃ] are surely true diphthongs.

Having said this, let us stress the point that *true* diphthongs should not be indicated as if they were sequences of vowels and consonants, /VC/, as '/aj/'. In fact, they have nothing in common with sequences like /as, aɾ, an/, because structurally they are quite different things.

Obviously, sequences as those found in *caiar* *i*[kaˈjaɾ] *b*[kaˈjaʁ] *l*[kɜˈjaɾ], *saia* *i*[ˈsaˑja] *b*[ˈsaˑja] *l*[ˈsaˑjɜ, -ɐl] are simply /VCV/, not 'diphthongs + vowels' or 'vowels + diphthongs', *ie* sequences formed by a vowel followed by a(n approximant) consonant and another vowel, as '/aja/'.

9.8. Thus, making constant reference to *fig* 5.9.1, *fig* 9.1 and *fig* 9.2 (for our three accents: International, Brazilian, and Lusitanian), we now indicate the diphthongs that actually occur in Portuguese (including mediatic differences, and traditional Lusitanian ones, too): *i/b/l*[ei, ˌẽĩN, ˈẽĩN; ou, ˌõũN, ˈõũN] *mb*[eɪ, ˌẽĩN, ˈẽĩN; oʊ, ˌõũN, ˈõũN] *tl*[ˌʌɪ, ˈʁɪ, ˌʃĩN, ˈʃĩN; ou, ˌõũN, ˈõũN], /ɐiN/*i/b*[ẽĩN] *mb*[ʒĩN] *l*[ˈẽĩN, ˌʒĩN] *tl*[ˈʌĩN, ˌʒĩN], /ɐuN/ *i/b*[ẽũN] *mb*[ʃũN] *l*[ˈẽũN, ˌʒũN] *tl*[ˈʌũN, ˌʒũN].

First of all, we list them, here: *i/b/l*[ei] *tl*[ˈʌɪ, ˌʒɪ] /ei/, /ɛi/ [ˈɛi, ˌɛi], /ai/ [ai]; /ui/ [ui], /oi/ [oi], /ɔi/ [ˈɔi, ˌõi]; /iu/ [iu], /eu/ [eu], /ɛu/ [ˈɛu, ˌɛu], /au/ *i*[au] *b/l*[ɑu], /o/ *ou* *i*[o] *b*[oʊ, o] *l*[o, oʊ].

Now, we provide some examples: *reis* *i*[ˈreis] *b*[ˈʁeis] *l*[ˈʁeiʃ] *tl*[ˈʁʌɪʃ], *Leixões* *i*[leiˈʃõĩʃ] *b*[ɬeiˈʃõĩʃ] *l*[ɬeiˈʃõĩŋ̊ʃ] *tl*[ɬɜɪˈʃõĩŋ̊ʃ], *réis* *i*[ˈrɛis] *b*[ˈʁɛis] *l*[ˈʁɛiʃ], *reizitos* *i*[ˌʁɛiˈziˑtus] *b*[ˌʁɛiˈziˑtus] *l*[ˌʁɛiˈziˑtu̢ʃ], *vai* [ˈvai]; *fui* [ˈfui], *sois* *i/b*[ˈsois] *l*[ˈsoiʃ], *sóis* *i/b*[ˈsɔis] *l*[ˈsɔiʃ], *heroicamente* *i*[iˈɾɔikaˈmẽ̞ti] *b*[iˈɾɔikẽˈmẽ̞tʃi] *l*[iˈɾɔikɜˈmẽ̞t̢ʉ]; *viu* [ˈviu].

Also *vi-o* is [ˈviu]. In fact, the presumed difference between the two forms has nothing phonic in itself, in neutral pronunciation. It derives exclusively from a (pedantic) desire to only distinguish morphologically different forms, especially in mediatic and traditional Lusitanian pronunciations), *seu* [ˈseu], *chapeuzinho* *i*[ˌʃaˌpɛuˈziˑɲu] *b*[ʃaˌpɛuˈzĩˑɲu] *l*[ʃɜˌpɛuˈziˑɲu]; *chapéu* *i*[ʃaˈpɛu] *b*[ʃaˈpɛu] *l*[ʃɜˈpɛu], *mau* *i*[ˈmau] *b/l*[ˈmɑu], *vou* *i*[ˈvo] *b*[ˈvoʊ, ˈvo] *l*[ˈvo, ˈvoʊ], *Mourinho* *i/l*[moˈɾiˑɲu] *b*[moˈɾĩˑɲu].

Instead, the simplification of /ei/ (*i/b/l*[ˈei] *tl*[ˈʌɪ, ˌʒɪ]), becoming [e], does not belong to neutral pronunciation, even if it is rather widespread, especially in (most-

ly mediatic) Brazilian, and in (southern) Lusitanian.

Arguably, we also have to consider further real diphthongs as the following: *in-fluo* ⁱ[ĩn̩ˈfluu] ᵇ[ĩn̩ˈfɫuu] ˡ[ĩn̩̊ˈfɫuu], *moo* [ˈmou], *lua* ⁱ[ˈlua] ᵇ[ˈɫua] ˡ[ˈɫuɜ, -uɐ‖], *ria* ⁱ[ˈria] ᵇ[ˈʁia] ˡ[ˈʁiɜ, -iɐ‖], *boa* ⁱ/ᵇ[ˈboa] ˡ[ˈboɜ, -oɐ‖].

Including combinations as in *true triphthongs* derived by /i+ei, i+au/ (fig 5.9.3): *víeis* ⁱ/ᵇ[ˈvieis] ˡ[ˈvieiʃ] ᵗˡ[ˈviɘɪʃ], *ríeis* ⁱ[ˈrieis] ᵇ[ˈʁieis] ˡ[ˈʁieiʃ] ᵗˡ[ˈʁiɘɪʃ], *riem* ⁱ[ˈrĩẽĩn̩] ᵇ[ˈʁĩẽĩn̩] ˡ[ˈʁĩɜ̃ĩn̩] ᵗˡ[ˈʁĩɜ̃ĩn̩], *riam* ⁱ[ˈrĩẽũn̩] ᵇ[ˈʁĩẽũn̩] ˡ[ˈʁĩɜ̃ũn̩].

9.9. A *diaphonemic* transcription should also adequately show the behavior in unstressed syllables. In fact, even in Lusitanian, the diphthongs are never reduced, clearly maintaining their two elements. Let us see (in addition to *reizitos, heroicamente, chapeuzinho*): *fáceis* ⁱ/ᵇ[ˈfaseis] ˡ[ˈfaseiʃ] ᵗˡ[-ɘɪʃ], *paizinho* ⁱ/ˡ[ˌpaiˈziɲu] ᵇ[ˌpaiˈzĩ-ɲu], *fluidez* ⁱ[fluiˈdes] ᵇ[fɫuiˈdes] ˡ[fɫuiˈðeʃ], *oitavo* [oiˈtaˑvu], *miudinho* ⁱ[mjuˈdiɲu] ᵇ[mjuˈdʒĩ-] ˡ[mjuˈðiˑ-], *adeuzinho* ⁱ[aˌdeuˈziɲu] ᵇ[aˌdeuˈzĩ-] ˡ[ɜˌðeuˈziˑ-], *cautela* ⁱ[kauˈtɛˑla] ᵇ[kɑuˈtɛˑɫa] ˡ[kɑuˈtɛˑɫɜ, -ɐ‖].

In Lusitanian, for *-ou-*, the monophthong [o] is preferrred (as already seen, obviously with no reduction to [u]): *roubar* ⁱ[roˈbar] ᵇ[ʁoˈbaʁ] ˡ[ʁoˈβaɾ].

9.10. The only seeming exception consists in the proclitic *ao(s)*, which is not '/au(s)/', but normally /ɐ/+/u(s)/, thus /ɐu(s)/. Its true nature is slightly concealed by its spelling, which joins two grammemes, as [nus, das] *nos (em + os), das (de + as)*.

On the other hand, it is not *au(s)*! And it could more safely be written '*a o(s)*'. The same goes for both Lusitanian and Brazilian, and also for International Portuguese. In fact, in this case, realizations as [ɑu] are excessive and pedantic, in comparison with its normal realization [ɐu, ̥ɜu] (in case, [ˈau]). Further occurrences of ˡ[ˌɜi, ̥ɜu] derive from original forms with /aˈi, aˈu/: *sairia* [sɜiˈriɜ, -ɐ‖], *saudade* ˡ[sɜuˈðaˑðɨ], from *sair* [sɜˈir], *saúde* ˡ[sɜˈuˑðɨ].

In the nasalized form, in Lusitanian, we also have [ˈɐ̃uN, ̥ɜ̃uN], by coarticulation. Rather, in actual language, Luso-Brazilian, and also in the international form, normally, we also have: [o] /o/, or [ɔ] /ɔ/: *ao lado* ᵇ[oˈɫaˑdu, ɔ-, aɔ-, ɐu-, au-] ˡ[ɔˈɫaˑðu, o-, ɐɔ-, ɐu-], *aos amigos* ᵇ[ˌozɐ̃ˈmiˑgus, ̥ɔ-, ˌaɔ-, ˌau-] ˡ[ˌɔzɜˈmiˑɣuʃ, ̥o-, ˌɐɔ-, ˌɐu-].

As already told in advance (cf fig 5.9.2), also in international pronunciation, it is more natural to say ⁱ[ɔˈlaˑdu, ɐɔ-, ɐu-, au-; ˌoza̩ˈmiˑgus, ̥ɐɔ-]. But, obviously, we have *o lado* ⁱ[uˈlaˑdu] ᵇ[uˈɫaˑdu] ˡ[uˈɫaˑðu] and *os amigos* ⁱ[ˌuzaˈmiˑgus] ᵇ[ˌuzɐ̃ˈmiˑgus] ˡ[ˌuzɜˈmiˑɣu̥ʃ], which are certainly different.

9.11. Let us quickly observe (without a specific figure), that for /ɛ, ɔ/, half-lengthened in free syllable (or also checked, and for emphasis), in addition to normal monophthongs [ɛˑ, ɔˑ] (with their actual collocations in vocograms, which should be seen again attentively in fig 5.9.1, and fig 9.1-5), we can find (mostly in Brazilian) either monotimbric realizations, or narrow diphthongs.

In comparison with the realizations shown in fig 9.1-5, these can stray from a slightly higher point and reach the indicated one, [ɛɛ⊤, ɔɔ⊤]. It is also possible to start from that one and go down a little, reaching the phone below (in the voco-

gram), [ɛæ˔, ɔɒ˔] (including intermediate opening movements, which, in any case, are always rather limited), *ie* ⟦ɛæ, ɔɒ⟧ (using two special, intermediate, symbols).

9.12. Passing to the nasalized versions, instead, we find /ɐiN/ *ⁱ/ᵇ*[ɐ̃ĩN] *ˡ*[ˈɐ̃ĩN, ͜ɜ̃ĩN], /ɐuN/ *ⁱ/ᵇ*[ɐ̃ũN] *ˡ*[ˈɐ̃ũN, ͜ɜ̃ũN]: *mãe* *ⁱ/ᵇ/ˡ*[ˈmɐ̃ĩŋ], *mãezinha* *ⁱ*[ˌmɐ̃ĩŋˈziˑɲa] *ᵇ*[ˌmɐ̃ĩŋˈzĩ̆ˑɲa] *ˡ*[ˌmɜ̃ĩŋˈziˑɲɜ, -ɐ]], *falarão* *ⁱ*[ˌfalaˈrɐ̃ũŋ] *ᵇ*[ˌfaɫa-] *ˡ*[ˌfɜɫɜ-], *falaram* *ⁱ*[faˈlaˑrɐ̃ũŋ] *ᵇ*[faˈlaˑrɐ̃ũŋ] *ˡ*[fɜˈlaˑrɜ̃ũŋ]. As we have already seen, the diphthong /ɐuN#/ opposes /ɐN#/: *órfão* *ⁱ*[ˈɔrfɐ̃ũŋ] *ᵇ*[ˈɔɹfɐ̃ũŋ] *ˡ*[ˈɔɾfɜ̃ũŋ], *órfã* *ⁱ*[ˈɔrfɐ̃ŋ] *ᵇ*[ˈɔɹfɐ̃ŋ] *ˡ*[ˈɔɾfɜ̃ŋ].

Let us note that, even in Lusitanian, there is a (not slight) difference between /ɐiN/ and /eiN/: *cães* *ⁱ/ᵇ*[ˈkɐ̃ĩŋs] *ˡ*[ˈkɐ̃ĩŋ̊ʃ], *mãezinha* *ⁱ*[ˌmɐ̃ĩŋˈziˑɲa] *ᵇ*[ˌmɐ̃ĩŋˈzĩ̆ˑɲa] *ˡ*[ˌmɜ̃ĩŋˈziˑɲɜ, -ɐ]], *sem* *ⁱ/ᵇ/ˡ*[ˈsɛ̃ĩŋ] *ᵗˡ*[ˈsɐ̃ĩŋ], *sem vir* *ⁱ/ˡ*[sɛ̃ĩŋˈviɾ] *ᵇ*[sɛ̃ĩŋˈviɹ] *ᵗˡ*[sɜ̃ĩŋˈviɾ].

Instead of regular /eiN/ [ˈɛ̃ĩN, ͜ẽ̃ĩN], in traditional and mediatic Lusitanian, we have *ᵗˡ/ᵐˡ*[ˈɐ̃ĩN, ͜ɜ̃ĩN] (with first elements not front, but front-central). For /ɐiN/ [ɐ̃ĩN] and /ɐuN/ [ɐ̃ũN], we find the following variants: [ɜ̃ĩN, ɜ̃ũN] (mediatic Brazilian) and [ˈɐ̃ĩN, ͜ɜ̃ĩN; ˈɐ̃ũN, ͜ɜ̃ũN] (neutral Lusitanian), [ˈɐ̃ĩN, ͜ɜ̃ĩN; ˈɐ̃ũN, ͜ɜ̃ũN] (traditional Lusitanian).

To be true, the mediatic Lusitanian variants oscillate between modern and traditional realizations. Let us notice that, in *ᶜᵃⁿ*IPA notation, the differences between [ẽ, ɜ̃] [ɛ̃, ɐ̃, ɜ̃, ɐ̃] [ɐ̃, ẽ, ɐ̃] are rather considerable, contrary to what is usually believed.

9.13. In addition to /eiN#/ *ⁱ/ᵇ/ˡ*[ˈɛ̃ĩN, ͜ẽ̃ĩN] *ᵐᵇ*[ˈɛ̃ĩN, ͜ẽ̃ĩN] *ᵗˡ*[ˈɐ̃ĩN, ͜ɜ̃ĩN], /ɐiN#/ *ⁱ*[ɐ̃ĩN] *ᵇ*[ɐ̃ĩN] *ᵐᵇ*[ɜ̃ĩN] *ˡ*[ˈɐ̃ĩN, ͜ɜ̃ĩN] *ᵗˡ*[ˈɐ̃ĩN, ͜ɜ̃ĩN], /ɐuN#/ *ⁱ*[ɐ̃ũN] *ᵇ*[ɐ̃ũN] *ᵐᵇ*[ɜ̃ũN] *ˡ*[ˈɐ̃ũN, ͜ɜ̃ũN] *ᵗˡ*[ˈɐ̃ũN, ͜ɜ̃ũN]), the other nasalizable diphthongs are: /uiN#/ [ũĩN], /oiN#/ [õĩN, ͜õ̃ĩN], /ouN#/ *ⁱ/ᵇ/ˡ*[ˈõũN, ͜õũN] *ᵐᵇ/ᵗˡ*[ˈõũN#, ͜õũN#].

Examples: *vens* *ⁱ/ᵇ*[ˈvẽĩŋs] *ˡ*[ˈvẽĩŋ̊ʃ] *ᵗˡ*[ˈvɐ̃ĩŋ̊ʃ], *viagens* *ⁱ*[ˈvjaˑʒẽĩŋs] *ᵇ*[ˈvjaˑʒẽĩŋs] *ˡ*[ˈvjaˑʒẽĩŋ̊ʃ] *ᵗˡ*[ˈvjaˑʒɐ̃ĩŋ̊ʃ], *muito* *ⁱ/ᵇ*[ˈmũĩntu] *ˡ*[ˈmũĩ̯ntu] (the only actual case, with *muitíssimo* *ⁱ/ᵇ*[mũĩnˈtiˑsimu] *ˡ*[mũĩ̯nˈtiˑsimu], which varies with *ⁱ*[mwĩ-] *ᵇ/ˡ*[mũ̃ĩ-]).

And: *lições* *ⁱ*[liˈsõĩŋs] *ᵇ*[ɫiˈsõĩŋs] *ˡ*[ɫiˈsõĩŋ̊ʃ], *som* *ⁱ/ᵇ/ˡ*[ˈsõũŋ] *ᵐᵇ/ᵗˡ*[ˈsõũŋ], *com calor* *ⁱ*[ˌkõũŋkaˈlor] *ᵇ*[ˌkõũŋkaˈɫoɹ] *ˡ*[ˌk õũŋ̊kɜˈɫor] *ᵐᵇ/ᵗˡ*[ˌkõũ-].

We have already seen marginal cases like: *abdómen* (*ᵇ-ômen*) *ⁱ*[abˈdɔˑmẽĩŋ] *ᵇ*[abˈdõ̆ˑmẽĩŋ] *ᵐᵇ*[-ẽĩŋ] *ˡ*[ʒβˈδɔˑmẽĩŋ, ʒβˈd-, ʒbˈδ-, ʒbˈd-, ↑-ɛn] *ᵗˡ*[ʒβˈδɔˑmɜ̃ĩŋ, ↑-ɛn], *ípsilon* *ⁱ*[ˈipsilõũŋ] *ᵇ*[ˈipsiɫõũŋ] *ᵐᵇ*[-õũŋ] *ˡ*[-i̥ɫõũŋ, ↑-ɔn] *ᵗˡ*[-i̥ɫõũŋ, ↑-ɔn].

The following monosyllabic forms (of verbs *pôr, vir, ver*) are rather curious, even with true *triphthongs* and *quadriphthongs*: *põem* *ⁱ/ᵇ/ˡ*[ˈpõĩ̯ẽĩŋ, ˈpõĩŋ] *ᵗˡ*[ˈpõĩ̯ɜ̃ĩŋ, ˈpõĩŋ], *vêm* *ⁱ/ᵇ/ˡ*[ˈvẽĩ̯ẽĩŋ, ˈvẽẽĩŋ, ˈvẽĩŋ] *ᵐᵇ*[ˈvẽĩ̯ẽĩŋ, ˈvẽẽĩŋ, ˈvẽĩŋ] *ᵗˡ*[ˈvɐ̃ĩ̯ɜ̃ĩŋ, ˈvɐ̃ɜ̃ĩŋ, ˈvɐ̃ĩŋ], *veem* *ⁱ/ᵇ/ˡ*[ˈveiẽĩŋ, ˈveẽĩŋ, ˈvẽĩŋ] *ᵐᵇ*[ˈveɪẽĩŋ, ˈveẽĩŋ, ˈvẽĩŋ] *ᵗˡ*[ˈvɐɪɜ̃ĩŋ, ˈvɐɜ̃ĩŋ; ˈvɐ̃ĩŋ].

Obviously, the other 'triphthongs' found in grammars (and in traditional linguistics) are simply sequences of these two kinds: /CVV, VCV/ (also + /N/), as, for instance: *fieis* *ⁱ*[ˈfjeis] *ᵇ*[ˈfjeis] *ˡ*[ˈfjeiʃ] *ᵗˡ*[ˈfjɐɪʃ], *leais* *ⁱ*[ˈljais] *ᵇ*[ˈɫjais] *ˡ*[ˈɫjaiʃ], *poeira* *ⁱ*[ˈpweira] *ᵇ*[ˈpɯeiɾa] *ˡ*[ˈpɯeiɾɜ, -ɐ] *ᵗˡ*[ˈpɯɐɪɾɜ, -ɐ]], *saio* *ⁱ*[ˈsaˑju] *ᵇ/ˡ*[ˈsaˑju], *meia* *ⁱ*[ˈmeˑja] *ᵇ*[ˈmeˑja] *ˡ*[ˈmeˑjɜ, -ɐ] *ᵗˡ*[ˈmɐˑjɜ, -ɐ]]; *leão* *ⁱ*[ˈljɐ̃ũŋ] *ᵇ/ˡ*[ˈɫjɐ̃ũŋ], *peões* *ⁱ*[ˈpjõĩŋs] *ᵇ*[ˈpjõĩŋs] *ˡ*[ˈpjõĩŋ̊ʃ].

9.14. In the Brazilian *mediatic* accent, [ˈCɛ̃N] sequences are very often realized by inserting a prepalatal approximant, [ɹ], before the nasalized vocoid, thus becoming similar, to the palatal semi-approximant [j], but still different: *apartamento* [aˌpaɾtɐ̃ˈmɹɛ̃n-tu], *pretendo* [pɾeˈtɹɛ̃ndu] (cf *compreendo* [kõmˈpɾɹɛ̃ndu]) – cf fig 6.8 and § 10.16.

9.15. As in neutral Brazilian, mediatic Brazilian also has /t, d/ [tʃ, dʒ] + /i, j/. But, mediatic adds further possible taxophones: [tʂ, dʐ; tʂ, dʐ; ʈ, ɖ; ʈ, ɖ]; and [ʃ, ʒ] also for /sʰ, sʰ, zʰ/ (including [ʂ, ʐ; ʂ, ʐ; ʂ, ʐ]). All these possible oscillations are also due to the fact that mediatic pronunciation, for many speakers, is what happens when proceeding from different accents. A same speaker may have a number of different phones, although normalization, in a direction or other, should be highly desirable.

In addition, to metaphony, in mediatic and colloquial Brazilian (in common words, not lofty ones), another kind of vocalic adjustment is frequent. In fact, synchronically, prestressed *e, o* can be realized as /i, u/ [i, u], often as [ɪ, ʊ] (cf fig 9.3), when a following stressed vowel is /i, u/: *menino* [i][meˈniˑnu] [mb][mẽ-ˈnĩˑnʊ, mĩ-, mĩ-] [l][mɨˈniˑnu], *alegria* [i][ˌaleˈgria] [mb][ˌaɫeˈgriɐ, ˌaɫɪ-, ˌaɫi-] [l][ˌɜɫɨˈɣriɜ, -ɐ]], *sorriso* [i][soɾˈriˑzu] [mb][soˈʁiˑzʊ, sʊ-, su-] [l][sʊ̞ˈʁiˑzu], *veludo* [i][veˈluˑdu] [mb] [veˈɫuˑdʊ, vɪ-, vi-] [l][vɨˈɫuˑðu].

Instead, the same vowels can be realized as [ɛ, ɔ] when the word stress is on opener vowels: [i][reˈlɔˑʒju] [mb][ʁeˈɫɔˑʒjʊ, ʁɛ-] [l][ʁɨˈɫɔˑʒju] *relógio*, [i][korˈrɛˑtu] [mb][koˈʁɛˑtu, kɔ-] [l][kʊ̞ˈʁɛˑtʊ̞] *correto*/[l]-ecto.

The systematic use of /e, o/ may sound excessively careful (and, perhaps, too formal). On the other hand, a systematic use of [ɪ, ʊ, ɛ, ɔ] may certainly produce 'excessive' –even 'non-native'– results, since lofty or rare words have to be kept unaltered. In addition, we can also find speakers who distinguish, for example, *folhinha* 'calendar' [i][foˈʎiˑɲa] [mb][fʊˈʎĩˑɲɐ, fu-] [l][fʊ̞ˈʎiˑɲɜ, -ɐ]] vs [i][foˈʎiˑɲa] [mb][foˈʎĩˑɲɐ] [l][fʊ̞ˈʎiˑɲɜ, -ɐ]] 'small leaf', because it is felt as a derivative, unlike the other.

10.
Lusitanian vowels

Neutral Lusitanian pronunciation

10.1. Although in some sections of the preceding chapter we had to present some Lusitanian peculiarities, let us see, now, *fig* 10.1, where the vocalic realizations of neutral *Lusitanian* Portuguese are shown. By comparing the first vocogram with the first one in *fig* 5.9.1.4 and *fig* 9.1, we can immediately see that, in addition to the [ɑɫ] taxophone (as Brazilian [ɑɬ], correspondent to international [aɰ]), we also find /ˌa/ [ˌɜ, -ɐ‖], and [ɪ, ɨ] for the /ẹ, i̥/ diaphonemes, which we will see soon.

fig 10.1. Lusitanian vowels: *neutral* vowels and diphthongs.

/i/ [i, ĩN#]
/i̯#/ [ɨ], (*in sequences*) [i, ɪ, ɨ]
/ẹ/ [ɨ] (*between* [ɫ, ʁ] & [ʃ, ʒ], *but* [ɪ] *with* /Ç/)
/e/ [e, ˌE(ɰ), ẽN#, ˌẽN#, eÇ]
/ɛ/ [ɛ, ˌE]
/ɐ/ [ˈɐ#N, ẽN#, ˌɝN#]

/u/ [u, ũN#]
/u̯/ (*in sequences*) [u, ɨ]
/o/ [o, ˌσ(ɰ), õN#, ˌõN#]
/ɔ/ [ɔ, ˌσ]
/a/ [a, ɑɫ, ɜˈi, ɜˈu, ˌɜ, ˌɐ‖]
/ạ/ [ˈɐ, ˌa, a#N, ãN#]

/ei/ [ei, ẽĩN#, ˌẽĩN#]
/ɛi/ [ɛi, ˌEi]
/ɐi/ [ɐ̃ĩN#, ˌɝ̃ĩN#]
/ai/ [ai]

/ui/ [ui, ũĩN] (& [ŭĩN#])
/oi/ [oi, õĩN#, ˌõiN#]
/ɔi/ [ɔi, ˌσi]

/iu/ [iu]
/eu/ [eu]
/ɛu/ [ɛu, ˌEu]

/ou/ [o, ou, õũN#, ˌõũN#]
/ɐu/ [ɐ̃ũN#, ˌɝ̃ũN#]
/au/ [ɑu]
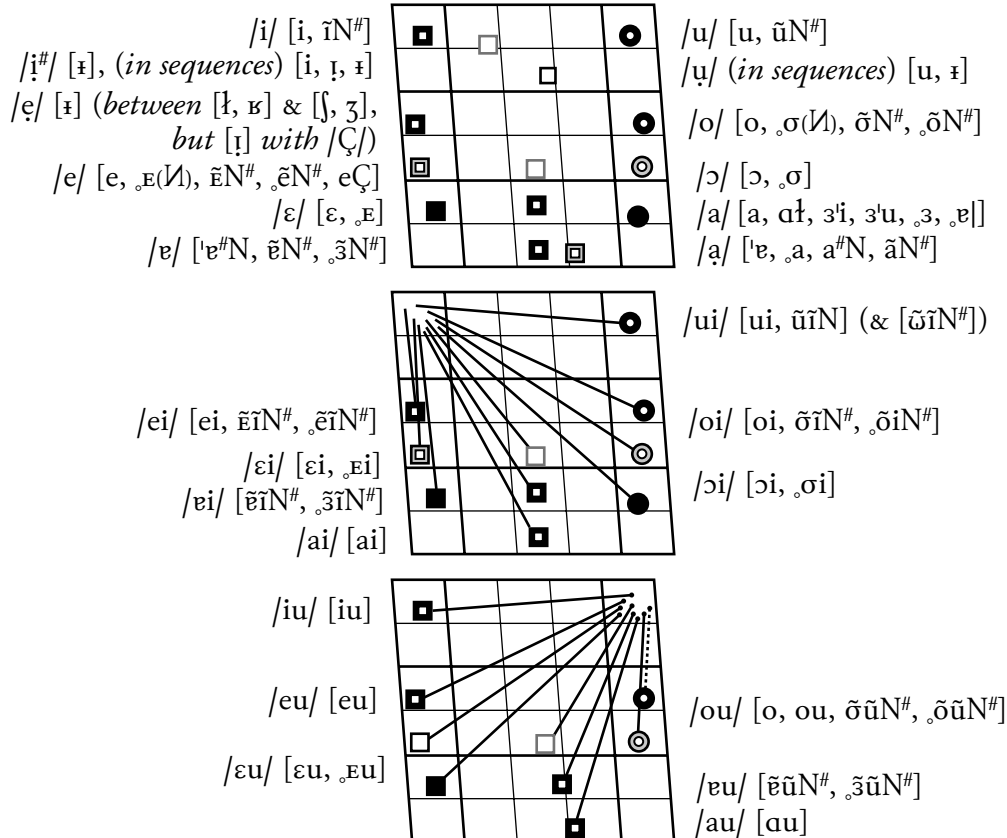
fig 10.2.1. Lusitanian vowels: *neutral* morphonological diphthongs.

/ia(s)#/ [iɜ(ʃ)]   /ua(s)#/ [uɜ(ʃ)]

/ea(s)#/ [eɜ(ʃ)]   /ou(s)#/ [ou(ʃ)]
                                          /oa(s)#/ [oɜ(ʃ)]

/ɛa(s)#/ [ɛɜ(ʃ)]
                                          /aa(s)#/ [aɜ(ʃ), ₒa(ʃ)]

/ia#/ [iɐ|]   /ua#/ [uɐ|], /uu#/ [uu]

/ea#/ [eɐ|]   /ou#/ [ou]
                                          /oa#/ [oɐ|]

/ɛa#/ [ɛɐ|]
                                          /aa#/ [aɐ|, ₒa|]
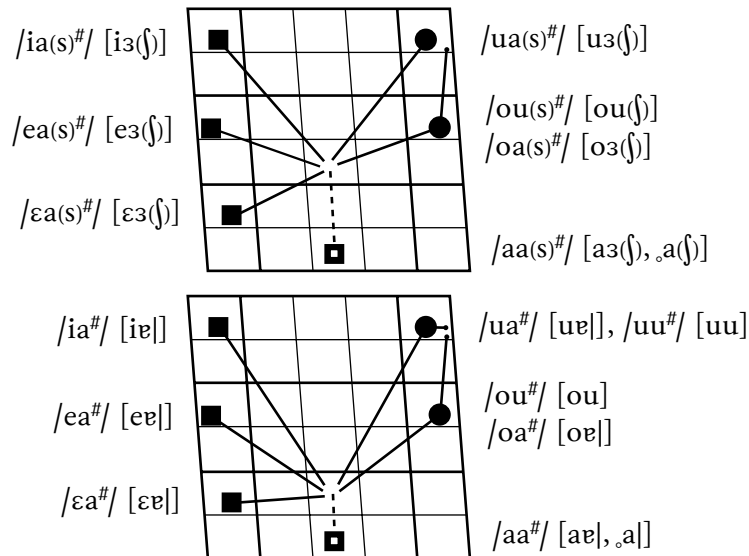
fig 10.2.2. Lusitanian vowels: *neutral* morphonological diphthongs: *ao(s)* (cf § 9.9).

ao(s) /ₒau(s)/ [ₒo-, ₒσ-, ₒɜu, ₒɐu-, ₒɐσ-]
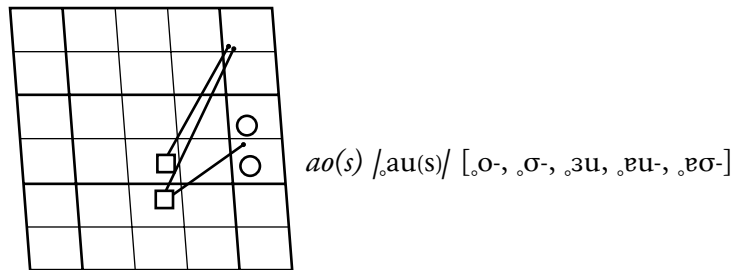
For now, let us consider the 'regular oddities' for /ₒa/ [ₒɜ, -ɐ|], with unstressed /a/ that is considerably raised, becoming [ɜ] (or less so, as [ɐ], if final before a pause): *ela* *ⁱ*['ɛ·la] *ˡ*['ɛ·ɫɜ, -ɐ|], *batata* *ⁱ*[ba'ta·ta] *ˡ*[bɜ'ta·tɜ, -ɐ|], *nova* *ⁱ*['nɔ·va] *ˡ*['nɔ·vɜ, -ɐ|], *amassar* *ⁱ*[ˌama'saɾ] *ˡ*[ˌɜmɜ'saɾ] (*ᵇ*[ˌɐ̃ma'saʀ]) and *samba* *ⁱ/ᵇ*['sɐ̃mba] *ˡ*['sɐ̃mbɜ, -ɐ|], *cantando* *ⁱ/ᵇ*[kɐ̃n'tɐ̃ndu] *ˡ*[kɜ̃n'tɐ̃ndu], *cama* *ⁱ*['kɐ·ma] *ˡ*['kɐ·mɜ, -ɐ|], *cama de casa* *ⁱ*['kɐ·ma di'ka·za] *ᵇ*['kɐ̃·ma dʑi'ka·za] *ˡ*['kɐ·mɜ ðɻ̥'ka·zɐ|].

But, also with few further examples, Lusitanian oddities come close to absurdity, at least in comparison with simpler and more regular pronunciations, like the international and Brazilian ones. In fact, we come against: *açúcar* *ⁱ*[a'su·kaɾ] *ᵇ*[a'su·kaʀ] *ˡ*[ɜ'su·kaɾ], with /ₒaɾ#/ [aɾ], and (even worse): *amanhã* *ⁱ*[ˌama'ɲɐ̃ŋ] *ᵇ*[ˌɐ̃mɐ̃'ɲɐ̃ŋ] *ˡ*[ˌɜmɜ-'ɲɐ̃ŋ], *Camões* *ⁱ*[ka'mõĩŋs] *ᵇ*[kɐ̃'mõĩŋs] *ˡ*[ka'mõĩŋ̊ʃ], with /ₒa/ [a] in the first syllables.

In order to obtain final [aɾ#], a simple distributional rule might be sufficient. But, in order to 'guess' an [a] occurring in the other examples, without a decent crystal ball, we should introduce the /a̦/ diaphoneme, to indicate the Lusitanian /a/'s which do not become the 'expected' [ɜ], producing /a̦ma'ɲɐ̃ŋ, ka̦'moĩŋ/ (adding at least /a'suka̦ɾ/).

10.2. Another solution, more on the line to the international transcription, would reverse the use of the /a̦/ diaphoneme: instead of using it to indicate exceptions, it could highlight the differences between international and Lusitanian

pronunciations. So, we would have: /amą̇ˈɲɐ̯ŋ, kaˈmoi̯ŋs, ą̇ˈsukaɾ/, as the initial syllables of the first two words and the last syllable of the third word would coincide with the international value of /ˌa/ [a], while the typical Lusitanian use of /ˌa/ [ɜ] would be marked, precisely as /ą̇/.

However, each word like *cataplasma, catarata, cavalada* would have three /ą̇/'s: /ką̇tą̇ˈplazmą̇, ką̇tą̇ˈratą̇, ką̇vą̇ˈladą̇/. Should we want to also use the consonantal diaphonemes, to indicate Lusitanian differences (for instance /zʰ/→[ʒ] and /d/→[ð], in given contexts), we would have: /ką̇tą̇ˈplaẓmą̇, ką̇tą̇ˈratą̇, ką̇vą̇ˈladą̇/. Quite a 'nice' series of dotted symbols! Other examples could have even more…

A more Lusitanian alternative, but certainly less natural, could be /kataˈplazma, kataˈrata, kavaˈlada/ (in case, with /-ẓma, -adą̇/). In exclusively Lusitanian transcriptions, various solutions are possible, although aiming at unifying these occurrences with those of the /ɐ/ phoneme.

We should use them in international (and Brazilian) transcriptions, too, in cases with *a*'s realized as higher than /a/ [a]. As a matter of fact, in available Lusitanian transcriptions, more often, we find /ɐ/, but more recently also /ɜ/, as we are showing only for *catarata* /kɐtɐˈratɐ/ or /kɜtɜˈratɜ/.

10.3. However, we can certainly find further Lusitanian surprises. In fact, for verbs, there is an exceptional case by which, normal /ˈɐNV/ with [ˈɐ·NV] is opposed by /ˈaNV/ [ˈa·NV], as in: *falamos* ᶦ[faˈlɐ·muʃ] ˡ[fɜˈlɐ·mu̜ʃ] 'we speak' and *falámos* ᶦ[faˈlɐ·mus] ˡ[fɜˈla·mu̜ʃ] 'we spoke'. Obviously, in international and Brazilian pronunciations, both forms are exactly the same: ᶦ[faˈlɐ·mus] ᵇ[faˈlɜ̃·mus].

And that is not enough: the words *cada* and *para*, in Lusitanian pronunciation, never have [a], but [ɐ] or [ɜ] (since, in sentences, normally, their stress is reduced). So we find 'ˈ[ˈkɐdɐ, ˈkɜdɜ; ˈpɐɾɐ, ˈpɜɾɜ]', instead of ˡ[ˈkɐ·ðɜ, -ɐ|, ˌkɜðɜ] and ˡ[ˈpɐ·ɾɜ, -ɐ|, ˌpɜɾɜ, pɾɜ] (ᶦ/ᵇ[ˈka·da, ˌkada; ˈpa·ɾa, ˌpaɾa, pɾa]).

Here are further noteworthy cases, in Lusitanian, for /ˌa/ [a], by contraction: *à* (for 'a a') ᶦ/ˡ[a], *àquele* ᶦ[aˈke·li] ˡ[aˈke·ɫi], *caveira* ᶦ[kaˈvei̯ra] ˡ[kaˈvei̯ɾɜ, -ɐ|] ᵗˡ[kaˈvɐi̯ɾɜ, -ɐ|] (ᵇ[a, aˈke·ɫi, kaˈvei̯ra]). Also before consonant clusters simplified or not in pronunciation (and spelling): *a(c)ção* ᶦ/ˡ/ᵇ[aˈsẽũ̯ŋ], *fa(c)tura* ᶦ/ᵇ[faˈtu·ra] ˡ[faˈtu·ɾɜ, -ɐ|]. And more or less unexpected surprises continue…

Let us also consider the Lusitanian pronunciation of the other examples already given in § 9.2: *difícil* ᶦ[diˈfi·siɫ] ˡ[dɹ̥ˈfi·siɫ], *ele* ᶦ[ˈe·li] ˡ[ˈe·ɫi], *ela* ᶦ[ˈɛ·la] ˡ[ˈɛ·ɫɜ, -ɐ|], *batata* ᶦ[baˈta·ta] ˡ[bɜˈta·tɜ, -ɐ|], *nova* ᶦ[ˈnɔ·va] ˡ[ˈnɔ·vɜ, -ɐ|], *novo* ᶦ/ˡ[ˈno·vu], *chuva* ᶦ[ˈʃu·va] ˡ[ˈʃu·vɜ, -ɐ|]; *pau* ᶦ[ˈpau̯] ˡ[ˈpɑu̯], *audaz* ᶦ[au̯ˈdas] ˡ[ɑu̯ˈðaʃ], *mal* ᶦ[ˈmaɫ] ˡ[ˈmɑɫ], *altura* ᶦ[aɫˈtu·ra] ˡ[ɑɫˈtu·ɾɜ, -ɐ|].

Also: *seca* ᶦ[ˈse·ka] ˡ[ˈse·kɜ, -ɐ|] 'dry' and ᶦ[ˈsɛ·ka] ˡ[ˈsɛ·kɜ, -ɐ|] 'dryness; tediousness', *cerco* ᶦ[ˈseɾku] ˡ[ˈseɾku̜] 'circle; siege' and ᶦ[ˈsɛɾku] ˡ[ˈsɛɾku̜] 'I (en)close', *lobo* ᶦ[ˈlo·bu] ˡ[ˈɫo·βu] 'wolf' and ᶦ[ˈlɔ·bu] ˡ[ˈɫɔ·βu] 'lobe', *fosso* ᶦ[ˈfo·su] ˡ[ˈfo·su̜] 'ditch' and ᶦ[ˈfɔ·su] ˡ[ˈfɔ·su̜] 'I dig'.

Let us add, here: *cadáver* ᶦ[kaˈda·veɾ] ᵇ[kaˈda·veɤ] ˡ[kɜˈða·vɛɾ], *sóror* ᶦ[ˈsɔ·ɾoɾ] ᵇ[ˈsɔ·ɾoɤ] ˡ[-oɾ], *amável* ᶦ[aˈma·veɫ] ᵇ[aˈma·veɫ] ˡ[ɜˈma·vɛɫ], *álcool* ᶦ[ˈaɫkwoɫ] ᵇ[ˈaɫkwoɫ] ˡ[ˈaɫkw̥oɫ], *voltar* ᶦ[voɫˈtaɾ] ᵇ[voɫˈtaɤ] ˡ[vo̥ɫˈtaɾ].

10.4. In addition to [ˌa], in Lusitanian, it is necessary to also indicate [ˌᴇ, ˌσ], especially, but not only, in some pre-stressed syllables (due to diachronic fusion with no trace in usual spelling): /VV/→/V/, coming from a different previous structure: /VCV/, with subsequent consonant disappearance, § 10.10)

To all this, at least [ˌᴇɫ#, ˌσɫ#, ˌɑɫ#; ˌᴇɾ#, ˌσɾ#, ˌɑɾ#] have to be added, also with possible occurrences in non-final contexts, especially with [ˌVɫ#] (which have to be indicated, in order to avoid incompleteness and uncertainty).

Strictly speaking, should we decide to use a diaphonemic transcription that can clearly indicate all cases of /ˌa/ which do not attenuate, the unstressed /ai, au/ diphthongs also remaining [ai, ɑu] even in unstressed syllables should be indicated (and the same goes for /ˌei, ˌoi/ [ei, oi], with the complication of /ˌei/ *ᵗˡ*[əɪ]).

Depending on the choices we may make, in favor either of naturalness or Lusitanianness, we should choose /ai, au; ei, oi/ or /ại, ạu; ẹi, ọi/.

Furthermore, there are particular cases (with more possibilities) like: *abdómen* (*ᵇ-ômen*) *ⁱ*[abˈdɔ·mẽĩ̯ŋ] *ᵇ*[abˈdõ·mẽĩ̯ŋ] *ˡ*[ɜβˈðɔ·mẽĩ̯ŋ, ↑-ᴇɴ] *ᵗˡ*[ɜβˈðɔ·mɜ̃ĩ̯ŋ, ↑-ᴇɴ], *ípsilon* *ⁱ*[ˈipsilõũ̯ŋ] *ᵇ*[ˈipsiɫõũ̯ŋ] *ˡ*[-iɫ̥õũ̯ŋ, ↑-ᴏɴ], *inclusive* *ⁱ*[ĩŋkluˈzi·vi] *ᵇ*[ĩŋkɫuˈzi·vi] *ˡ*[ĩ̯ŋkɫ̥u-, -v(ɨ), ↑-vᴇ].

10.5. Furthermore, we must always keep in mind that, in neutral Lusitanian, nasalization only occurs in checked syllables. Besides, sometimes, it is so light and little perceptible, that we should indicate it as [ṾN#], instead of [ṼN#]. However, on the contrary, there is the mediatic Lusitanian peculiarity for which all vocoids followed by [N] in free syllables become half-nasalized, [Ṿ#N] (as the first vocogram in *fig* 10.4 shows).

We have: *sim* *ⁱ/ᵇ/ˡ*[ˈsĩŋ], *lengalenga* *ⁱ*[ˌlẽŋgaˈlẽ̯ŋga] *ᵇ*[ˌɫẽŋgaˈɫẽ̯ŋga] *ˡ*[ˌɫẽŋgɜˈɫẽŋgɜ, -ᴇ‖], *bem* *ⁱ/ᵇ/ˡ*[ˈbẽĩ̯ŋ] *ᵐˡ*[ˈbãĩ̯ŋ], *homem* *ⁱ/ˡ*[ˈɔ·mẽĩ̯ŋ] *ᵇ*[ˈõ·mẽĩ̯ŋ] *ᵐˡ*[ˈɔ·mãĩ̯ŋ], *amanhã* *ⁱ*[ˌama·ˈɲẽ̯ŋ] *ᵇ*[ˌẽmẽ·ˈɲẽ̯ŋ] *ˡ*[ˌamɜ·ˈɲẽ̯ŋ], *bombom* *ⁱ/ᵇ/ˡ*[bõmˈbõũ̯ŋ], *honra* *ⁱ*[ˈõŋra] *ᵇ*[ˈõŋʁa] *ˡ*[ˈõŋʁɜ, -ᴇ‖].

And: *alguns* *ⁱ*[aɫ̞ˈgũŋs] *ᵇ*[aɫˈgũŋs] *ˡ*[aɫˈɣũŋ̥ʃ]; *caminho* *ⁱ*[kaˈmi·ɲu] *ᵇ*[kɐ̃ˈmĩ·ɲu] *ˡ*[kɜˈmi·ɲu], *fenómeno* (*ᵇ-ôme-*) *ⁱ*[feˈnɔ·menu] *ᵇ*[fẽˈnõ·mẽnu] *ˡ*[fɨˈnɔ·mɨnu], *telefonema* *ⁱ*[ˌtelefoˈne·ma] *ᵇ*[ˌteɫefõˈnẽ·ma] *ˡ*[ˌtɨɫ̞fu·ˈne·mɜ, -ᴇ‖], *único* *ⁱ*[ˈu·niku] *ᵇ*[ˈũ·niku] *ˡ*[ˈu·niku̥].

Lusitanian has another 'minor inconvenience' due to the diachronic contraction of two vowels. In fact, in either stressed or unstressed syllables, it also has '/ã/' (in addition to '/ẽ/'): *a ama* *ⁱ*[aˈɐ̯·ma] *ᵇ*[aˈɐ̃·ma] *ˡ* [ˈɐːmɜ, -ᴇ‖], *à ama* *ⁱ*[aˈɐ̯·ma] *ᵇ*[aˈɐ̃·ma] *ˡ*[ˈaːmɜ, -ᴇ‖], *a ânfora* *ⁱ*[aˈɐ̃ŋfoɾa] *ᵇ*[aˈɐ̃ŋfoɾa] *ˡ*[ˈɐ̃·ɳfuɾɜ, -ᴇ‖], *à ânfora* *ⁱ*[aˈɐ̃ŋfoɾa] *ᵇ*[aˈɐ̃ŋfoɾa] *ˡ*[ˈã·ɳfuɾɜ, -ᴇ‖], *à antiga* *ⁱ*[aɐ̃nˈti·ga] *ᵇ*[aɐ̃ɲˈʤi·ga] *ˡ*[ã·ɳˈti·ɣɜ, -ᴇ‖].

Mediatic and traditional Lusitanian pronunciations

10.6. Let us consider, now, *fig* 10.3.1. By comparing it at least with *fig* 10.1 and *fig* 5.9.1, another mediatic Lusitanian peculiarity appears, strongly influenced by Lisbon pronunciation (later on, traditional peculiarities will also be dealt with, *cf fig* 10.4.1-2).

In reality, it is the same (traditional) accent that, in its more marked (mediatic) version, adds half-nasalization to any vowels followed heterosyllabic nasals (*ie* belonging to a following syllable): /V#N/ *i*[V#N] *b*[Ṽ#N] *l*[V#N] *ml*[Y̰#N]. The first vocogram in *fig* 10.3.1 shows this clearly.

But, let us proceed in an orderly manner. It is immediately clear that the number of the markers (and, consequently, of the phones and taxophones) in the first vocogram is higher, not only than the 10 international symbols, but also than the 14 ones of neutral Lusitanian. As a matter of fact, they are 23!

fig 10.3.1. Lusitanian vowels: *mediatic* vowels and diphthongs.

/i, i̱/ [i, ʊɫ, ĩN#, i̱#N, ↓ɪ]   /u, ʊ̱/ [u, ʊɫ, ũN#, ʊ̱#N] ↓[μ, õN#]
/ẹ/ [ə]
/e/ [e, ɔɫ, ẽN#, ˳ẽN#, ᴇ̱#N, ˳e̱#N]   /o/ [o, ɔ̱ɫ, õN#, ˳õN#, ᴏ̱#N, ˳ᴏ̱#N, ↓ʊ]
↓[ə, ᴈ̱#N, ˳ᴈ̱#N]
/ɛ/ [ɛ, ˳ᴇ, aɫ, ˳aɫ, ᴇ̱#N]   /ɔ/ [ɔ̰, ˳ᴏ̰, ɔɫ, ɔ̌#N]
/ɐ/ [ɐ̃N#, ɐ̱#N]   /a, a̱/ [a, ʌɫ, ˳ɐ|, ˳ɜ, ɜˈi, ɜˈu]

/ui/ [uɪ, ↓ᴏɪ, ũɪ̃N] (& /wi/ [ʊ̃ĩN#])
/ou/ [oʊ, ↑o]
/ei/ [ᴈɪ, ˳ᴐɪ, ↓aɪ] [ᴈ̃ĩN#, ˳ᴐ̃ĩN#]   /oi/ [oɪ, õĩN#, ˳õĩN#]
↓[ᴈ̃ĩN#, ˳ᴐ̃ĩN#]   /ɐi/ [ɐ̃ĩN#, ˳ᴈ̃ĩN#]

/ɛi/ [ɛɪ, ˳ᴇɪ]   /ɔi/ [ɔɪ, ˳ᴏɪ]
/ai/ [aə, ˳ɐə]

/iu/ [iμ, ↓ɪ̱μ] *-io, -iu*

/eu/ [eʊ, ↓ᴈʊ]
/ɛu/ [ɛʊ, ˳ᴇʊ, ↓aʊ]   /ou/ [õũN#, ˳õũN#]
/ɐu/ [ʌ̃ũN#, ˳ʌ̱̃ũN#]
/au/ [ɑʊ, ˳ʌʊ, ↓ʌʊ]
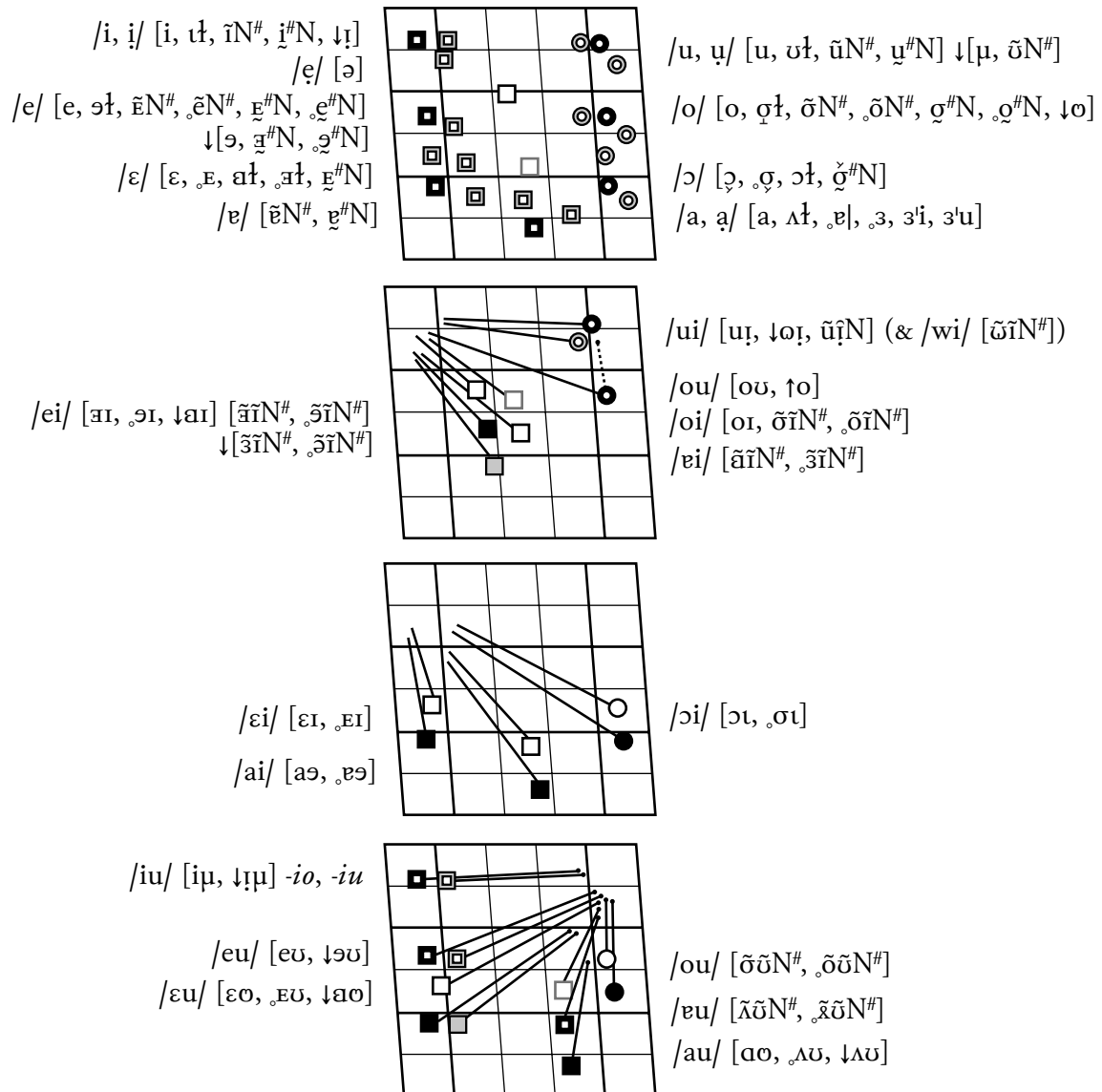
10.7. The other vocoids, while keeping the same symbols, [i, e, ɛ, ɛ, a, ɑ, ɔ, ơ, o, u], are all also more centralized, less peripheral and, thus, still less distant one from another. Somehow, they are less different.

Thus, they favor the impression that Lusitanian Portuguese 'eats' its vowels (also because it has many partially or totally devoiced vocoids) and many consonants, like [β, ð, ɣ; ʝ, ɰ], in spite of some 'eccessive' occurrences of /ʃ, ʒ/ [ʃ, ʒ]. In addition, these last are still a little 'eaten' in its mediatic version, with [ʂ, ʐ] (protruded grooved postalveo-palatal semiconstrictives), less noisy than normal traditional and neutral constrictives [ʃ, ʒ]. They occur in syllable- or word-final position and can be represented by the /ʂ, ʐ/ diaphonemes: *os postos* *i* [usˈpɔstus] *l* [u̥ʃˈpɔʃtu̥ʃ] *ml* [u̥ʂ-ˈpɔʂtu̥ʂ].

In mediatic Lusitanian, /VᵗN/ also stands for /VᵗN/ in rhythm groups. In addition, as for /VᵗN/ (& /VᵗN/) = *m*[V̨N], possible /VVᵗN/ (& /VVᵗN/) = *m*[V̨V̨N] (with half-nasalized vocoids). They correspond to those in the vocograms, thus without '[ɛ, ɔ]' → [ɛ, ɔ], but including *m*['a̯ə, ̥ɐ̯ɪ; 'ɑ̯ɪ, ̥ɜ̯ɪ; 'ɑ̯ɔ, ̥ʌ̯ʊ; 'ʌ̯ʊ, ̥ɐ̯ʊ] /ai, ɐi, au, ɐu/).

It is useful to also watch –well!– any single element of all diphthongs (including oral ones), in the vocograms of *fig* 10.3.1.

Here are some examples: *cama* ['kɐ̯ˑmɑ], *meninice* [ˌme̥niˈnisə̯], *sono* ['so̯ˑnu], *tóni-co* ['to̯ˑni̥ku̥], *minuto* [mi̯ˈnuˑtu̥], *monogamia* [ˌmo̯nɔɡʒˈmiɑ], *o monitor* [u̯ˌmo̯niˈtoɾ].

10.8. In addition, *fig* 10.3.2 shows the most typical realizations of the *unstressed* vowels of the mediatic accent, although they can frequently alternate with more normal timbres. It is an interesting and easy job to choose examples for these nuances.

fig 10.3.2. Lusitanian vowels: *mediatic* unstressed vocoids.

/i/ [ˌɪ, ̥ĩN]   /u/ [ˌʊ, ̥õN]

/e/ [ˌə, ̥ə̃N], -em [ˌɐ̃ᵗ, ̥ɐ̯ᵗ, ̥ɐᵗ]   /o/ [ˌo, ̥õN]

/ɛ/ [ˌɐ], /ɐ/ [ˌɜ, ̥ɜ̃N], -am [ˌõ, ̥ɔ, ̥o]   /ɔ/ [ˌɔ]
                                     /a/ [ˌɐ]
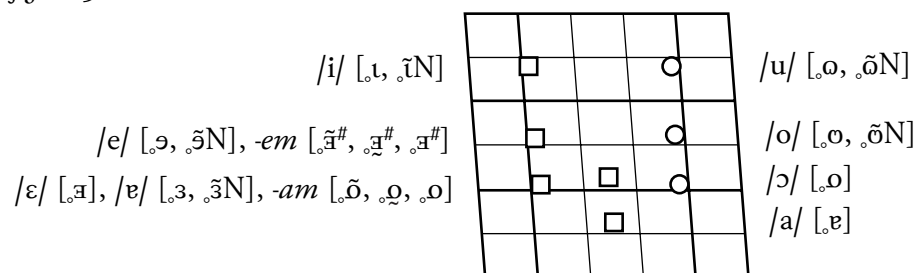
10.9. We will now see some specific examples, which highlight the differences between the two Lusitanian accents. To account for *mediatic* and *traditional* Lusitanian pronunciation, we must remember that /e/ in a stressed syllable, followed by /ɲ, ʃ, ʒ, ʎ, j, i/, became [ɐ]. This is close enough to the realization of the Lusitanian phoneme /ɐ/ *l*[ɐ] *tl*[ɐ].

But, it must be clear that it is not exactly alike, even if occasionally, for some words or specific speakers, there can be only a small difference. This also depends on the considerable and unpredictable oscillation that we can certainly find.

However, modern neutral pronunciation –more regular and etymological– corresponds to the Brazilian and international ones, with /e, ei/ [e, ei]. These are strongly maintained outside the areas influenced by Lisbon, especially in Coimbra.

Therefore, this pronunciation is certainly more advisable.

Examples: *venho* ᶦ/ˡ[ˈveˑɲu] ᵇ[ˈvɛ̃ˑɲu] ᵗˡ[ˈvɐˑɲu], *fecho* ᶦ[ˈfeˑʃu] ᵇ[ˈfeˑʃu] ˡ[ˈfeˑʃu̪] ᵗˡ[ˈfɐˑ-ʃu̪], *vejo* ᶦ/ˡ[ˈveˑʒu] ᵇ[ˈveˑʒu] ᵗˡ[ˈvɐˑʒu], *Tejo* ᶦ/ˡ[ˈteˑʒu] ᵇ[ˈteˑʒu] ᵗˡ[ˈtɐˑʒu], *espelho* ᶦ/ᵇ[is-ˈpeˑʎu] ˡ[ɨ̥ˈpeˑʎu] ᵗˡ[ɨ̥ˈpɐˑʎu], *seio* ᶦ[ˈseˑju] ᵇ/ˡ[ˈseˑju] ᵗˡ[ˈsɐˑju], *seis* ᶦ/ᵇ[ˈseis] ˡ[ˈseiʃ] ᵗˡ[ˈsɐɪʃ]; and *sem* ᶦ/ˡ/ᵇ[ˈsẽĩɲ] ᵗˡ[ˈsɐ̃ĩɲ].

Let us notice: *queijo com leite de ovelha* ᶦ[ˈkeiʒu kõũɲˈleiti djoˈveˑʎa] ᵇ[ˈkeiʒu kõũɲˈleitʃi dʒjoˈveˑʎa] ˡ[ˈkeiʒu̪ kõũɲˈleitɨ̥ δoˈveˑʎɜ, δjo-, -ɐ]] ᵗˡ[ˈkɐɪʒu̪ kõũɲˈɫɐɪtɨ̥ δoˈvɐˑʎɜ, δjo-, -ɐ]].

In unstressed syllables, we find /ei/ ᶦ/ˡ/ᵇ[ei] ᵗˡ[ɜɪ]: *leito* ᶦ[ˈleitu] ᵇ[ˈɫeitu] ˡ[ˈɫeitu̪] ᵗˡ[ˈɫɐɪtu̪], *leitor* ᶦ[leiˈtoɾ] ᵇ[ɫeiˈtoʁ] ˡ[ɫeiˈtoɾ] ᵗˡ[ɫɜɪˈtoɾ].

10.10. The other Lusitanian characteristic par excellence, in purely Lusitanian transcription, would certainly resort to the phoneme /ɨ/ (or, less recently, to /ə/) for ˡ[ɨ] ᵗˡ[ə], with its taxophones ˡ[ɪ] ᵗˡ[ɨ] in contact with /ɲ, ʎ, ʃ, ʒ, j/ or followed by /s#, z#/ (which, in Lusitanian pronunciation, are [ʃ, ʒ], and representable by means of the diaphonemes /ʂ, ʐ/).

However, in our phonemic interpretation, we should have /e̥/ within words, correspondent to Brazilian /ˌe/ spelt *-e-*; but neither for initial *e-*, which is /e/ or /i/, in all accents, except in words spelled as *esC-*, *exC-*, or for final *-e*, which is /i/ ᶦ/ᵇ[i] ˡ[ɨ]).

Examples: *nenhum* ᶦ[neˈɲũɲ] ᵇ[nẽ-] ˡ[nɪ-], *melhor* ᶦ[meˈʎɔɾ] ᵇ[meˈʎɔʁ] ˡ[mɪ̥ˈʎɔɾ], *fechar* ᶦ[feˈʃaɾ] ᵇ[feˈʃaʁ] ˡ[fɪ̥ˈʃaɾ], *chegar* ᶦ[ʃeˈgaɾ] ᵇ[ʃeˈgaʁ] ˡ[ʃɪ̥ˈɣaɾ], *tejadilho* ᶦ[ˌteʒaˈdiˑʎu] ᵇ[ˌteʒaˈdʒiˑ-] ˡ[ˌtĩ̥ʒ3ˈδiˑ-], *hoje* ᶦ[ˈoˑʒi] ᵇ[ˈoˑʒi] ˡ[ˈoˑʒɪ].

And: *leiamos* ᶦ[leˈjɐˑmus] ᵇ[ɫeˈjɐ̃ˑmus] ˡ[ɫɪ̥ˈjɐˑmu̥ʃ], *elegante* ᶦ[ˌileˈgẽti] ᵇ[ˌiɫeˈgẽ̥ɲtʃi] ˡ[ˌiɫɨ̥ˈɣẽ̥ɲtɨ̥], *desvertebrar* ᶦ[dezˌverteˈbɾaɾ] ᵇ[dezˌveʁteˈbɾaʁ] ˡ[dɪʒˌvɨ̥ɾtɨ̥ˈβɾaɾ], *pires* ᶦ/ᵇ[ˈpiˑris] ˡ[ˈpiˑrɪ̥ʃ], *e ela* ᶦ[iˈɛˑla, ˈjɛˑla] ᵇ[iˈɛˑɫa, ˈjɛˑɫa] ˡ[iˈɛˑɫ3, ˈjɛˑɫ3, -ɐ]].

Nevertheless, when the sequences /e̥/ [ɪ] + /ɲ, ʎ, ʃ, ʒ; ʂ, ʐ/ are preceded by /l, r/ (ᶦ[l, r] ᵇ[ɫ, ʁ]) ˡ[ɫ, ʁ] (since they have a dorsal component), its taxophone is [ɨ] (*ie* backer and less high): *eleger* ᶦ[ˌileˈʒeɾ] ᵇ[ˌiɫeˈʒeʁ] ˡ[ˌiɫɨ̥ˈʒeɾ], *torres* ᶦ[ˈtorris] ᵇ[ˈtoˑʁis] ˡ[ˈtoˑʁɨ̥ʃ].

In the same contexts, /ˌi/ *-i-* normally remains /i/, but in traditional pronunciation it becomes /ɨ/: *Lisboa* ᶦ[lizˈboa] ᵇ[ɫizˈboa] ˡ[ɫiʒˈβoɜ, -ɐ]] ᵗˡ[ɫɨʒ-], *Félix* ᶦ[ˈfɛˑlis, -iks] ᵇ[ˈfɛˑlis, -iks] ˡ[ˈfɛˑlɪʃ, -ɫiks] ᵗˡ[-ɫɨʃ], *milhão* ᶦ/ᵇ[miˈʎẽũɲ] ˡ[miˈʎẽũɲ] ᵗˡ[mɨ-], *dinheiro* ᶦ[diˈɲeiɾu] ᵇ[dʒĩˈɲeiɾu] ˡ[diˈɲeiɾu] ᵗˡ[dɨˈɲɐɪɾu].

For /e̥#N/ we also have [ɨ#N], while /ˌeN#/ is [ẽN#]: *tenebroso* ᶦ[ˌteneˈbroˑzu] ᵇ[ˌtẽ-neˈbroˑzu] ˡ[ˌtɨnɨ̥ˈβroˑzu], *temperado* ᶦ/ᵇ[ˌtẽmpeˈraˑdu] ˡ[ˌtẽmpɨ̥ˈraˑδu].

10.11. Another inconvenient Lusitanian 'curiosity', especially in traditional and possibly in mediatic accents, is that /ˌi/ [i] *-i-* (not /iN#/ [ĩN]), occurring in series in adjoining syllables, become /ɨ/, *ie* /i̥/ (except the last one, either stressed or not, and the first one, if absolutely initial, *ie* not with /#C/.

Examples: *dividir* ᶦ[ˌdiviˈdiɾ] ᵇ[ˌdʒiviˈdʒiʁ] ᵗˡ[ˌdəvəˈδiɾ, dəvˈδ-], *ministro* ᶦ[miˈnis-tru] ᵇ[mĩˈnistru] ᵗˡ[m(ə)ˈniʃtr̥u̥], *inimigo* ᶦ[ˌiniˈmiˑgu] ᵇ[ĩnĩˈmiˑgu] ᵗˡ[ˌin(ə)ˈmiˑɣu], *privilegiado* ᶦ[priˌvileˈʒjaˑdu] ᵇ[priˌviɫeˈʒjaˑdu] ᵗˡ[pr̥əˌviɫ(ɨ)ˈʒjaˑδu] (in our last example, the sequence [-ɫ(ɨ)ˈʒ-] is due to what has just been said little above, for /ˌi/ *-i-*).

But, of course, there are the following exceptions (including many lofty words), so that *i* /ˌi/, when corresponding to an original /ˈi/, remains /ˌi/ in derivatives, as in the conditional forms of verbs in -*ir*: *dividiríamos* *ⁱ*[diˌvidiˈriamus] *ᵇ*[ʤiˌviʤiˈriɐ̃mus] *ˡ*[diˌviðiˈriʒmuʃ] *ᵗˡ*[d(ə)ˌvəðiˈriʒmuʃ]; also in superlatives: *dificílimo* *ⁱ*[ˌdifiˈsiˑlimu] *ᵇ*[ˌʤi-fiˈsiˑɫĩmu] *ˡ*[ˌdifiˈsiˑɫimu] *ᵗˡ*[ˌdəfiˈsiˑɫimu].

The same happens in the rare series of /u/, so that we have to resort to the diaphoneme /u̜/ to account for this (possible and inconvenient) Lusitanian fact: *futuro* *ⁱ/ᵇ/ˡ* [fuˈtuˑru] *ᵗˡ*[fə̜ˈtuˑru, fə̜-, fə-, fu̜-, fu̜-, fu-].

10.12. Generally, in Lusitanian, /ˌo/ (but not /ˌoN#/ [õN#]) corresponds to /ˌu/: *o-probrioso* *ⁱ*[ˌoproˈbrjoˑzu] *ᵇ*[ˌoproˈbrjoˑzu] *ˡ*[ˌu̜pru̜ˈβrjoˑzu, ˌɔ-] (just to make things less simple, words beginning in (*h*)*o*(*CV*)- can have *ˡ*[u] or *ˡ*[ɔ]), and *monotonia* *ⁱ*[ˌmo-notoˈnia] *ᵇ*[ˌmõnotõˈnia] *ˡ*[ˌmunutu̜ˈniʒ, -ɐ]], *monção* *ⁱ/ᵇ*[mõŋˈsẽũŋ] *ˡ*[mõŋ̩ˈsẽũŋ].

On the other hand, if there is lexical composition with learned prefixes, for -*o*-, we have /ˌo/ *ˡ*[ɔ]: *monossilábico* *ⁱ*[ˌmonosiˈlaˑbiku] *ᵇ*[ˌmõnosiˈlaˑbiku] *ˡ*[ˌmɔnɔsi̜ˈlaˑβi-ku̜], *luso-francês* *ⁱ*[ˈˌluzo frẽŋˈses] *ᵇ*[ˈˌɫuzo frẽŋˈses] *ˡ*[ˈɫuzɔ frɔ̃ŋ̩ˈseʃ].

Therefore, /ọ/ should be used for all phonically unstressed *o*'s that do not become /u/, while, final *o*'s regularly do, instead: *monótono* *ⁱ*[moˈnɔˑtonu] *ᵇ*[mõˈnɔˑtõ-nu] *ˡ*[muˈnɔˑtu̜nu], *fonólogo* *ⁱ*[foˈnɔˑlogu] *ᵇ*[fõˈnɔˑɫogu] *ˡ*[fu̜ˈnɔˑɫuɣu]. This, more naturally, gives /mọˈnɔtọnu, fọˈnɔlọgu/, unless we choose to use a more Lusitanian-like diaphonemic transcription, *ie* /moˈnɔtonu, foˈnɔtonu/, obligating us to (more spelling-dependent) mental exercise, so that *o*'s and phonically unstressed /o/'s become /u/.

10.13. But, at this point, two divergent kinds of exception would arise: those that do not become /u/ (as in the cases seen above), and those that do so in all kinds of pronunciation, *ie* -*o*'s and final '/o/'s', more (phono)logically rendered with /u/ (even if followed by the grammeme -*s* /s#/ *ˡ*[ʃ] (in case, representable by means of the diaphoneme /ṣ/).

However, should we also want to force the case of endings into something like '/ˌo#/', it would be completely useless to talk about natural phonetics. It would rather be better to do as many retired people do, when they go fishing, or to the bowling club, or when they sprawl out on their sofas in front of the televison set (hopefully switched on)…

10.14. Another (not minor) nuisance concerns the fact that Lusitanian can have clear timbres, [ɛ, ɔ], in pre-stressed syllables. This chiefly happens (as already seen for *a*) with diachronic contraction, or before consonant sequences (simplified or not, in pronunciation and spelling).

Examples: *você* *ⁱ/ᵇ*[voˈse] *ˡ*[vɔˈse], *credor* *ⁱ*[kreˈdoɾ] *ᵇ*[kreˈdoɹ] *ˡ*[kr̥ɛˈðoɾ], *aquecer* *ⁱ*[ˌakeˈseɾ] *ᵇ*[ˌakeˈseɹ] *ˡ*[ˌɔkɛˈseɾ], *afe(c)tivo* *ⁱ*[ˌafeˈtiˑvu] *ᵇ*[ˌafeˈtʃiˑvu] *ˡ*[ˌɔfɛˈtiˑvu], *flexão* *ⁱ*[flekˈsẽũŋ] *ᵇ*[fɫekˈsẽũŋ] *ˡ*[fɫɛkˈsẽũŋ].

And: *corado* *ⁱ/ᵇ*[koˈraˑdu] *ˡ*[kɔˈraˑðu], *mordomo* *ⁱ*[moɾˈdoˑmu] *ᵇ*[moɹˈdõˑmu] *ˡ*[mɔɾ-ˈðoˑmu] (but today, luckily, also *ˡ*[muɾ-], conveniently normalized), *ado(p)tivo* *ⁱ*[ˌa-

doˈtiˑvu] *ᵇ*[ˌadoˈʧiˑvu] *ˡ*[ˌɜðʊˈtiˑvu], *opção* *ⁱ/ᵇ*[opˈsẽũŋ] *ˡ*[ʊpˈsẽũŋ]; also *boiar* *ⁱ*[boˈjaɾ] *ᵇ*[boˈjaʀ] *ˡ*[boˈjaɾ] (from /oi/).

In addition, this phenomenon appears in compounds and certain derivatives, with semantically more distinct elements (as we have just seen for *o*): *pretónico* (*ᵇpretô-*) *ⁱ*[pɾeˈtɔˑniku] *ᵇ*[pɾeˈtõˑniku] *ˡ*[pɾ̥ɛˈtɔˑni̥ku̥], but also in (more) learned words: *retórica* *ⁱ*[reˈtɔˑrika] *ᵇ*[ʀeˈtɔˑrika] *ˡ*[ʀɛˈtɔˑr̥ikɜ, -ɐ̥]].

Let us also notice the following Lusitanian minimal pairs (among other possible ones): *pregar* *ⁱ*[pɾeˈgaɾ] *ˡ*[pɾ̥ɨˈɣaɾ] 'to fix' and *ⁱ*[pɾeˈgaɾ] *ˡ*[pɾ̥ɛˈɣaɾ] 'to preach' (both *ᵇ*[pɾeˈgaʀ]), or *coração* *ⁱ/ᵇ*[ˌkoɾaˈsẽũŋ] *ˡ*[ˌku̥ɾɜˈsẽũŋ] 'heart' and *ⁱ/ᵇ*[ˌkoɾaˈsẽũŋ] *ˡ*[ˌkʊɾɜˈsẽũŋ] 'coloring'.

fig 10.3.3. Lusitanian vowels: *mediatic* morphonological diphthongs. Careful comparisons should be made both with fig 10.2.1 and fig 10.4.2.
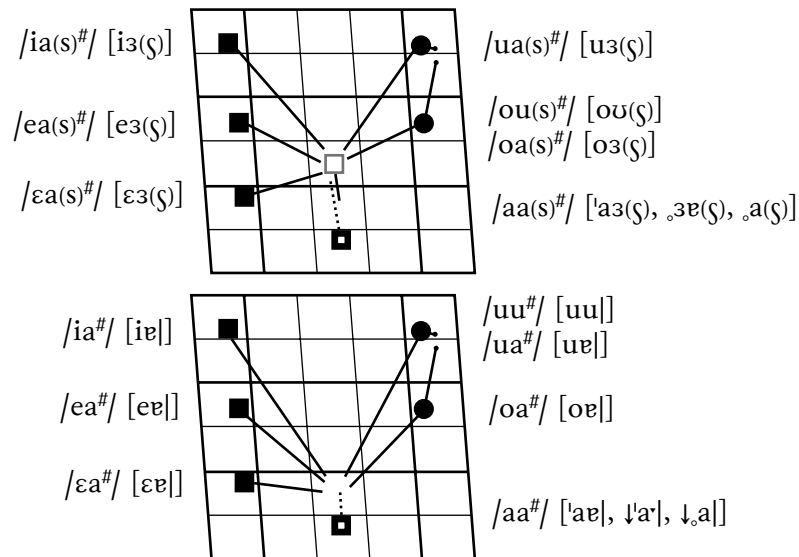
10.15. As fig 10.4.1 shows, there are 19 symbols for *traditional* Lusitanian Portuguese. Among these, there are: [ɪ, ɘ, ʊ], as taxophones of /i, e, u/ + [ɫ] (together with /a/ [ɑ]; but with [ʌÇ] for [a] /a/, *ie* before /ɲ; ʃ, ʒ; j; ʎ/): *Brasil* [bɾɜˈzɪɫ], *feltro* [ˈfaɫtɾu̥], *azul* [ɜˈzʊɫ], *mal* [ˈmɑɫ]. Also [ɑ], even in /ˌaɫ/, as some of the following examples will show.

On the other hand, three further taxophones are slightly shifted in the vocogram: [ə, ɨÇ] for [ɨ, ɨÇ] /i̥, e̥/, [ɑ] for [ɐ] /ɐ/, beside [ɜÇ] for [e] /e/: *apetecer* [ˌɜpə̥tə̥ˈseɾ], *espelho* [ɨʃˈpɜˑʎu], *canha* [ˈkɑˑɲɑ]], *ganho* (with '/ˈgɑ-/') [ˈgʌˑɲu], *Maio* [ˈmʌˑju], *malha* [ˈmʌˑʎɑ]].

In addition, fig 10.4.2 shows the usual traditional Lusitanian morphonological diphthongs.

10.16. In the Lusitanian *mediatic* accent, [ˈCẽN] sequences are very often realized by inserting a prepalatal approximant, [ɹ], before the nasalized vocoid, becoming similar, to the palatal semi-approximant [j], but still different: *apartamento* [ɜˌpɐɾtɜˈmjẽn̥tu̥], *pretendo* [pɾə̥ˈtɹẽndu] (cf *compreendo* [kõmˈpɾɹẽndu]) – cf fig 6.8 and § 9.14.

fig 10.4.1. Lusitanian vowels: *traditional* vowels and diphthongs. Before /Ç/ (ie /ɲ; ʃ, ʒ; j; ʎ/, for /i̦, e̦; e; a/ = [ɨ, ɪ, ʌ].

/i/ [i, ɪɫ, ĩN#]   /u/ [u, ʊɫ, ũN#]
/i̦/ [ə, i]   /u̦/ [ə, u]
/e̦/ [ə, ɨÇ]   /o/ [o, ̥o(ʋ), õN#, ̥õN#]
/e/ [e, ɛ̃, ̥ɛ(ʋ), ɪÇ, ̥ɪɫ, ɛ̃N#, ̥ẽN#]   /ɔ/ [ɔ, ̥o]
/ɛ/ [ɛ, ̥ɛ]
/ɐ/ [ɑ̃N#, ɑ#N]   /a/ [a, ɑɫ, ʌÇ, ̥ɑ|, ̥ʒ, ʒ'i, ʒ'u]
/a̦/ [̥a, ɑ̃N#, a#N]

/ei/ [ɐɪ, ̥ɔɪ, ɑ̃ĩN#, ̥ɔ̃ĩN#]   /ui/ [ui, ũĩN] (& [ʊ̃ĩN#])

                                         /oi/ [oɪ, õĩN#, ̥õĩN#]

                                         /ɐi/ [ɑ̃ĩN#, ̥ɔ̃ĩN#]

/ɛi/ [ɛɪ, ̥ɛɪ]   /ɔi/ [ɔɪ, ̥ɔɪ]
/ai/ [aə, ̥ɐɪ]

/iu/ [iu] *-io*   /ou/ [o, õũN#, ̥õũN#]
/iu/ [iu, ɪu] *-iu*   /ɐu/ [ʌ̃ũN#, ̥ʒ̃ũN#]
/eu/ [eʊ]   /au/ [ɑʊ, ̥ʌʊ]
/ɛu/ [ɛʊ, ̥ɛʊ]
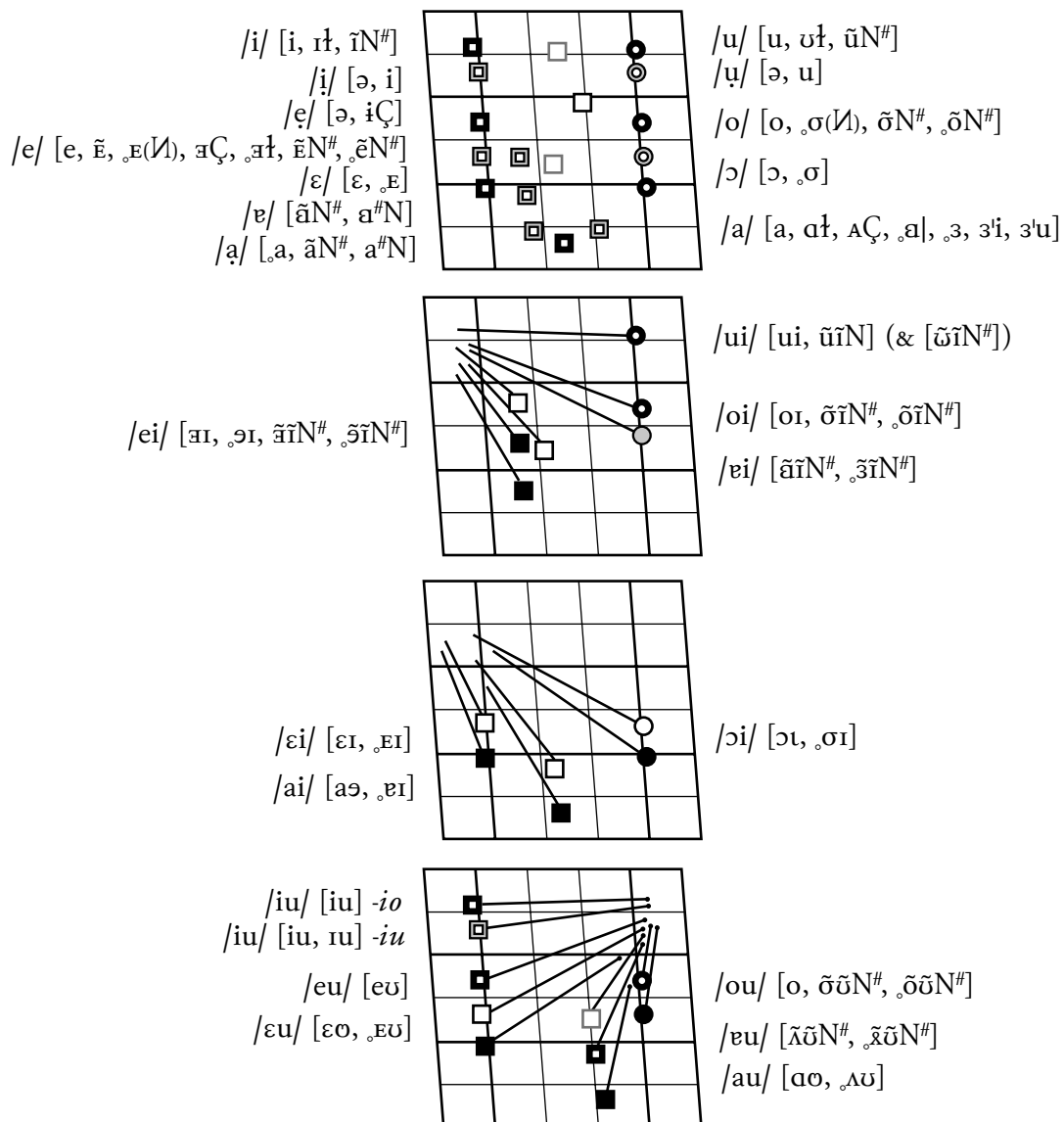
10.17. Frankly, many further aspects of Portuguese pronunciation really deserve fruitful commitment, instead of getting embroiled in inconvenient peculiarities, which are intricate and practically fruitless, as these segmental Lusitanian facts. For instance, greater care of prosodic features, stress, intonation, syllabic structure, assimilation, which provide better results.

However, in an exclusively Lusitanian phonemic transcription, these cases would be rendered with /ɛ, ɔ/ in unstressed syllables, too. In a diaphonemic transcription, /e̦, o̦/ would not be suitable, if already used for [ɨ, ɪ; u]. But, according to 'natural' conventions, /e, o/ would be enough.

Instead, in Lusitanian-like diaphonemic transcription, as with /e, o/ for [ɨ, ɪ; u], it would be necassary to assign an 'unreduced value' to '/e̦, o̦/', exactly for [ɛ, ɔ] (as, necessarily, for [a] /a̦/).

fig 10.4.2. Lusitanian vowels: *mediatic* morphonological diphthongs.

/ia(s)#/ [iɜ(ʃ)]   /ua(s)#/ [uɜ(ʃ)]

/ea(s)#/ [eɜ(ʃ)]   /ou(s)#/ [oʊ(ʃ)]
                     /oa(s)#/ [oɜ(ʃ)]

/ɛa(s)#/ [ɛɜ(ʃ)]

                     /aa(s)#/ [ˈaɜ(ʃ), ͜ɜɐ(ʃ), ͜a(ʃ)]

/ia#/ [iɐ|]   /uu#/ [uu|]
                     /ua#/ [uɐ|]

/ea#/ [eɐ|]   /ou#/ [oʊ|]
                     /oa#/ [oɐ|]

/ɛa#/ [ɛɐ|]

                     /aa#/ [ˈaɐ|, ↓ˈaˑ|, ↓͜a|]
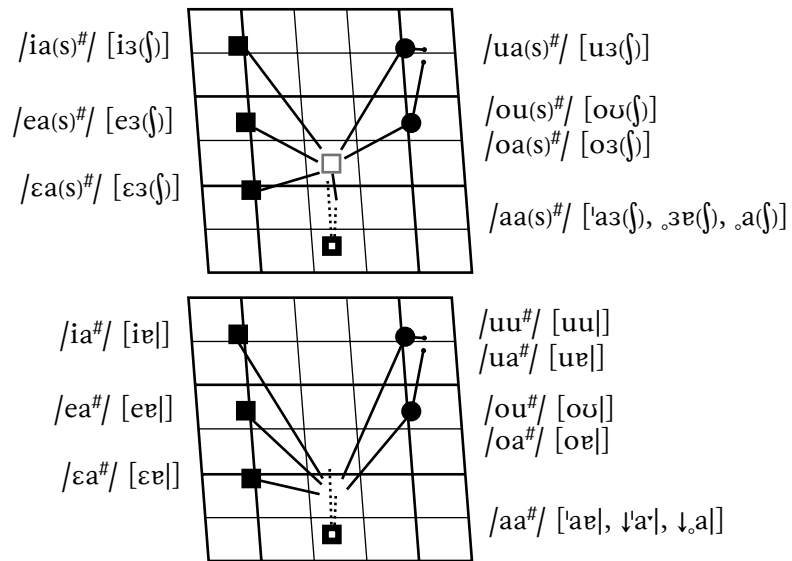
11.
Brazilian and Lusitanian consonants

11.1. By attentively comparing this chapter with ℭ 6, let us consider now the native inventories of the consonants of Portuguese.

11.2. For the three *nasals*, we have (cʄ *fig* 6.5): [m, n, ɲ]: *camas* ⁱ[ˈkɐ·mas] ᵇ[ˈkɐ̃·mas] ˡ[ˈkɐ·mɐʃ], *canas* ⁱ[ˈkɐ·nas] ᵇ[ˈkɐ̃·nas] ˡ[ˈkɐ·nɐʃ], *canhas* ⁱ[ˈkɐ·ɲas] ᵇ[ˈkɐ̃·ɲas] ˡ[ˈkɐ·ɲɐʃ].

These taxophones are absolutely necessary for an adequate transcription of Portuguese (and for a satisfying reproduction). Their devoiced variants are important for Lusitanian (before voiceless consonants): [m] + /p, b/: *tempo* ⁱ/ᵇ[ˈtɛ̃mpu] ˡ[ˈtɛ̃m̥pu̞], *sombra* ⁱ/ᵇ[ˈsõmbra] ˡ[ˈsõmbrɐ, -ɐ|].

And: [n] + /t, d/ and [ɲ] (in Brazilian, before [tʃ, dʒ] + [i, ɹ], ie /t, d/ + /i, i̥, j/): *antes* ⁱ[ˈɛ̃ntis] ᵇ[ˈɛ̃ɲtʃis] ˡ[ˈɛ̃ɲtʃʃ], *venda* ⁱ/ᵇ[ˈvɛ̃nda] ˡ[ˈvɛ̃ndɐ, -ɐ|], *onde* ⁱ[ˈõndi] ᵇ[ˈõɲdʒi] ˡ[ˈõndɨ]; [ŋ] + /k, g/: *nunca* ⁱ/ᵇ[ˈnũŋka] ˡ[ˈnũŋkɐ, -ɐ|], *língua* ⁱ[ˈlĩŋgwa] ᵇ[ˈlĩŋgʊa] ˡ[ˈlĩŋgʊɐ, -ɐ|].

The velar and prevelar seminasal taxophones ([ŋ, ŋ̟]) are rather important. They occur at the end of words before a *pause* (the prevelar one after fronter vocoids). They also occur before all other consonants (which are phonotactically possible, except /ɾ/), which are realized by means of *constrictive* contoids [f, v; s, z; ⁱ/ˡʃ, ᵇʃ, ⁱ/ˡʒ, ᵇʒ; ʁˡ].

Examples: *não* ⁱ/ᵇ/ˡ[ˈnɐ̃ũŋ], *enfim* ⁱ/ᵇ[ĩŋ̟ˈfĩŋ̟; ɛ̃ŋ̟-] ˡ[-ŋ̟̊f-], *denso* ⁱ/ᵇ[ˈdɛ̃ŋ̟su] ˡ[ˈdɛ̃ŋ̟̊su̞], *cães* ⁱ/ᵇ[ˈkɐ̃ĩŋ̟s] ˡ[ˈkɐ̃ĩŋ̟̊ʃ].

Approximants, [j, w, ᵇɹ], and *semi-approximants*, [ɹ, ɰ]: *lã e algodão* ⁱ[ˈlɐ̃ŋ jaɹguˈdɐ̃ũŋ] ᵇ[ˈlɐ̃ŋ jaɫguˈdɐ̃ũŋ] ˡ[ˈlɐ̃ŋ jaɫɣuˈδɐ̃ũŋ], *sem o amigo* ⁱ[ˌsẽĩŋwaˈmi·gu] ᵇ[ˌsẽĩŋɰɐ̃ˈmi·gu] ˡ[ˌsẽĩŋɰɐ̃ˈmi·ɣu] ᵗˡ[ˌsɐ̃ĩŋ-].

Laterals, [l, ɫ]: *um lado* ⁱ[ũŋˈla·du] ᵇ[-ɫa·du] ˡ[-ɫa·δu]; and, for *r* (with different realizations): *honra* ⁱ[ˈõŋra] ᵇ[ˈõŋʁa] ˡ[ˈõŋʁɐ, -ɐ|].

Instead, for /(V)VN#/ (ie word-final nasalized vocoids or diphthongs) followed by nasal contoids or vocoids and/or nasal contoids, their actual realizations are [Ṽ#N, Ṽ#V, Ṽ#Ṽ], where [ŋ#] is dropped, but it protects from vowel elision.

11.3. For diphonic pairs of *stops*, [p, b; t, d; k, g] (cʄ *fig* 6.6 and *fig* 11.2; for dental [t, d], in Brazilian, before /i, i̥, j/, we have their postalveo-palatal stop-strictive taxophones [tʃ, dʒ]): *pomba* ⁱ/ᵇ[ˈpõmba] ˡ[-ɜ, -ɐ|], *canga* ⁱ/ᵇ[ˈkɐ̃ŋga] ˡ[ˈkɐ̃ŋɜ, -ɐ|], *tenda* ⁱ/ᵇ[ˈtɛ̃nda] ˡ[-ɜ, -ɐ|], *tímido* ⁱ[ˈti·midu] ᵇ[ˈtʃĩ·midu] ˡ[ˈti·miδu], *teatro* ⁱ[ˈtja·tru] ᵇ[ˈtʃja·tru] ˡ[ˈtja·tru̞].

Before front vowels or /j/, the articulation of /k, g/ is prevelar, [k, g; ˡχ], by coarticulation, but, in Brazilian, before /i, i̥, j/, we have [c, ɟ] (postpalatal): *quinto* ⁱ[ˈkĩntu] ᵇ[ˈcĩntu] ˡ[ˈkĩn̥tu̥], *toque* ⁱ[ˈtɔˑki] ᵇ[ˈtɔˑci] ˡ[ˈtɔˑkɨ̥], *inquieto* ⁱ[ĩŋˈkjɛˑtu] ᵇ[ĩɲ-ˈcjɛˑtu] ˡ[ĩŋ̊ˈkjɛˑtu̥], *guia* ⁱ[ˈgia] ᵇ[ˈɟia] ˡ[ˈgiɜ, -ɐ]].

The most interesting Lusitanian peculiarity (which is more difficult for foreigners, but also for Brazilians who might want to 'speak Lusitanian') consists in the voiced stops, /b, d, g/, which are realized as true stops, [b, d, g] only after a pause or nasal contoids (as the preceding examples have shown). The same is also true for ⁱ[ɟd] ᵇ[ɟ̊d] ˡ[ɫd], the last two with an apical contact, since the two articulations are homorganic, as far as their tongue contact is concerned. Also by emphasis or precision they are true stops.

Examples: *bom* [ˈbõũŋ], *dá* [ˈda], *gato* ⁱ/ᵇ[ˈgaˑtu] ˡ[-u̥], *caldo* ⁱ[ˈkaɟdu] ᵇ[ˈkaɫ̥-] ˡ[ˈkaɫ-]; *pedido* ⁱ[peˈdiˑdu] ᵇ[peˈʤiˑdu] ˡ[pɾ̥ˈðiˑðu]; with emphasis: ˡ[pɾ̍ˈdiːdu]…

fig 11.1. Portuguese consonants: Brazilian taxophones of /k, g/ [c, ɟ] and /t, d/ [tʃ, ʤ].
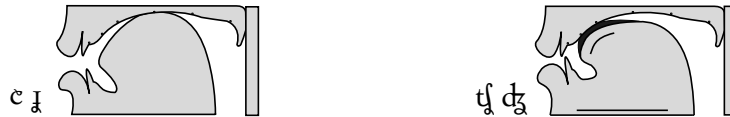
11.4. In all other cases, we find continuous realizations (two approximants and a constrictive, the last one), ˡ[β, ð, ɣ]. Unfortunately, most dictionaries that provide Lusitanian transcription miss the opportunity to use these symbols to adequately train interested people to an aware usage. On the contrary, they trivialize anything by showing only [b, d, g] (which may be fit for international and Brazilian accents).

However, we must admit that in Lusitanian, for ˡ[ɫβ, ɫɣ; ɾβ, ɾð, ɾɣ], even without emphasis or desire for precision, stop realizations are rather common in (more) learned words.

Examples: *aba* ⁱ/ᵇ[ˈaˑba] ˡ[ˈaˑβɜ, -ɐ]], *o brinco* ⁱ/ᵇ[uˈbɾĩŋku] ˡ[uˈβɾĩŋ̊ku̥], *Lisboa* ⁱ[lizˈboa] ᵇ[ɫizˈboa] ˡ[ɫiʒˈβoɜ, ɫɪʒ-], *álbum* ⁱ[ˈaɟbũŋ] ᵇ[ˈaɫbũŋ] ˡ[ˈaɫβũŋ, ˈaɫb-], *arbítrio* ⁱ[arˈbiˑtɾju] ᵇ[aʁˈbiˑtɾju] ˡ[ɜɾˈβiˑtɾju̥, ɜɾˈb-], *abdicar* ⁱ[ˌabdiˈkaɾ] ᵇ[ˌabʤiˈkaʁ] ˡ[ˌɜβðiˈkaɾ, ˌɜbd-], *uma dedada* ⁱ[ˌumadeˈdaˑda] ᵇ[ˌũmadeˈdaˑda] ˡ[ˌumɜðɾ̍ˈðaˑðɜ, -ɐ]], *padrão* ⁱ/ᵇ[paˈdɾẽũŋ] ˡ[pɜˈðɾẽũŋ], *árduo* ⁱ[ˈardwu] ᵇ[ˈaʁdwu] ˡ[ˈaɾðwu, ˈaɾd-], *desdém* ⁱ/ᵇ[dezˈdẽĩŋ] ˡ[diʒˈðẽĩŋ] ᵗˡ[diʒˈðãĩŋ].

Some more examples: *é gago* ⁱ/ᵇ[ɛˈgaˑgu] ˡ[ɛˈɣaˑɣu], *algoz* ⁱ[aɟˈgɔs] ᵇ[aɫˈgɔs] ˡ[aɫˈɣɔʃ, aɫˈg-], *vesgo* ⁱ/ᵇ[ˈvezgu] ˡ[ˈveʒɣu], *a graça* ⁱ/ᵇ[aˈgɾaˑsa] ˡ[ɜˈɣɾaˑsɜ, -ɐ]], *argamassa* ⁱ[ˌarga-ˈmaˑsa] ᵇ[ˌaʁgẽˈmaˑsɐ] ˡ[ˌɜɾɣɜˈmaˑsɜ, ˌɜɾg-].

fig 11.2. Portuguese consonants: Lusitanian taxophones of /b, d, g/ [β, ð; ɣ, ɣ].
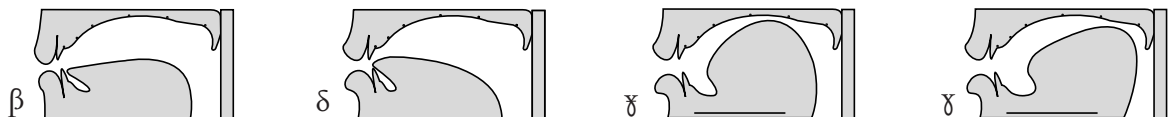
11.5. In addition, (even neutral) *Brazilian* typically adds /i/ [i; ᵐɪ] to separate stops followed by consonants (different from [ɾ, ɫ]) or if word-final: *optar* ⁱ[opˈtaɾ] ᵇ[opˈtaʀ, ˌopi̥ˈtaʀ, ˌopi-] ˡ[ɔpˈtaɾ], *advogado* ⁱ[ˌadvoˈgaˑdu] ᵇ[ˌadvoˈgaˑdu, ˌadʒiv-] ˡ[ˌɜð-vuˈɣaˑðu], *ritmo* ⁱ[ˈritmu] ᵇ[ˈʀitmu, ˈʀiˑtʃĩmu] ˡ[ˈʀitmu̥], *pneus* ⁱ[pˈneus] ᵇ[pˈneus, pi-] ˡ[pˈne̥uʃ].

More examples: *cádmio* ⁱ[ˈkadmju] ᵇ[ˈkadmju, ˈkaˑdʒimju] ˡ[ˈkaðmju, -dm-], *amígdala* ⁱ[aˈmigdala] ᵇ[ɐ̃ˈmigdaɫa; -ɪ̥id-] ˡ[ɜˈmiɣðɜɫɜ, -gd-, -ɐ‖], *digno* ⁱ[ˈdignu] ᵇ[ˈdʒignu, ˈdʒiˑɲĩnu] ˡ[ˈdiɣnu, -gnu-], *dogma* ⁱ[ˈdɔgma] ᵇ[ˈdɔgma; ˈdɔˑɪ̥ima] ˡ[ˈdɔɣmɜ, ˈdɔgmɜ, -ɐ‖], *eczema* ⁱ[igˈzeˑma] ᵇ[igˈzẽˑma, ˌiɪ̥i-] [iɣˈzeˑmɜ, igˈ-, -ɐ‖]ˡ.

In Lusitanian we also find some similar cases (cf § 12.12): *obje(c)to* ⁱ[obˈʒɛˑtu] ᵇ[obˈʒɛˑtu, ˌobi-] ˡ[ɔβˈʒɛˑtu̥, ɔb-; ˌɔβɪˈʒ-], *Bilac* ⁱ[biˈlak] ᵇ[biˈɫak, -ɫaˑɕi, -ɕi] ˡ[biˈɫak; -kɪ̥].

Lastly, cases like the following are also included among difficult consonant clusters for Brazilians: *afta* ⁱ[ˈafta] ᵇ[ˈafta, ˈafi̥ta, -fita] ˡ[ˈaftɜ, -ɐ‖], *absurdo* ⁱ[abˈsuɾdu] ᵇ[abˈsuʀdu, ˌabi-] ˡ[ɜβˈsuɾðu, ɜb-], *sublocar* ⁱ[ˌsub-loˈkar] ᵇ[ˌsub-ɫoˈkaʀ, -biɫo-] ˡ[ˌsuβ-ɫuˈkar, ˌsub-], but also *claro* ⁱ[ˈklaˑɾu] ᵇ[ˈkɫaˑɾu, ɕiɫ-] ˡ[ˈkɫ̥aˑɾu] and, more rarely, *abrupto* ⁱ[aˈbruptu] ᵇ[aˈbruptu, ↓ˌabiˑɾ-] ˡ[ɜˈβɾuptu̥, ɜˈb-] (due to the difference in the primary place of articulation).

11.6. For the three diphonic pairs of *constrictives* (cf fig 6.7), /f, v; s, z; ʃ, ʒ/ [f, v; s, z; ⁱ/ˡʃ, ᵇʆ, ⁱ/ˡʒ, ᵇʓ], we have: *faço* ⁱ/ᵇ[ˈfaˑsu] ˡ[-su̥], *povo* ⁱ/ᵇ/ˡ[ˈpoˑvu], *sul* ⁱ[ˈsuɪ̥] ᵇ[-ɫ] ˡ[-ɫ], *tensão* ⁱ/ᵇ[tẽɳˈsẽũɳ] ˡ[-ɳ̥-], *valsa* ⁱ[ˈvaɪ̥sa] ᵇ[ˈvɑɫsa] ˡ[ˈvɑɫ̥sɜ, -ɐ‖], *persa* ⁱ[ˈpɛrsa] ᵇ[ˈpɛʀsa] ˡ[ˈpɛɾsɜ, -ɐ‖].

And: *passeio* ⁱ[paˈseˑju] ᵇ[paˈseˑɰu] ˡ[pɜˈseˑju] ᵗˡ[pɜˈsɐˑɰu], *vaso* ⁱ/ᵇ/ˡ [ˈvaˑzu], *azar* ⁱ[aˈzar] ᵇ[aˈzaʀ] ˡ[ɜˈzaɾ], *os índios* ⁱ[uˈzĩɳdjus] ᵇ[uˈzĩɳdʒɰus] ˡ[uˈzĩɳdjuʃ], *xerez* ⁱ[ʃeˈres] ᵇ[ʆeˈres] ˡ[ʃɪ̥ˈreʃ], *Xerxes* ⁱ[ˈʃɛɾʃis] ᵇ[ˈʆɛʀʆis] ˡ[ˈʃɛɾʃɪ̥ʃ], *hoje* ⁱ[ˈoˑʒi] ᵇ[ˈoˑʓi] ˡ[ˈoˑʒi̥].

For syllable- or word-final *-s*, in international Portuguese and neutral Brazilian, we have [s‖, s⁽⁺⁾Ç̬, z⁽⁺⁾Ç̬, z⁺V], while, in Lusitanian, we find [ʃ‖, ʃ⁽⁺⁾Ç̬, ʒ⁽⁺⁾Ç̬, z⁺V].

However, in mediatic Lusitanian, they are realized as grooved semi-constrictives, [ʂ, ʐ]. In the 'Carioca' accent, of Rio de Janeiro, and in *mediatic Brasilian*, they become [ʆ‖, ʆ⁽⁺⁾Ç̬, ʓ⁽⁺⁾Ç̬, z⁺V], without lip protrusion).

Examples: *trás* ⁱ/ᵇ[ˈtras] ˡ[ˈtɾaʃ], *os pais* ᵇ[usˈpais] ˡ[uʃˈpaiʃ], *excelso* ⁱ[i(s)ˈsɛɪ̥su] ᵇ[iˈsɛɫ-su] ˡ[i̥ʃˈsɛɪ̥su̥], *bastar* ⁱ[basˈtar] ᵇ[basˈtaʀ] ˡ[bɜʃˈtaɾ], *pescada* ⁱ/ᵇ[pesˈkaˑda] ˡ[pi̥ʃˈkaˑðɜ, -ɐ‖], *as mães* ⁱ/ᵇ[azˈmẽĩɳs] ˡ[ɜʒˈmẽĩɳ̥ʃ], *asma* ⁱ/ᵇ[ˈazma] ˡ[ˈaʒmɜ, -ɐ‖], *as lãs* ⁱ[azˈlẽɳs] ᵇ[azˈɫẽɳs] ˡ[ɜʒˈɫ̥ẽɳ̥ʃ] (further examples will be found in other sections).

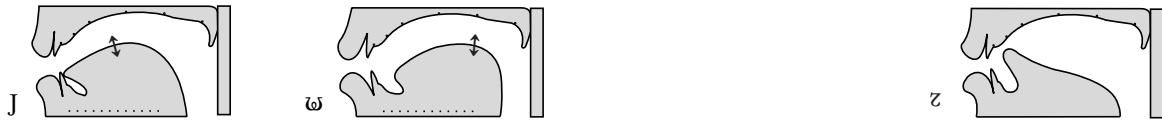*fig 11.3.* Portuguese consonants: Brazilian non-neutral variants.

11.7.1. The two central *approximant* phonemes, /j, w/ ⁱ[j, w] (palatal and velo-labial), are realized rather as semi-palatal and semi-velo-labial ᵇ/ˡ[ɰ, ɯ] (cf fig 6.8 and fig 11.4). They correspond to unstressed prevocalic *i, e* and *u, o*.

Examples: *miolo* ⁱ[ˈmjoˑlu] ᵇ/ˡ[ˈmjoˑɫu], *glória* ⁱ[ˈglɔˑɾja] ᵇ[ˈgɫɔˑɾja] ˡ[ˈgɫɔˑɾjɐ, -ɐ]], *peónia* (ᵇ-ônia) ⁱ[ˈpjɔˑnja] ᵇ[ˈpjõˑnjɐ] ˡ[ˈpjɔˑnjɐ, -ɐ]], *peão* ⁱ[ˈpjẽũŋ] ᵇ[ˈpjẽũŋ] ˡ[ˈpj̃ẽũŋ], *ideia* ⁱ[iˈdeˑja, -ɛˑja] ᵇ[iˈdɛˑja] ˡ[iˈðeˑjɐ, -ɐ]] ᵗˡ[iˈðɐˑjɐ, -ɐ]], *correio* ⁱ[koɾˈreˑju] ᵇ[koˈʁeˑju] ˡ[ku̥ˈʁeˑju] ᵗˡ[ku̥ˈʁɐˑju], *comboio* ⁱ[kõmˈboˑju] ᵇ/ˡ[kõmˈboˑju], *Sampaio* ⁱ[sẽmˈpaˑju] ᵇ[sẽmˈpaˑju] ˡ[sẽm̥ˈpaˑju].

And: *água* ⁱ[ˈaˑgwa] ᵇ[ˈaˑgwa] ˡ[ˈaˑɣw3, -ɐ]], *poeta* ⁱ[ˈpwɛˑta] ᵇ[ˈpwɛˑta] ˡ[ˈpw̥ɛˑt3, -ɐ]], *vácuo* ⁱ[ˈvaˑkwu] ᵇ[-kwu] ˡ[-kw̥ų̥], *arguir* (ⁱ-üir) ⁱ[arˈgwiɾ] ᵇ[aʁˈgwiʁ] ˡ[3ɾˈɣwiɾ, 3ɾˈg-], *Coimbra* ⁱ[ˈkwĩmbɾa] ᵇ[ˈkũ̥ĩmbɾa] ˡ[ˈkw̥ĩmbɾ3, -ɐ]].

fig 11.4. Portuguese consonants: native realizations of /j, w/ [ʝ, ɰ] (and possible variant of /ɾ/ [ɹ]).

11.7.2. *Slowing down* pronunciation, or for clarity, or emphasis, ᵇ/ˡ[ʝ, ɰ] can change into [i, u] (through [j, w]) (or even into [e, o], depending on spelling), giving: *glória* ⁱ[ˈglɔˑria] ᵇ[ˈgɫɔˑria] ˡ[ˈgɫɔˑɾi3, -ɐ]], *peónia* (ᵇ-ônia) ⁱ[piˈɔˑnia, pe-] ᵇ[piˈõˑnia, pe-] ˡ[piˈɔˑni3, pe-], *peão* [piˈẽũŋ, pe-], *ideia* ⁱ[iˈdeia, -ɛia] ᵇ[iˈdɛiɐ] ˡ[iˈðei3, -ɐ]] ᵗˡ[iˈðɐɪ3, -ɐ]], *correio* ⁱ[koɾˈreiu] ᵇ[koˈʁeiu] ˡ[ku̥ˈʁeiu] ᵗˡ[ku̥ˈʁɐɪu], *comboio* [kõmˈboiu], *Sampaio* ⁱ/ᵇ[sẽmˈpaiu] ˡ[sẽm̥-].

And: *água* ⁱ/ᵇ[ˈaˑgua] ˡ[ˈaˑɣu3, -ɐ]], *poeta* ⁱ/ᵇ[puˈɛˑtɐ, po-] ˡ[-3, -ɐ]], ⁱ/ᵇ[ˈvaˑkuu] ˡ[-ų̥u], *arguir* (ⁱ-üir) ⁱ[aɾguˈiɾ] ᵇ[aʁguˈiʁ] ˡ[3ɾɣuˈiɾ, -g-], *Coimbra* ⁱ/ᵇ[kuˈĩmbɾa, ko-] ˡ[-3, -ɐ]].

Several examples show that, by assimilation, in Lusitanian, we have devoicing, after voiceless consonants, and nasalization, [ʝ̥, ɰ̥; ʝ̃, ɰ̃; ʝ̃, ɰ̃], before nasalized vocoids. Generally, in Brazilian, we only find nasalization, [ʝ̃, ɰ̃]. In the international accent, instead, we have more natural approximant realizations: [j, w]. For Lusitanian devoicing, *cf* § 12.1.

11.8. For the *trill* manner of articulation, in addition to an alveolar *tap* [ɾ] /ɾ/, as we know, there is also a true trill [r] /r/ (or a theoretical uvular trill '/ʀ/') realized, though, in three different ways: ⁱ[(Vɾ)rV] ᵇ[(V)ʁV] ˡ[(V)ʁV] (*fig* 11.5 adds an orogram and three symbols to those seen in *fig* 6.9).

The important thing is to distinguish them from [ɾ] /ɾ/, especially between vowels, in word-internal position. In international pronunciation, for /r/ we can also have [ʀ], or [ʁ], besides [r, rː] (and [(Vɾ)rV], [(Vɾ)rːV]). Also see *fig* 11, which gathers several important orograms.

Furthermore, [ɾ] /ɾ/, in national accents, especially if mediatic ones, can become an alveolar approximant, [ɹ] (*cf fig* 11.4), between vowels, in the same word, where it distinctively opposes /r/: *caro* [ˈkaˑɾu] (*cf carro* ⁱ[ˈkarru] ᵇ[ˈkaˑʁu] ˡ[ˈkaˑʁu]).

We have [ɾ] /ɾ/, even after a tautosyllabic consonant: *braço* ᵇ[ˈbraˑsu] ˡ[-sų̥], *pedra* ⁱ/ᵇ[ˈpɛˑdra] ˡ[ˈpɛˑðɾ3, -ɐ]], *frio* ⁱ/ᵇ[ˈfriu] ˡ[ˈfɾ̥-]. Or else, in syllable- or word-final position: *perder* ⁱ[perˈder] ᵇ[peʁˈdeʁ] ˡ[pɨɾˈðeɾ], *formar* ⁱ[forˈmar] ᵇ[foʁˈmaʁ] ˡ[fuɾˈmaɾ]. This last case can be reprezented by means of the diaphoneme /ɾ/.

In addition, in Brazilian, [ɾ] also occurs when it is word-final followed by the initial vowel of a succeeding word, with resyllabification as in word-internal position (: [Vɾ#V]→[V#ɾV]). In Lusitanian, it occurs as final even before a pause or a consonant.

Examples: *ler algo* *ⁱ*[ˈle ˈɾaɫgu] *ᵇ*[ˈɫe ˈɾaɫgu] *ˡ*[ˈɫe ˈɾaɫɣu, -gu], *ler pouco* *ⁱ*[ˈleɾ ˈpoˑku] *ᵇ*[ˈɫeɐ ˈpouku, ˈpoˑ-] *ˡ*[ˈɫeɐ̯ ˈpoˑku̥, ˈpou-], *não ler* *ⁱ*[nẽũŋˈleɾ] *ᵇ*[nẽũŋˈɫeɐ] *ˡ*[nɐ̃ũŋˈɫeɾ].

fig 11.5. Portuguese consonants: native possible variants of /r/.
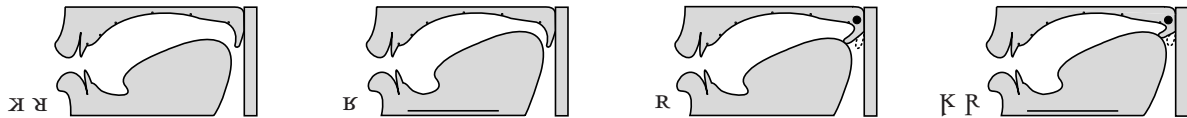
11.9. The phoneme /r/ occurs in word-initial position, even after a consonant or a vowel, and, within a word, after /V; n, s, l/ (ie after heterosyllabic consonants). In neutral Brazilian, it is realized as a voiceless uvular approximant, [ꭓ], independently of the context, with variants, which are always independent of neighboring phones, as well.

We indicate them in frequency order: voiced uvular constrictive [ʁ], or voiced uvular trill [ʀ], also partially devoiced [ʁ̥, ʀ̥].

Besides, we find two further variants (but less neutral): voiceless uvular constrictive trill [ʀ̥] and, lastly, voiced alveolar trill [r]. This can safely be the preferable international phone. It can also be slightly lengthened [rˑ, rː]), and, after a final vowel, /V#/, it can become [ɾr(ː)]: [(Vɾ)r(ː)].

In Lusitanian, this same phoneme is [ʁ], with its variants, again shown in frequency order: [ʀ, ʀ, ʀ̥, ʁ̥, ʀ̥] (where [ʀ] is the voiced counterpart of [ʀ̥]), in addition to [(Vɾ)rː]. This last one, little more than a century ago, was the only neutral pronunciation, while, today, it is less preferred, and felt to be provincial, or rural.

Examples: *rua* *ⁱ*[ˈrua] *ᵇ*[ˈꭓua] *ˡ*[ˈʁuɐ, -ɐ] , *as ruas* *ⁱ*[azˈruas] *ᵇ*[azˈꭓuas] *ˡ*[ɜʒˈʁuɐʃ], *um rato* *ⁱ*[ũŋˈraˑtu] *ᵇ*[ũŋˈꭓaˑtu] *ˡ*[ũŋˈʁaˑtu̥], *terra* *ⁱ*[ˈtɛrra] *ᵇ*[ˈtɛˑꭓa] *ˡ*[ˈtɛˑʁɜ, -ɐ] , *melro* *ⁱ*[ˈmɛɾru] *ᵇ*[ˈmɛɫꭓu] *ˡ*[ˈmɛɫʁu], *tenro* *ⁱ*[ˈtẽŋru] *ᵇ*[ˈtẽŋꭓu] *ˡ*[ˈtẽŋʁu].

The speakers who have /r/ [r(ː)], can have /s#r, z#r/ → [ɾr, rː], also [ʀꭓ]: *ˡ*[ɜɾˈr(ː)uɜʃ, ɜꭓˈꭓuɜʃ]. The assimilation, or fall, of /s, z/ is also frequent with neutral /r/: *as ruas* *ⁱ*[a(ɾ)ˈruas] *ᵇ*[a(ꭓ)ˈꭓuas] *ˡ*[ɜ(ʁ)ˈʁuɜʃ].

International pronunciation readily accepts /r/ [r(ː)] and /VrV/ [Vɾr(ː)V], to avoid mixed or irregular usages and [ʁ] instead of [ɾ], and vice versa. Such erratic usages derive from imperfect acquisitions of the distribution of the two phonemes /ɾ, r/.

11.10. The phoneme /ɾ/ also occurs in syllable-final position inside a word, and it corresponds to [ɾ], in international and Lusitanian Portuguese (with the not necessary possibility of having [r] before [m, n; l, ɫ]); but it corresponds to /r/ in Brazilian (/ɾ/, with its variant [ɾ], also acceptable, or [z], which is not neutral).

Examples: *largo* *ⁱ*[ˈlargu] *ᵇ*[ˈɫaꭓgu; ˈɫaɾ-] *ˡ*[ˈɫaɾɣu; -gu], *porta* *ⁱ*[ˈpɔrta] *ᵇ*[ˈpɔꭓta; ˈpɔɾ-] *ˡ*[ˈpɔɾtɜ, -ɐ] , *arma* *ⁱ*[ˈarma] *ᵇ*[ˈaꭓma; ˈaɾ-] *ˡ*[ˈaɾmɜ; ˈaɾ-], *carne* *ⁱ*[ˈkarni] *ᵇ*[ˈkaꭓni; ˈkaɾ-]

l[ˈkaɾnɨ; ˈkar-], *Carlos* *i*[ˈkaɾlus] *b*[ˈkaʀlus; -ɾɫ-] *l*[ˈkaɾɫu̥ʃ; -ɾɫ-].

In common (though rather popular) Brazilian, /ɾ#/ [ʀ] may fall (perhaps slightly lengthening a preceeding vocoid), especially in infinitives.

In Lusitanian, instead, /ɾ#/ is [ɾ] (or [z]), often devoiced, [ɾ̥] (and [z̥]), or followed by [ɨ] (more or less short ‰ devoiced): *fazer* *i*[faˈzeɾ] *b*[faˈzeʀ; -eˑ; -e] *l*[fɜˈzeɾ, -ɾ̥, -z̥, -ɾɨ, -ˑɾɨ], *mar* *i*[ˈmaɾ] *b*[ˈmaʀ] *l*[ˈmaɾ, -ɾ̥, -z̥, -ɾɨ, -ˑɾɨ].

Several examples show that, in Lusitanian, we find [ɾ̥] in contact with voiceless consonants, before a pause (cf § 12.1).

11.11. The two *lateral* phonemes are /l, ʎ/ *i*[l, ʎ] (fig 6.11): *fila* [ˈfiˑla], *filha* [ˈfiˑʎa]. The first, in neutral pronunciations, or even in Luso-Brazilian mediatic ones, also before a vowel, is semi-velarized alveolar, [ɫ̈] (or also [ɫ], alveo-velar [ɨɵ velarized alveolar, with no attenuation]; but, it can also be [l], which was the traditional neutral Lusitanian pronunciation, only optional, nowadays).

After a vowel, before a pause or consonant, the phoneme /l/, in international pronunciation, becomes [ꞁ] (alveo-velar [ɨɵ velarized alveolar] semilateral with no contact between tongue and palate).

Articulatorily, it is rather suitable and simpler, cf fig 6.12, contrary to what might be thought, and in spite of the seemingly more complex symbol, but it is more than justifiable).

In *Brazilian*, it is ‘alveo-velo-labial’ [ɫ] (velarized alveolar with lip rounding). It also has a frequent vocalized *mediatic* variant, hastily indicated as ‘[u]’. However, it does not belong to neutral pronunciation, and produces the diphthongs [iʊ, uʊ, oʊ] [eʊ, ɛʊ, ɵʊ] [ɛɔ, ɔɔ, aɔ] (cf fig 9.5 & § 9.6).

In *Lusitanian*, in the same context, we find [ɫ] (alveo-velar with no lip rounding, and the possible variant, alveo-*uvular*, [ʟ]): *leite* *i*[ˈleiti] *b*[ˈɫeitʃi] *l*[ˈɫeitɨ] *tl*[ˈɫɜɪtɨ], *claro* *i*[ˈklaˑɾu] *b*[ˈkɫaˑɾu] *l*[ˈkɫa̠ˑɾu], *azul escuro* *i*[aˈzu lisˈkuˑɾu] *b*[aˈzu ɫisˈkuˑɾu] *l*[ɜˈzu ɫɨ̥ʃˈkuˑɾu], *salto* *i*[ˈsaɫtu] *b*[ˈsaɫtu] *l*[ˈsa̠ɫ̥tu̠], *geral* *i*[ʒeˈɾaɫ] *b*[ʒeˈɾaɫ] *l*[ʒɪˈɾaɫ], *talho* [ˈtaˑʎu].

In *traditional* and *mediatic Lusitanian*, *i*[ɫ#] *tl/ml*[ɫ#] can become [ꞁ], because it is followed by a more or less short and devoiced [ɨ]: *mal* *i*[ˈmaɫ] *b*[ˈmaɫ, ˈmaɔ] *l*[ˈmaɫ, -ɫ̥, -ɫɨ̥, -ꞁɨ̥].

Several examples show that, in Lusitanian, we find [ɫ̥, ꞁ̥] in contact with voiceless consonants or before a pause (cf § 12.1).

fig 11.6. Portuguese consonants: native variants of /l/.
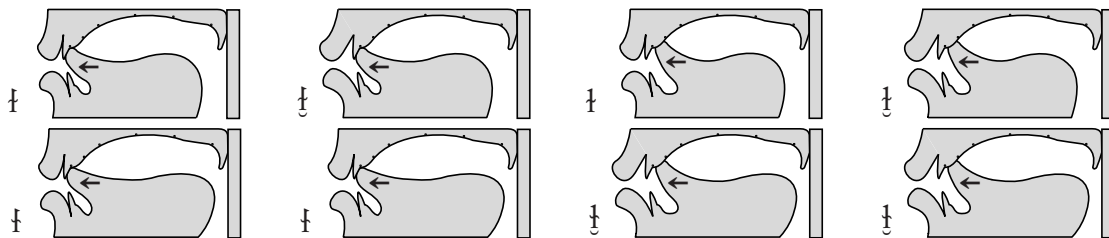
12.
Taxophonics

Lusitanian devoicing

12.1. We can posit a normalized 'rule' for *Lusitanian devoicing* (either complete or partial) of the three unstressed vowel phonemes graphically 'represented' by *i, e, o, u,* with the following realizations [i̥, i̥], [ɨ̥, ɨ̥, i̥, i̥], [u̥, u̥] (instead of the international ones, [i, e, o, u]) and of the six consonantal phonemes (*ie* sonants, or resonants) /m, n; j, w; l, ɾ/, with their realizations [m̥, n̥, ŋ̊, ŋ̊], [j̊, w̥], [l̥, ɫ̥], [ɾ̥].

We must keep in mind well that a secondary stress, [ˌ], normally, prevents devoicing. Equally, the second elements of diphthongs, [Vi, Vu], are never devoiced (because they are protected by the nucleus of the first element, which is decidedly voiced).

Therefore, *i, e, o, u* [i̥, i̥], [ɨ̥, ɨ̥, i̥, i̥], [u̥, u̥] are completely devoiced, [i̥], [ɨ̥, i̥], [u̥], between /Ç/ (*ie* between voiceless consonants), or between /|/ (indicating a pause) and /Ç̥/, or between /Ç/ and /|/: /Ç̥_Ç̥/, /|_Ç̥/, /Ç̥_|/, also in tautosyllabic contexts /#Ç̥И(И)V|/. Where one or two approximants, /И/, which may be present, become partially devoiced, [j̊, w̥], [ɫ̥], [ɾ̥].

Here are some examples: *pretensão* ᶦ[ˌpɾetẽŋˈsẽũŋ] ˡ[ˌpɾ̥tẽŋ̊ˈsẽũŋ], *pretenso* ᶦ[pɾeˈtẽŋsu] ˡ[pɾ̥ˈtẽŋ̊su̥], *caixa* ᶦ[ˈkaiʃa] ˡ[ˈkaiʃɐ, -ɐ|], *titânio* ᶦ[tiˈtɐ·nju] ˡ[ti̥ˈtɐ·nju], *secar* ᶦ[seˈkaɾ] ˡ[sɨ̥ˈkaɾ], *fechar* ᶦ[feˈʃaɾ] ˡ[fi̥ˈʃaɾ], *puxar* ᶦ[puˈʃaɾ] ˡ[pu̥ˈʃaɾ], *campo* ᶦ[ˈkẽmpu] ˡ[ˈkẽmpu̥], *tinto* ᶦ[ˈtĩntu] ˡ[ˈtĩntu̥], *banco* ᶦ[ˈbẽŋku] ˡ[ˈbẽŋ̊ku̥], *pior* ᶦ[ˈpjɔɾ] ˡ[ˈpjɔɾ].

And: *quanto* ᶦ[ˈkwẽntu] ˡ[ˈkw̥ẽn̥tu̥], *sulcar* ᶦ[suɫˈkaɾ] ˡ[suɫ̥ˈkaɾ], *plano* ᶦ[ˈplɐ·nu] ˡ[ˈpl̥ɐ·nu], *preto* ᶦ[ˈpɾe·tu] ˡ[ˈpɾ̥e·tu̥]; *o pão* ᶦ[uˈpẽũŋ] ˡ[u̥ˈpẽũŋ], *o fluxo* ᶦ[uˈfluksu] ˡ[u̥ˈfɫ̥uksu̥], *átrio* ᶦ[ˈa·tɾju] ˡ[ˈa·tɾ̥ju̥], *profícuo* ᶦ[pɾoˈfi·kwu] ˡ[pɾ̥u̥ˈfi·kw̥u̥].

When completely unstressed, *i, e, o, u,* inside a word or a rhythm group, are in contact with a single voiceless consonant, /Ç/, they are only partially devoiced, [i̥], [ɨ̥, i̥], [u̥]: ᶦ[ˌaɫfiˈne·ti, peˈda·su, soˌlidifiˈkaɾ] ˡ[ˌaɫ̥fi̥ˈne·ti̥, pɾ̥ˈða·su̥, su̥ˌliðifi̥ˈkaɾ] *alfinete, pedaço, solidificar.*

Words in sentences

12.2. Let us begin this section, considering only international pronunciation, not to make its presentation and reading heavier. At a certain point, we will re-

sume everything with further examples, adding various native pronunciations.

When, in sentences, words that end and begin in a vowel are joined together, different phenomena are produced.

If the two vowels are originally stressed, both remain, even if some prominence adjustments occur: *ali há* [a'li 'a → aˌli'a, ˌali'a], *café árabe* [ka'fɛ 'aˑɾabi → kaˌfɛ'aˑɾabi, ˌkafɛ'aˑɾabi], *xará ótimo* [ʃa'ɾa 'ɔˑtimu → ʃaˌɾa'ɔˑtimu, ʃaɾa'ɔˑtimu], *Jesus Cristo* [ʒe'zus 'kɾistu → ʒeˌzus'kɾistu, ˌʒezus'kɾistu].

When a stressed and unstressed vowels meet, their elements remain unaltered and become diphthongs: *xará heróico* [ʃa'ɾai 'ɾɔiku → ʃaˌɾai'ɾɔiku], *xará inimigo* [ʃa'ɾai ni'migu → ʃaˌɾaini'miˑgu], *boné azul* [bo'nɛa 'zuɫ → boˌnɛa'zuɫ], *boné utilizado* [bo'nɛu tili'zaˑdu], *boné usado* [bo'nɛu 'zaˑdu → boˌnɛu'zaˑdu], *sabiá alegre* [sa'bjaa 'lɛˑɡɾi → saˌbja'lɛˑɡɾi].

When the two vowels are unstressed and stressed, respectively, we have: *essa erva* [ˌɛsa'ɛɾva], *essa unha* [ˌɛsa'uˑɲa], *essa ilha* [ˌɛsa'iˑʎa]. If the vowels are equal, they may be contracted: *essa água* [ˌɛsa'aˑgwa, ɛ'saˑgwa], *verde ilha* ['veɾdi 'iˑʎa, ˌveɾ'diːʎa], *como uva* ['koˑmu 'uˑva, ˌko'mwuˑva, ˌko'muˑva].

Besides: *esse ano* [ˌesi'ɐˑnu, e'sjɐˑnu], *esse elo* [ˌesi'ɛˑlu, e'sjɛˑlu], *esse homen* [ˌesi'ɔˑmẽĩŋ, e'sjɔˑ-], *nove unhas* ['nɔˑvi 'uˑɲas, ˌnɔ'vjuˑɲas], *modelo alvo* [mo'deˑlu 'aɟvu, moˌde'lwaɟvu], *ponto ermo* ['põɳtu 'eɾmu, ˌpõɳ'tweɾmu], *ponto ótimo* ['põɳtu 'ɔˑtimu, ˌpõɳ'twɔˑtimu], *tenho ido* ['teˑɲu 'iˑdu, ˌteɲu'iˑdu, ˌte'ɲwiˑdu].

12.3. When both vowels are unstressed, the result depends on each single element. If they are equal, there are three possibilities: both remain, or they combine producing a half-lenthened vocoid, or one alone remains.

Therefore, we have: *essa apuração* [ˌɛsaaˌpuɾa'sẽũŋ, ˌɛsaˑ-, ˌɛsa-], *essa animação* [ˌɛsaaˌnima'sẽũŋ, ˌɛsaˑ-, ˌɛsa-], *essa ambiguidade (ⁱ-güi-)* [ˌɛsaẽmˌbigwi'daˑdi, ˌɛsẽˑ-, ˌɛsẽ-].

With /a/ + other vowels, we have: *obra emérita* ['ɔˑbɾai 'mɛˑɾita, 'ɔˑbɾi 'm-], *bela empresa* ['bɛˑlẽĩm 'pɾeˑza, 'bɛˑlĩm 'pɾeˑza], *coisa honesta* ['koizao 'nɛsta, 'koizau, 'koizo], *coisa inadmissível* ['koizai ˌnadmi'siˑveɟ, 'koizi ˌnad-], *muita hombridade* ['mũĩɳtẽõm bɾi'daˑdi, 'mũĩɳtõm bɾi'daˑdi, 'mwĩɳ-], *uma indicação* [ˌumẽĩɳˌdika'sẽũŋ, ˌu-mĩɳ-], *selva umbrosa* ['sɛɟvẽũm 'bɾɔˑza, 'sɛɟvũm], *linda união* ['lĩɳdau 'njẽũŋ, 'lĩɳdu].

With /i/ + other vowels, we have: *leve aragem* ['lɛˑvja 'ɾaˑʒẽĩŋ], *leve utilidade* ['lɛˑvju ˌtili'daˑdi], *leve exame* ['lɛˑvji 'zɐˑmi, 'lɛˑvi], *leve empenho* ['lɛˑvjĩm 'peˑɲu, 'lɛˑvĩm, -vjẽm, -vẽm], *rede horrível* ['ɾeˑdjoɾ 'ɾiˑveɟ], *doce-amargo* [ˌdosa'maɾgu, -sja-], *doce amparo* ['doˑsjẽm 'paˑɾu], *esse umbigo* [ˌesjũm'biˑgu], *nove ondas* ['nɔˑvi 'õɳdas, ˌnɔ'vjõɳdas].

When not speaking slowly: *ele se ergueu* [ˌelisjeɾ'geu, -seɾ-], *muito obrigado* [ˌmũĩɳtwobɾi'gaˑdu, -to-, ˌmwĩɳ-; ˌmũɳ-].

With /i/ + /i/, we have: [ˌesji'pɔˑkɾita, ˌesi'-] *esse hipócrita*, [ˌesjĩɳteɾ'vaˑlu, ˌesĩɳ-] *esse intervalo*; with /u/ + /u/, we have: ['liˑvɾwu tiˑliˑsimu, 'liˑvɾu] *livro utilíssimo*, ['koɾpwũɳ 'twoˑzu, 'koɾpũɳ] *corpo untuoso*.

With /u/ + other (different) vowels, we have: ['oˑtɾwad vo'gaˑdu, 'oˑtɾad] *outro advogado*, ['oˑtɾwi 'zɐˑmi, 'oˑtɾi] *outro exame*, ['soˑɲwip 'nɔˑtiku, 'soˑɲip] *sonho hipnótico*, ['liˑvɾwĩɳ 'teiɾu, 'liˑvɾĩɳ] *livro inteiro*, ['meˑdwoɾ 'ɾiˑveɫ, 'meˑdo] *medo horrível*, ['koɾpwõn du'lẽnti, 'koɾpõɳ] *corpo ondulante*.

12.4. As some examples have already shown, when vowels are lengthened or changed into diphthongs, nasalization is spread to both elements: *casa antiga* [ˈkaˑzɐ̃ɾ ˈtiˑga, ˈkaˑzɐ̃ɾ], *uma indicação* [ˌumɐ̃ĩ̯ɾˌdikaˈsɐ̃ũ̯ŋ, ˌumĩ̯ɾ-], *rude império* [ˈruˑdjĩm ˈpɛˑɾju, -dĩm].

The more numerous unstressed syllables are, the more possible their compression is: *essa austeridade* [ˌɛsausˌteɾiˈdaˑdi, ˌɛsus-], *esse aipim* [ˌesjaiˈpĩ̯ŋ, ˌesai-], but: *essa aula* [ˌɛsaˈaula], *essa eira* [ˌɛsaˈeiɾa].

When final diphthongs and initial vowels meet, inside rhythm groups, [-i, -u] change into [j, w]: *o meu amigo* [uˌmewaˈmiˑgu], *quem vai ao fogo se queima* (*ˡqueima-se*) [kẽĩ̯ŋˈvaˑjo ˈfoˑguˌ siˈkeima] [-ˈvaˑjau, ˈkeimasi]. This example also shows the common reduction of *ao(s)* [au(s)-] to [o(s)-]: *ao banco* [oˈbẽŋku, au-], *aos gatos* [ozˈgaˑtus, auz-].

When the article *uma* [ˌuma-] is followed by a word that begins in a nasal consonant, it can become [ũɐ̃-]: *uma morena* [ˌũɐ̃moˈɾeˑna], *uma mãe* [ũɐ̃ˈmɐ̃ĩ̯ŋ].

Often, prestressed *minha(s)* become(s) [mĩa-]: *a minha mãe* [ˌamĩaˈmɐ̃ĩ̯ŋ, a-ˌmĩa-], *minhas ovelhas* [ˌmĩazoˈveˑʎas].

The preposition *com* [kõũ̯ŋ-], followed by articles, becomes [kõ-, kw-]: *com o pai* [kõũ̯ˈpai, kwuˈpai], *com as mãos* [kõɐ̃zˈmɐ̃ũ̯ŋs, kwaz-] (cf § 7.2.5).

The preposition *em* [ẽĩ̯ŋ-], often becomes [ĩ̯ŋ-]: *em casa* [ẽĩ̯ŋˈkaˑza, ĩ̯ŋ-], *em português* [ẽĩmˌpoɾtuˈges, ĩmɾ-] (cf § 7.2.5).

The preposition *para* [ˌpaɾa-] is normally reduced to [pɾa-]: *para mim* [pɾaˈmĩ̯ŋ], *para os pais* [pɾausˈpais] (including [ˌpaɾosˈpais, pɾosˈpais]), *para a panificação* [ˌpɾapaˌnifikaˈsɐ̃ũ̯ŋ].

The preposition *de* [di-, dj-], before a vowel within a rhythm group, generally becomes [d-]: *copo de água* [ũŋˈkɔˑpu ˈdjaˑgwa, ˈdaˑgwa], *depois de amanhã* [deˈpoiz djamaˈɲɐ̃, da-].

The combined preposition [ˌpelu-] *pelo* usually also becomes [plu-] (quite different from a typically foreign [ˈpeˑlu], which might legitimately be interpreted more as *pêlo* ‘hair’): *pelo cão* [pluˈkɐ̃ũ̯ŋ, ˌpelu-]. The same goes for *pela cidade* [ˌplasiˈdaˑdi, ˌpela-], *pelas ciências* [plaˈsjẽ̞ŋsjas, ˌpela-] (with ˡ[-ʃˈsɟ-] –and [-ʃˈsɟ-] in Rio– for -*s s*-).

The last example shows the change of [sˊˈs] into [ˊˈs]. Besides, we also have: *as zebras* [aˈzeˑbɾas], &c.

In sentences, final [s] becomes voiced before a vowel or a voiced conconant, as plural articles show: *os amigos* [ˌuzaˈmiˑgus], *as notícias* [ˌaznoˈtiˑsjas].

Let us end with [ɫˊ] (or ᵇ[ɫˊ] ˡ[ɫˊ]) which becomes [ˊl] (or ᵇ/ˡ[ˊɫ]), when followed by a vowel: *fácil (pretexto)* [ˈfaˑsiɫ (preˈtestu)], but: *fácil exercício* [ˈfaˑsi ˌlezeɾˈsiˑsju].

12.5. Here are some interesting vowel clusters (mostly with graphemic vowels), which should be considered carefully:

Tamanho o ódio foi e a má vontade [taˈmɐˑɲuˑ ˌwɔˑdju.. ˌˌfoi..ˌ jaˈma võɾ_taˑdi.ˌ]

O amor e o ódio nunca é igual [waˈmoɾˑ| ˌjwɔˑdjuˑˑ| ˈnũŋk(a)ɛi ˌgwaɫ..]

Faço oó aí ou ali [ˌfaswoˈɔˑ aˌiˑˑ| waˌli..ˌ] (*faço oó* = ‘I’m gonna bye-byes’).

Lastly, let us consider some words of Tupian origin (belonging to the Amazon fauna, with *-açu* [-aˈsu] a suffix meaning 'large'), like: *andá-açu* [ɐ̃ɲˌdaˈsu], *arumã-*
-açu [ˌaɾuˌmɐ̃ˈsu], *teiú-açu* [teˌjuaˈsu].

12.6. Let us also add this series of examples, for further consideration and practice:
A tarde e a noite ajudam descansar [aˈtaɾdi· ja‿noiti·· aˈʒuˑdɛ̃ũɐ ˌdeskɛ̃ɳ‿saɾ··] [ˌdis-]
À tarde e à noite durmo sempre [aˈtaɾdi· ja‿noiti·· ˈduɾmu ‿sɛ̃mpɾi··]
Quais são as partes do dia que prefere? [¿ˌkwaiˈsɛ̃ũas ‿paɾtis duˈdia·· ¿kipɾe‿fɛˈɾi··]
    [-ˈsɛ̃ w̃as‿p-] — *A noite e a tarde* [aˈnoiti· ja‿taɾdi··]
Quando gosta de dormir? [¿kwɛ̃ɱduˈgɔsta· ¿didoɾ‿miɾ··] — *À noite e à tarde* [a-
    ˈnoiti· ja‿taɾdi··]
As vezes em que como uma sandes… [azˈveˑzis· ĩ̯ŋkiˈkɔˑmu ma‿sɛ̃ɳdis··]
Às vezes como uma sandes [azˈveˑzis· ˈkɔˑmu ma‿sɛ̃ɳdis··]
O recurso à força é legítimo [ˌuɾɾeˈkuɾswa ˈfoɾsaɛ· le‿ʒiˈtimu··]
O recurso à força é ilegítimo [ˌuɾɾeˈkuɾswa ˈfoɾsaɛi· le‿ʒiˈtimu··] [↑-saɛ ˌi-, -sa ˌɛi-]
A força do homem é o amor [aˈfoɾsa ‿dwɔˑmɛ̃ɳ··| ˌɛwa‿moɾ··]
Encontro as cegas [ɛ̃ŋˈkõntɾwa ‿sɛˑgas··]
Encontro às cegas [ɛ̃ŋˈkõntɾwa ‿sɛˑgas··] [↑-rwaˑ]
As cegas trabalham às cegas [aˈsɛˑgas· traˈbaˑʎɛ̃ũa ‿sɛˑgas··] [-ʎɛ̃ w̃a‿s-] [↑aˑ‿s-].

12.7. From now on, we will show the various accents together. Clusters of /V#V/ (*ie* final vowels even belonging to unstressed monosyllables: *me, te, se, lhe, que, e, de, o, do, no* + initial vowels) cause some simplifications inside tunings, not only inside rhythm groups.

Generally, /i, i/ and /u/ are respectively realized as /j, w/ [i][j, w] [b][l][ɟ, ɰ], or dropped: *entre eles* [i][ɛ̃ɲˈtɾeˑlis] [b][ɛ̃ɲˈtɾeˑɫis] [l][ɛ̃ɲˈtɾeˑɫi̯ʃ], *de água* [i][ˈdaˑgwa, ˈdja-] [b][ˈda-gɰa, ˈdʑa-] [l][ˈdaˑɣɰɜ, -ɐ], *e outra coisa* [i][ˈjoˑtra ˈkoiza] [b][ˈjoutra ˈkoiza, ˈjoˑ-] [l][ˈjoˑtɾɜ ˈkoizɜ, ˈjou-, -ɐ], *se inclina* [i][sĩˈkliˑna] [b][-ˈkɫĩ̯-] [l][sĩ̯ŋˈkɫiˑnɜ, -ɐ].

Further examples: *todo este tempo* [i][ˈtoˑd(w)esti ˈtɛ̃mpu] [b][ˈtoˑd(ɰ)estɕiˈtɛ̃mpu] [l][ˈtoˑð(ɰ)eʃtɨ̞ ˈtɛ̃mpṵ], *se a vires* [i][sjaˈviˑris] [b][sjaˈviˑris] [l][sjɜˈviˑɾi̯ʃ], *isto é um roubo* [i][ˌist(w)ɛũɳˈroˑbu] [b][ˌist(ɰ)ɛũɳˈʁoubu, -ʁoˑ-] [l][ˌɨ̞ʃt(ɰ̞)ɛũɳˈʁoˑβu, -ou-], *o amigo italiano* [i][waˈmiˑgwi taˈljɐ̃ˑnu] [b][w̃ɛ̃ˈmiˑgɰi taˈɫjɐ̃ˑnu] [l][ɰɜˈmiˑɣɰi̯ tɜˈɫjɐ̃ˑnu].

More: *não pôde ir* [i][ˌnɛ̃ũmpoˈd(j)iɾ] [b][ˌnɛ̃ũmpoˈdʑ(j)iʁ] [l][ˌnɜ̃ũ̞mpoˈð(j)iɾ], *que é muito alegre* [i][kjɛˈmũĩɳ t(w)aˈlɛˑgɾi, -ˈmwĩ-] [b][ɕjɛˈmũĩɳ t(ɰ)aˈɫɛˑgɾi, -ˈmõ̞ĩ̯ɳ-] [l][kjɛ-ˈmũĩɳ t(ɰ̞)ɜˈɫɛˑɣɾɨ̞, -ˈmõ̞ĩ̯ɳ-], *disse-lhe a ele* [i][ˈdiˑsiʎ(j)a ˈeˑli] [b][ˈdʑiˑsiʎ(j)a ˈeˑɫi] [l][ˈdiˑsɨ̞ʎ(j)ɜ ˈeˑɫ(ɨ̞)], [lt][ˈdɑɪʃ(ɨ̞ʃ) ˈtaɾ], *júri idóneo* (b-*ôneo*) [i][ˈʒuˑɾ(j)i ˈdɔˑnju] [b][ˈʒuˑɾ(j)i ˈdõˑnju] [l][ˈʒuˑɾ(j)ɜ ˈðɔˑnju].

Furthermore: *bebo-o todo* [i][ˈbeˑb(w)u ˈtoˑdu] [b][ˈbeˑb(ɰ)u ˈtoˑdu] [l][ˈbeˑβ(ɰ)u̞ ˈtoˑðu], *tu usas muito isso* [i][ˈt(w)uˑzaz ˈmũĩɳ ˈt(w)iˑsu, ˈmwĩ-] [b][ˈt(ɰ)uˑzaz ˈmũĩɳ ˈt(ɰ)iˑsu, ˈmõ̞ĩ̯ɳ-] [l][ˈt(ɰ̞)uˑzɜʒ ˈmũĩɳ ˈt(ɰ̞)iˑsṵ, ˈmõ̞ĩ̯ɳ-], *grande horror* [i][ˈgɾɛ̃ɳ d(j)oɾˈroɾ] [b][ˈgɾɛ̃ɳ dʑjoˈʁoʁ, -ɳ do-] [l][ˈgɾɛ̃ɳ d(j)oˈʁoɾ], *o António* (b-*ônio*) [i][wɛ̃ɳˈtɔˑnju] [b][w̃ɛ̃ɳˈtõˑnju] [l][ɰɜ̃ɳ̩ˈtɔˑnju, ɰɜ̃ɳ̩-].

disse-lhe a ele [i][ˈdeiʃ(is) ˈtaɾ] *deixe estar* [i][ˈdeiʃ(is) ˈtaɾ] [b][ˈdeiʃ(is) ˈtaʒ] [l][ˈdeiʃ(ɨ̞ʃ) ˈtaɾ]

12.8. When two /a/'s are joined, in Lusitanian we have /aa/ → [ˌa] (with greater lengthening, especially if one of them is stressed; however, this is only done for clarity's sake): *toda a gente* ⁱ[ˈtoˑda(a) ˈʒɛ̃n̬ti] ᵇ[ˈtoˑda(a) ˈʒɛ̃n̬tʃi] ˡ[ˈtoˑða ˈʒɛ̃n̬t̪], *a ami-ga* ⁱ[aaˈmiˑga] ᵇ[aɐ̃ˈmiˑga, ɐ̃ˈm-, ã·ˈm-] ˡ[aˈmiˑɣɜ, -ɐ‖], *a água* ⁱ[aˈaˑgwa] ᵇ[aˈaˑgʊa] ˡ[ˈaːˑɣʊɜ, ɜˈaˑ-, -ɐ‖], *à água* ⁱ[a(ˑ)ˈaˑgwa] ᵇ[a(ˑ)ˈaˑgʊa] ˡ[ˈaːˑɣʊɜ, aˈaˑ-, -ɐ‖], *vi-a andar* ⁱ[ˈvi(a)ɐ̃n ˈdaɾ] ᵇ[ˈvi(a)ɐ̃n ˈdaʁ] ˡ[ˈviãn ˈdaɾ], *a alma* ⁱ[aˈaɫma] ᵇ[aˈaɫma] ˡ[ˈɑˑɫmɜ, ɜˈɑɫ-, -ɐ‖], ⁱ[aˈaɟ-ma, aˑˈaɟ-] ᵇ[aˈaɫma, aˑˈaɫ-] ˡ[ˈɑːɫmɜ, aˈɑɫ-, -ɐ‖] *à alma*.

Further cases: *ela era* ⁱ[ˌɛlaˈɛˑra, ɛˈlɛˑra] ᵇ[ˌɛɫaˈɛˑra, ɛˈɫɛˑra] ˡ[ˌɛɫɜˈɛˑrɜ, ɛˈɫɛˑrɜ, -ɐ‖], *uma hora* ⁱ[uˈmɔˑra, ˌumaˈɔ-] ᵇ[ũˈmɔˑra, ˌũmaˈɔ-] ˡ[uˈmɔˑrɜ, ˌumɜˈɔ-, -ɐ‖], *a oração* ⁱ/ᵇ[ˌaɔraˈsẽũŋ, ˌɔra-] ˡ[ˌɐɔrɜˈsẽũŋ, ˌɔrɜ-], *dava-o* ⁱ/ᵇ/ˡ[ˈdaˑvaɔ, -vɔ], *ponha o seu chapéu* ⁱ[ˈpoˑɲau ˌseuʃaˈpɛu, ˈpoˑɲɔ ˌseu-] ᵇ[ˈpõˑɲau ˌseuʃaˈpɛu, ˈpõˑɲɔ ˌseu-] ˡ[ˈpoˑɲ̊u ˌseuʃɜˈpɛu, ˈpoˑɲ̊ɔ ˌseu-], *nunca ouvi falar nisso* ⁱ[ˈnũŋkao ˈvi faˈlaɾ ˈniˑsu, ˈnũ̃ŋkɔ] ᵇ[ˈnũŋkao ˈvi faˈɫaʁ ˈniˑsu, ˈnũ̃ŋkɔ] ˡ[ˈnũ̃ŋ̊kɜo ˈvi fɜˈɫaɾ ˈniˑsu̥, ˈnũ̃ŋ̊kɔ].

We already know that /(V)Vŋ#/ followed by /N, VN#, V/ are respectively realized as [(Ṽ)V̄#N, (Ṽ)V̄#Ṽ, (Ṽ)V̄#V], where /ŋ#/ is dropped, but protects the nasalized vowel from elision: *lã natural* ⁱ[ˈlɛ̃ natuˈraɟ] ᵇ[ˈɫɛ̃ natuˈraɫ] ˡ[ˈɫɛ̃ n̬tu̥ˈraɫ], *com ninguém* ⁱ/ᵇ/ˡ[ˌkõũnĩŋˈgẽĩŋ̊] ˡᵗ[-ãĩ̃ŋ̊]; *lã antiga* ⁱ[ˈlɛ̃ɛ̃n ˈtiˑga, ˈlɛ̃ˑn ˈt-] ᵇ[ˈɫɛ̃ɛ̃n̬ ˈtʃiˑgɐ, ˈɫɛ̃ˑn̬ ˈtʃ-] ˡ[ˈɫɛ̃ɜ̃n̬ ˈtiˑɣɜ, ˈɫɛ̃ˑn̬ ˈt-, -ɐ‖], *com ânsia* ⁱ[kõũˈɐ̃ŋsja] ᵇ[kõũˈɐ̃ŋsja] ˡ[kõũˈɐ̃ŋsjɜ, -ɐ‖]; *lã azul* ⁱ[ˈlɛ̃a ˈzuɟ, ˈlɛ̃ˑ ˈz-] ᵇ[ˈɫɛ̃a ˈzuɫ, ˈɫɛ̃ˑ ˈz-] ˡ[ˈɫɛ̃ɜ ˈzuɫ, ˈɫɛ̃ˑ ˈz-], *com isso* ⁱ/ᵇ[kõũˈiˑsu] ˡ[-su̥], *um homem alto* ⁱ[ũˑɔˑmẽĩ ˈaɟtu, ˈw̃ɔˑ-] ᵇ[ũˑɔ̃ˑmẽĩ ˈaɫtu, ˈw̃õ̃ˑ-] ˡ[ũˑɔˑmẽĩ ˈaɫtu̥, ˈw̃ɔˑ-] ˡᵗ[ũˑɔˑmɔ̃ĩ, ˈw̃ɔˑ-]; *sem ela* ⁱ[sẽĩɛˑla] ᵇ[sẽĩɛˑɫa] ˡ[sẽĩɛˑɫɜ, -ɐ‖] ˡᵗ[sɜ̃ĩɛˑɫɜ, -ɐ‖], *não é* ⁱ[nẽ̃w̃ɛ] ᵇ[nẽ̃ũ̃ɛ] ˡ[nɜ̃ũ̃ɛ].

12.9. When the syllables that join have equal or similar consonants, we can find some geminates, due to the fall of a vowel: *fique comigo* ⁱ[ˈfiˑk(i) koˈmiˑgu] ᵇ[ˈfiˑɕi kõˈmiˑgu, ˈfik] ˡ[ˈfik(ᵻ̥) ku̥ˈmiˑɣu], *daquele lado* ⁱ[daˌkel(i)ˈlaˑdu] ᵇ[daˌkeɫ(i)ˈɫaˑdu] ˡ[dɜˌkeɫ(ᵻ̥)ˈɫaˑðu], *come muito* ⁱ[ˈkɔˑm(i) ˈmũĩntu, ˈmwĩn-] ᵇ[ˈkõˑm(ĩ) ˈmũĩntu, ˈmũĩn-] ˡ[ˈkɔˑm(ᵻ̥) ˈmũĩn̬tu̥, ˈmũĩn̬-], *compro-te tudo* ⁱ[ˈkõmpɾut(i) ˈtuˑdu] ᵇ[ˈkõmpɾutʃi ˈtuˑdu, -t ˈt-] ˡ[ˈkõm̥pɾut(ᵻ̥) ˈtuˑðu], *campo perigoso* ⁱ/ᵇ[ˈkɛ̃mpu ˌperiˈgoˑzu, -p pri-] ˡ[ˈkɛ̃m̥p(u̥) pᵻ̥ri-ˈɣoˑzu, -p pᵻ̥ri-].

More: *os peixes estão nadando* ⁱ[usˈpeiʃi zisˌtẽũnaˈdẽndu, -eiʃ ʃis-] ᵇ[usˈpeiʃi zisˌtẽũ-naˈdẽndu, -eiʃ ʃis-] ˡ[u̥ʃˈpeiʃᵻ̥ z̥iʃˌtɜ̃ũnɜˈðẽndu, -eiʃ ʃᵻ̥ʃ-] ˡᵗ[u̥ʃˈpɐiʃᵻ̥ z̥iʃˌtɜ̃ũnɜˈðẽndu, -ɐiʃ ʃᵻ̥ʃ-], *ouve vozes* ⁱ[ˈoˑv(i) ˈvɔˑzis] ᵇ[ˈouv(i) ˈvɔˑzis, ˈoˑ-] ˡ[ˈoˑv(ᵻ̥) ˈvɔˑzᵻ̥ʃ, ˈou-], *passe cedo* ⁱ/ᵇ[ˈpaˑs(i) ˈseˑdu] ˡ[ˈpaˑs(ᵻ̥) ˈseˑðu], *pede tudo* ⁱ[ˈpɛˑd(i) ˈtuˑdu, -d ˈt-] ᵇ[ˈpɛˑʤ(i) ˈtuˑdu, -d ˈt-] ˡ[ˈpɛˑð(ᵻ̥) ˈtuˑðu, -ð ˈt-], *sente bulha* ⁱ[ˈsẽnt(i) ˈbuˑʎa, -nd̥ ˈb-] ᵇ[ˈsẽn̬tʃ(i) ˈbuˑʎa, -nd̥ ˈb-] ˡ[ˈsẽn̬t̪ ˈβuˑʎɜ, -nd̥ ˈb-, -ɐ‖].

Chiefly when the syllables contain /t, d/, one of these consonants may fall completely: *faculdade de Letras* ⁱ[ˌfakuɟˈdaˑdi (di)ˈleˑtras, -ad di-] ᵇ[ˌfakuɫ̪ˈdaˑʤi (ʤi)ˈleˑtras, -aʤ ʤi-] ˡ[ˌfɜkuɫ̪ˈdaˑðᵻ (ðᵻ)ˈletɾɜʃ, -að ðᵻ-], *podes desligar* ⁱ[ˈpɔˑd(iz ˌd)ezliˈgar, ˈpɔd d-] ᵇ[ˈpɔˑ(ʤiz ˌ)dezɫ̪iˈgaʁ, ˈpɔd d-] ˡ[ˈpɔˑð(ᵻʒ ˌð)ᵻʒɫ̪iˈɣar, ˈpɔð ð-], *caldo de carne* ⁱ[ˈkaɟ(du) diˈkarni] ᵇ[ˈkaɫ(du) ʤiˈkaʁni] ˡ[ˈkaɫ(du̥) d̪ˈkarn̪].

Further examples: *gente de fora* ⁱ[ˈʒɛ̃n(ti) diˈfɔˑra] ᵇ[ˈʒɛ̃ɲ(tʃi) ʤiˈfɔˑra] ˡ[ˈʒɛ̃n̬t̪ ð̪fɔˑ-rɜ, -n d̪-, -ɐ‖], *gente direita* ⁱ[ˈʒɛ̃n(ti) diˈreita] ᵇ[ˈʒɛ̃ɲ(tʃi) ʤiˈreita] ˡ[ˈʒɛ̃n̬t̪ ð̪ˈreitɜ, -n d̪-, -tɐ‖] ˡᵗ[ˈʒɛ̃n̬t̪ ð̪ˈrɐitɜ, -n d̪-]; also *bate-te* ⁱ[ˈbaˑtiti, -atti, -aˑti] ᵇ[ˈbaˑtʃitʃi, ˈbatʧʃi, ˈbaˑʧi] ˡ[ˈbaˑt̪t̪, -att̪, -aˑt̪], *veste-te* ⁱ[ˈvɛstiti, ˈvɛsti] ᵇ[ˈvɛstʃitʃi, ˈvɛstʃi] ˡ[ˈvɛʃt̪t̪, -ʃt̪].

12.10. Mainly in *Lusitanian*, also in sentences, /i#/ tends to fall, even after voiced consonants: *Filipe* ⁱ[fi'li·pi] ᵇ[fi'ɫi·pi] ˡ[fɪ̥'ɫi·p(ɪ̥)], *lave* ⁱ['la·vi] ᵇ['ɫa·vi] ˡ['ɫa·v(ɪ̥)]. On the other hand, also /u#/ tends to do so: *tipo* ⁱ['ti·pu] ᵇ['t͡ʃi·pu] ˡ['ti·p(ʊ̥)], *lavo* ⁱ['la·vu] ᵇ['ɫa·vu] ˡ['ɫa·v(u)].

However, generally, there is a difference, actually perceptible enough, between forms like /'lavi̥/ and /'lavu̥/, because although /u/ also falls, it nevertheless gives lip-rounding to a preceeding consonant, even if this is bilabial or labiodental. We exactly have: ˡ['ɫa·v̥, 'ti·p̥], and the same for all other possible consonants, including /s, z/ which, hence, phonetically, can also occur before a pause (either with lip--rounding or not, depending on the kind of vocoid that is dropped).

Examples: *síntese* ⁱ/ᵇ['sĩ·ntezi] ˡ['sĩ·nt̪z(ɪ̥)], *romance* ⁱ[ro'mẽŋsi] ᵇ[ʁo'mẽŋsi] ˡ[ʁu-'mẽn̥s(ɪ̥)], *duvidoso* ⁱ/ᵇ[ˌduvi'do·zu] ˡ[ˌduvi'ðo·z(u), -ẑ], *passo* ⁱ/ᵇ['pa·su] ˡ['pa·s(ʊ̥), -ŝ], but *passe* ⁱ/ᵇ['pa·si] ˡ['pa·s(ɪ̥)]… Normally, a 'simpler' kind of transcription can be used, except when the fact has to be highlighted.

In Lusitanian, /Cji#, Vji#/ sequences, besides a kind of pronunciation corresponding to spelling, keep the (once more systematic) possibility of merging the last two elements: *série* ⁱ['sɛ·rji] ᵇ['sɛ·ɾji] ˡ['sɛ·ɾj̩ɪ, -ɾjɪ̥, -ɾɪ̥, -ɾi], *caie* ⁱ['ka·ji] ᵇ['ka·ji] ˡ['ka·jɪ̩, -jɪ̥, -a·ɪ̯, -a·i] (its lengthening may well be the only difference compared to *cai* ['kai]).

Again in Lusitanian, the rare cases of /ˌi#/ oscillate between /i/ (more modern and mediatic, and closer to spelling) and /i̥/ (more traditional): *táxi* ⁱ/ᵇ['taksi] ˡ['tak-si̥, -sɪ̥]. Forms like *júri* and *jure* (which are alike in international and Brazilian Portuguese: ⁱ['ʒu·ri] ᵇ['ʒu·ɾi]) in Lusitanian, can either be alike, ˡ['ʒu·ɾɪ̥], or different, ˡ['ʒu·ri, -ɾɪ̥] (respectively).

12.11. When words joined together produce the following sequences ⁱ[ɾ#r, ɾ#l] ᵇ[ʁ#ʁ, ɫ#ɫ] ˡ[ɾ#ʁ, ɫ#ɫ], they are normally simplified, although they are more or less different, but with complementary phonic functions: *mar real* ⁱ['ma(ɾ) 'rja·ɫ] ᵇ['ma(ʁ) 'ʁja·ɫ] ˡ['ma(ɾ) 'ʁja·ɫ], *mar rumoroso* ⁱ['ma(ɾ) rumo'ro·zu] ᵇ['ma(ʁ) ʁũmo'ro·zu] ˡ['ma(ɾ) ʁumu'ro·zu], *canal limpo* ⁱ[ka'na(ɫ) 'lĩmpu] ᵇ[kẽ'na(ɫ) 'lĩmpu] ˡ[kɜ'na(ɫ) 'lĩ̯mpʊ̥], *canal limitado* ⁱ[ka'na(ɫ) limi'ta·du] ᵇ[kẽ'na(ɫ) ɫimi'ta·du] ˡ[kɜ'na(ɫ) ɫ̩mi̥'ta·ðu].

The same happens to /s#s, z#z, s#ʃ, z#ʒ/ when they are alike: *dez séculos* ⁱ['dɛ(s) 'sɛ·kulus] ᵇ['dɛ(s) 'sɛ·kuɫus] ˡ['dɛʃ 'sɛ·kuɫuʃ], *dez xales* ⁱ['dɛs 'ʃa·lis] ᵇ['dɛs 'ʃa·ɫis] ˡ['dɛ(ʃ) 'ʃa·ɫɪ̥ʃ], *as zonas* ⁱ[a(z)'zo·nas] ᵇ[a(z)'zõ·nas] ˡ[ɜʒ'zo·nɜʃ], *as janelas* ⁱ[ˌazʒa'nɛ·las] ᵇ[ˌazʒẽ'nɛ·las] ˡ[ˌʒ(ʒ)ʒɜ'nɛ·ɫɜʃ]. Besides, we find: /ss/ ⁱ[(s)s] ᵇ[s] ˡ[ʃs] in cases like: *excelente* ⁱ[ˌise-'lẽ·nti, ˌisse-] ᵇ[ˌise'ɫẽ·nt͡ʃi] ˡ[ˌɪ̥sɪ̥'ɫẽ·nt̪] *crescer* ⁱ[kre'ser, -s's-] ᵇ[kre'seʁ] ˡ[kɾɪ̥ʃ'seɾ].

In Lisbon Lusitanian, we find [ʃs]→[ʃʃ]→[ʃ], while, in mediatic Lusitanian, we have [ʂs]→[ʂ]: *disciplina* [ˌdi(ʃ)ʃi'pli·nɜ], *seiscentos* [sɐɪ(ʃ)'ʃẽ·ntuʃ], *crescer* [kɾə(ʃ)'ʃeɾ], *os sintomas* [ˌu(ʃ)ʃĩ̯'to·mɜʃ], *dois sistemas* [ˌdoi(ʃ)ʃiʃ'te·mɜʃ]. Mediatic: [ˌdiʂi'pli·nɜ, sɐɪ-'ʂẽ·ntʊ̥ʂ, kɾə'ʂeɾ, ˌuʂĩ̯'to·mɜʂ, ˌdoɪʂiʂ'te̯·mɜʂ].

12.12. In *Lusitanian*, [Cl, Cr] sequences are often realized as [Cɫ, Cɾ] (even if this more mediatic and uneducated pronunciation is better avoided, cf § 11.5): *flor* ⁱ['flor] ᵇ['fɫoʁ] ˡ['fɫor; fɹ̥ɫ-; ↓fɹ̥ɫ-], *claro* ⁱ['kla·ru] ᵇ['kɫa-] ˡ['kɫa·-; kɹ̥ɫ-; ↓kɹ̥ɫ-], *glória* ⁱ['glɔ·rja] ᵇ['gɫɔ·ɾja] ˡ['gɫɔ·ɾjʒ; gɹ̥ɫ-; ↓gɹ̥ɫ-], *queria* ⁱ/ᵇ[ke'ria] ˡ[kɹ̥'ri3; k̥ɹi3; 'kɹi3, -ɐ]], *co-*

roa *ⁱ/ᵇ*[koˈroɐ] *ˡ*[kʊˈroɐ; kˈroɐ; ˈkɾoɐ, -ɐ‖], *feroz* *ⁱ/ᵇ*[feˈrɔs] *ˡ*[fɨ̞ˈrɔʃ, fˈrɔʃ, ˈfɾ̥ɔʃ], *merecer*
ⁱ[ˌmereˈser] *ᵇ*[ˌmereˈseɹ] *ˡ*[ˌmɨɾɨ̞ˈser, mɨɾˈser].

It is usual, in normal speech, to shorten the combined prepositions *pelo(s)*, *pe-la(s)* as [plV, ↓pV] (*p'lo, po*), also in Brazilian: *pela mãe* *ⁱ*[plaˈmɐ̃ĩŋ, ˌpela-] *ᵇ*[pɫɐ̃-ˈmɐ̃ĩŋ, peɫɐ̃-] *ˡ*[pɫ̥ɐˈmɐ̃ĩŋ, ˌpɨɫɐ̃-], *pelo ar* *ⁱ*[ˈplwar, pluˈar, ˌpelu-] *ᵇ*[ˈpɫwaɹ, pɫuˈaɹ, ˌpe-ɫu-] *ˡ*[ˈpɫ̥war, pɫuˈar, ˌpɨ̞ɫu-].

Besides, let us compare *pára* *ⁱ/ᵇ*[ˈparra] *ˡ*[-ɐ, -ɐ‖] and *para* *ⁱ/ᵇ*[ˌpara, praᵗC, paᵗC, parᵗⁱV, pɾᵗⁱV] *ˡ*[ˌpɐɾɐ, pɾɐᵗⁱC, pɐᵗⁱC, pɐɾᵗⁱV, pɾ̥ᵗⁱV]: *para cá, para aqui* *ⁱ*[ˌparaˈka, praˈka; ˌparaˈki, praˈki] *ᵇ*[ˌparaˈka, praˈka; ˌparaˈci, praˈci] *ˡ*[ˌpɐɾɐˈka, pɾ̥ɐˈka; ˌpɐɾɐˈki, pɾ̥ɐˈki]; generally also *cada* is *ⁱ/ᵇ*[ˌkada-] *ˡ*[ˌkɐðɐ-]. We are talking about *restressed forms*, when they are isolated (as it happens in metalinguistic usage, in comparison to normal ones), not with primary stress, but secondary, or else weak.

The same goes for *a(s), da(s), na(s)…* /a(s), da(s), na(s)/ *ⁱ/ᵇ*[a(s), da(s), na(s)] *ˡ*[ɐ(ʃ), dɐ(ʃ), nɐ(ʃ)], also for *mas* *ⁱ/ᵇ*[ˌmas] *ˡ*[ˌmɐʃ] (with possible secondary stress for rhythmical reasons, *ⁱ/ᵇ*[ˌmas, mas] *ˡ*[ˌmɐʃ, mɐʃ]).

12.13. Again in *Lusitanian*, /Ces, Cı̥s/, in particular in the ending *-es*, can also be fairly reduced, up to becoming an intense ('syllabic') contoid; but, a complete fall of a vocoid is rather uneducated): *flores* *ⁱ*[ˈfloˑris] *ᵇ*[ˈfɫoˑris] *ˡ*[ˈfɫ̥oˑrɨ̞ʃ, -rʃ̩; ↓-rʃ]. By combining what has just been said, in rather uneducated Lusitanian pronunciation, certainly we can also hear even *ˡ*[fɨ̞ˈɫoˑrʃ].

Let us also consider: *romances* *ⁱ*[roˈmɐ̃ŋsis] *ᵇ*[ʁõˈmɐ̃ŋsis] *ˡ*[ʁuˈmɐ̃ŋsĩ̥ʃ, -ŋsʃ̩], *restaurantes* *ⁱ*[ˌrestauˈrɐ̃ntis] *ᵇ*[ˌʁestauˈrɐ̃ntʃis] *ˡ*[ˌʁɨ̞ʃtauˈrɐ̃ntĩ̥ʃ, ʁʃ̩t-, -ntʃ].

In Lusitanian, even /per, pre/ sequences often get an intense contoid, so that they may merge (as *perguntar* shows, in comparison with Spanish *preguntar*). Thus, *perfeito* *ˡ*[pɾ̥ˈfeitu̥] *ˡᵗ*[-ɐɪ-] may stand for *ⁱ*[perˈfeitu, preˈfeitu] *ᵇ*[peɹˈfeitu, preˈfeitu], *prefeito* (besides *ˡ*[pɨ̞ɾˈfeitu̥, pɾ̥ɨ̞ˈfeitu̥] *ˡᵗ*[pəɾˈfɐɪ-, pɾ̥ə̞ˈfɐɪ-]).

12.14. The preposition *com* [kõũŋ], followed by articles, becomes [kõ], or even [ku, kw, kʊ, kw̃, kũ̥]: *com o pai* *ⁱ*[kõuˈpai, kw̃u-, kwu-] *ᵇ*[kõuˈpai, kũ̥u-, kʊu-] *ˡ*[kõuˈpai, kũ̥u-, kʊ̥u-], *com uma mulher* *ⁱ*[kõˌumamuˈʎɛr, kwu-] *ᵇ*[kõũ̥mɐ̃muˈʎɛɹ, kũ̥ũ-] *ˡ*[kõˌumɐmuˈʎɛr, kʊ̥u-], *com as mãos* *ⁱ*[kõazˈmɐ̃ũŋs, kw̃az-, kwaz-] *ᵇ*[kõaz-ˈmɐ̃ũŋs, kũ̥az-, kʊaz-] *ˡ*[kõɐʒˈmɐ̃ũ̥ŋʃ, kũ̥ɐʒ-, kʊ̥ɐʒ-], *com os lobos* *ⁱ*[kõuzˈloˑbus, kuz-] *ᵇ*[kõuzˈɫoˑbus, kuz-] *ˡ*[-ʒˈɫoˑβu̥ʃ, ku̥-].

Also *e em* is considerably reduced, up to [ĩN]: *em português* *ⁱ*[ẽĩmˌportuˈges, ĩm-] *ᵇ*[ẽĩmˌpoɹtuˈges, ĩm-] *ˡ*[ẽĩmˌpuɾtuˈɣeʃ, ĩm-] *ˡᵗ*[ʃĩm̩-, ĩm̩-], *em casa* *ⁱ/ᵇ*[ẽĩŋˈkaˑza, ĩŋ-] *ˡ*[ẽĩŋˈkaˑzɐ, ĩŋ̩-] *ˡᵗ*[ʃĩŋ̩-, ĩŋ̩-], *em auxílio* *ⁱ*[ˌẽĩauˈsiˑlju, ĩau-, j̃-] *ᵇ*[ˌẽĩauˈsiˑɫju, ĩau-, j̃-] *ˡ*[ẽ-ĩauˈsiˑɫju, ĩau-, j̃-] *ˡᵗ*[ʃĩau-].

In rhythm groups, /ViᵗⁱV, VuᵗⁱV/ sequences become /VᵗⁱjV, VᵗⁱwV/, with different divisions to the morphological ones: *o meu amigo italiano* *ⁱ*[uˌmewaˈmiˑɡwi taˈljɐ-nu] *ᵇ*[ũˌmewɐ̃ˈmiˑɡwi taˈɫjɐ̃ˑnu] *ˡ*[uˌmewɐʒˈmiˑɣwi tɐˈɫjɐˑnu].

12.15. In neutral *Lusitanian*, as a number of examples already showed, we systematically also find (besides [m̩, n̩, ŋ̩, ŋ̥̩, ɫ̩, ɫ̥, ɾ̩, j̥, w̥], except in slow and very pre-

cise pronunciation) [ɪ̥, i̥; u̥], between voiceless consonants, or between those and a pause, and vice versa. It is fairly common to hear things like: *os professores portugueses* ⁱ[usˌprofeˈsoɾis ˌportuˈgeˑzis] ᵇ[usˌpɾofeˈsoɾis ˌpoɹtuˈgeˑzis] ˡ[uʃˌpɾuf̥ɪ̥ˈsoˑɾi̥ʃ ˌpuɹtuˈɣeˑzi̥ʃ].

Even complete devoicing of /i#, u#/ is found in Lusitanian, rather regularly, up to their full fall (after voiced consonants, too), as we find for /ˌe/, inside a word or rhythm group, as well.

Examples: *desculpe* ⁱ[disˈkuɹpi, des-] ᵇ[dʑisˈkuɫpi, des-] ˡ[dʃˈkuɫp, di̥ʃˈkuɫpɪ̥], *televisão* ⁱ[ˌteleviˈzẽũŋ] ᵇ[ˌteɫeviˈzẽũŋ] ˡ[ˌtɫviˈzẽũŋ, tɹɫv-, tɹɫɪ̥-, tɹɫɪ̥-], *apetece* ⁱ/ᵇ[ˌapeˈtɛˑsi] ˡ[ɜpˈtɛˑs, ˌɜpɪ̥ˈtɛˑsɪ̥], *desportos* ⁱ[disˈportus, des-] ᵇ[dʑisˈpoɹtus, des-] ˡ[dʃˈpoɹtʃ, di̥ʃˈpoɹtu̥ʃ].

More: *esperar* ⁱ[ˌespeˈɾaɾ, ˌis-] ᵇ[ˌespeˈɾaɹ, ˌis-] ˡ[ʃˈpɾaɾ, i̥ʃpɹ̥ˈɾaɾ], *estatal* ⁱ[ˌestaˈtaɫ, ˌis-] ᵇ[ˌestaˈtaɫ, ˌis-] ˡ[ʃtɜˈtaɫ, i̥ʃ-], *escasser* ⁱ[ˌeskaˈseɾ, ˌis-] ᵇ[ˌeskaˈseɹ, ˌis-] ˡ[ʃkɜˈseɾ, ʃk-, i̥ʃ-], *rebanho* ⁱ[reˈbɐˑɲu] ᵇ[ʁeˈbẽˑɲu] ˡ[ʁˈβɐˑɲu, ʁɪ̥-].

And: *a superioridade do sol* ⁱ[aˌsuperjoɾiˈda(di) duˈsɔɫ, -ˈdad du-] ᵇ[aˌsuperjoɾiˈda-(dʑi) duˈsɔɫ, -ˈdad du-] ˡ[ɜˌsupɾjuɾiˈða(ð) ðuˈsɔɫ, ɜˌsupɹ̥ɾju-], *o fim-de-semana* ⁱ[uˈfĩɲ diseˈmɐˑna] ᵇ[uˈfĩɲ dʑisẽˈmẽˑna] ˡ[u̥ˈfĩɲ ds̥ˈmɐˑnɜ, ds̥ɪ̥-, dɹ̥s̥ɪ̥-, -ɐɫ].

Let us also consider: ˡ*parece-me uma boa ideia* (ᵇ*idéia*) ˡ[pɜˈɾɛˑs mumɜˈβoɜ iˈðeˑjɜ, pɜˈɾɛˑs mu-, pɜˈɾɛˑsɪ̥ m-, pɜˈɾɛˑsɪ̥ mju-, -ɐɫ] ˡᵗ[iˈðaˑjɜ, -ɐɫ] (not spontaneously, but in reading: ⁱ[paˈɾɛˑsi miumaˈboa iˈdeˑjɐ, -simju-, -ɛˑja] ᵇ[paˈɾɛˑsĩ mĩumaˈboa iˈdɛˑja, -sĩmjũ-]).

And, constructions like *me parece…* ⁱ[ˌmipaˈɾɛˑsiu maˈboai ˈdeˑja, -ˈɾɛˑsju ma-, -ˈdɛˑja] ᵇ[ˌmipaˈɾɛˑsĩũ maˈboai ˈdɛˑja, -sĩmjũ-].

12.16. Let us examine, now, some examples with [Cu#] → [C̦#] (while, for [Ci#], Lusitanian symbols would be normal, as in *quente* ⁱ[ˈkẽnti] ᵇ[ˈkẽɲtʃi] ˡ[ˈkẽɲt]): *átimo(s)* ⁱ[ˈaˑtimu(s)] ᵇ[ˈaˑtʃĩmu(s)] ˡ[ˈaˑtim̥(ʃ)], *plano(s)* ⁱ[ˈplɐˑnu(s)] ᵇ[ˈpɫẽˑnu(s)] ˡ[ˈpɫɐˑn̥(ʃ)], *banho(s)* ⁱ[ˈbɐˑɲu(s)] ᵇ[ˈbẽˑɲu(s)] ˡ[ˈbɐˑɲ̥(ʃ)], *tempo(s)* ⁱ/ᵇ[ˈtẽmpu(s)] ˡ[ˈtẽmp̥(ʃ)], *tribo(s)* ⁱ/ᵇ[ˈtɾiˑbu(s)] ˡ[ˈtɾiˑβ̥(ʃ)], *parto(s)* ⁱ[ˈpaɾtu(s)] ᵇ[ˈpaɹtu(s)] ˡ[ˈpaɹt̥(ʃ)], *saco(s)* ⁱ/ᵇ[ˈsaˑku(s)] ˡ[ˈsaˑk̥(ʃ)], *lago(s)* ⁱ[ˈlaˑgu(s)] ᵇ[ˈɫaˑgu(s)] ˡ[ˈɫaˑɣ̥(ʃ)].

Furthermore: *tufo(s)* ⁱ/ᵇ[ˈtuˑfu(s)] ˡ[ˈtuˑf̥(ʃ)], *povo(s)* ⁱ/ᵇ[ˈpoˑvu, ˈpɔˑvus] ˡ[ˈpoˑv̥, ˈpɔˑv̥ʃ], *poço(s)* ⁱ/ᵇ[ˈpoˑsu, ˈpɔˑsus] ˡ[ˈpoˑs̥, ˈpɔˑs̥ʃ], *caso(s)* ⁱ/ᵇ[ˈkaˑzu(s)] ˡ[ˈkaˑz̥(ʃ)], *roxo(s)* ⁱ[ˈroˑʃu(s)] ᵇ[ˈʁoˑʃu(s)] ˡ[ˈʁoˑʃ̥(ʃ)], *beijo(s)* ⁱ[ˈbeiʒu(s)] ᵇ[ˈbeiʒu(s)] ˡ[ˈbeiʒ̥(ʃ)] ˡᵗ[ˈbaɪʒ̥(ʃ)], *meio(s)* ⁱ[ˈmeju(s)] ᵇ[ˈmeju(s)] ˡ[ˈmeˑĵ̥(ʃ)] ˡᵗ[ˈmaˑĵ̥(ʃ)], *caro(s)* ⁱ/ᵇ[ˈkaɾu(s)] ˡ[ˈkaˑɾ̥(ʃ)], *carro(s)* ⁱ[ˈkaɾru(s)] ᵇ[ˈkaʁu(s)] ˡ[ˈkaˑʁ̥(ʃ)], *rolo(s)* ⁱ[ˈroˑlu(s)] ᵇ[ˈʁoˑɫu(s)] ˡ[ˈʁoˑɫ̥(ʃ)], *filho(s)* ⁱ/ᵇ[ˈfiˑʎu(s)] ˡ[ˈfiˑʎ̥(ʃ)].

In neutral Brazilian, such a devoicing is quite rare; but it may occur, mostly after voiceless consonant before a pause, in particular for /i, u/: *quente* ⁱ[ˈkẽnti] ᵇ[ˈɕẽɲtʃi, tʃi̥, -tʃi̥] ˡ[ˈkẽɲtɪ̥], *poço* ⁱ[ˈpoˑsu] ᵇ[ˈpoˑsu, -su̥, -su̥] ˡ[-su̥], *posso* ⁱ[ˈpɔˑsu] ᵇ[ˈpɔˑsu, -su̥, -su̥] ˡ[-su̥].

12.17. A(n oral) vowel followed by a nasalized vocoid can be nasalized, especially in common pronunciation: *a impressão* ⁱ[ˌaĩmpɾeˈsẽũŋ, aˌĩm-, ˌẽĩm-] ᵇ[ˌaĩmpɾeˈsẽũŋ, aˌĩm-, ˌẽĩm-] ˡ[ˌ3ĩmpɾ̥ɪ̥ˈsẽũŋ, 3ˌĩm-, ˌ3ĩm-], *é ímpio* ⁱ[ɛˈĩmpju] ᵇ[ɛˈĩmpju, ẽˈĩm-] ˡ[ɛˈĩmpju̥, ẽˈĩm̥-].

12.18. Let us also consider *não* [ˈnẽũŋ], in unstressed syllables, as in *não sabe* [nũˈsaˑbi], and *não há* [ˈnŭ̃a]; or *muito* [ˈmũĩɲtu], in *muito bem* [ˌmũɲtuˈbẽĩŋ], and *também* [tẽmˈbẽĩŋ], as in *também eu não* [tẽˌmẽĩŋeuˈnẽũŋ], *mais* [ˈmais], *mais tar-de* [masˈtaɾdi], *dois* [ˈdois], *dois mil* [dozˈmiɫ], *vamos embora* [ˌvamuzĩmˈbɔˑra, -mũĩm-, vẽmˈbɔˑra, m̩ˈbɔˑra, ˈbɔˑra, ˌbɔra], *Maurício* [mauˈriˑsju, mɔ-], *difíceis* [diˈ-fiˑseis, -ses, -sis], *fácil* [ˈfaˑsiɫ, -sjɫ̩].

ture of one or more languages. That entails just following some theoretical and abstract ways of dealing with pronunciation, but without the pleasure of the sounds themselves, as so many more or less recent kinds of phonology do.

The second way consists in trying to show some characteristics of pronunciation by means of few and poor symbols and possibly many acoustic data, as numbers and peculiar machine-generated diagrams, but with scanty reference to actual sounds. That is thinking of doing phonetics by showing such data just *to be seen*, with no real connection with true sounds to be listened to.

The third way consists in actually loving the great pleasure of *listening* to the sounds of a language (with all their possible variants) or, no doubt, of as many languages as possible. Obviously, this implies the pleasing task of representing all those sounds in the best possible way, by means of proper symbols and accurate articulatory diagrams. This *is* respecting sounds, as they actually deserve.

fig 16.0.5. Brazil: the 16 accent koinés with city indications.

Brazilian Portuguese regional accents (starting from the capital-city area: *Brasília*, through *Sudeste* and *Sul*, then *Nordeste*, *Norte* and *Centro* in contact with Brasília).

Brasiliense (Brasília)

16.1. Brasília is the federal capital of Brazil. It was founded in 1960, and half of its population is multiratial, or better *pardo*: mostly triratial descendants of European, Native American, and West African people – generally they have brown skin. The other half of the population is due to immigrants not only from near states, but also from more distant Brazilian states, and non-Brazilian ones, too.

fig 16.1 shows the *vowels* and *intonation* patterns of the accent of Brasília. As can be seen (and expected, indeed), it is similar, though not identical, to either neutral or mediatic Brazilian Portuguese.

Consonants: [ʀ-, χ-, ʁ-], [-ʀ, -χ, -ʁ], [-ʀ-, -ʁ-] (& [ŋʀ, łz]); [ł-, ł-] (& [łɤ̯, lɤ̯]), [-u, -ɣ̃, -ɺ, -L]; [-s, -z; -ʃ, -ʒ]; & /Vs#/ [V-, Vi-]; [ʃ, ʒ], [tʃ, dʒ]; [ɲ], [ʎ; ļ]; & [Ṽ#N, V̰#N, V#N] (generally also with [ɛ, a, ɔ] when not fully nasalized); in addition, also [Ç̬i̬ļ, Ç̬u̬ļ] and ['Vː#$ļ] are frequent.

fig 16.1. Brazilian regional accents: Brasília.
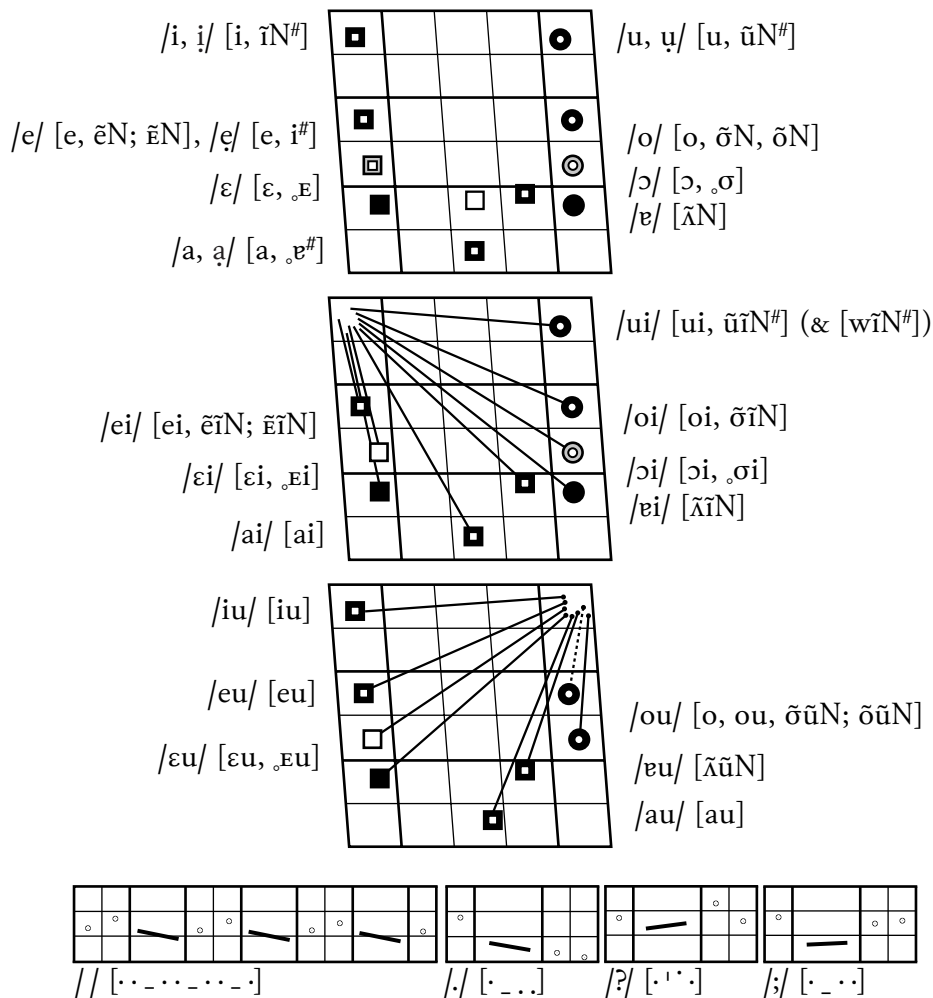
Caipira (São Paulo: hinterland)

16.6. *fig* 16.6 shows the *vowels* and *intonation* patterns (with variants) of the *caipira* accent.

Consonants: [ʀ̞-, ɤ-, ꜧ-, ɦ̝-, h-, h̞-, ɦ-] (& [ŋʁ, ŋʁ, z(#)ʀ] & [#Cɹ], after /l/ also [ɾ, r, z, ɻ]), [-ɹ, -ɻ, -ʐ, -ɹ, -ɭ, -ɻ] (sometimes [-ɾ, -r, -Ø]); often also [-ɻ, -ɻ, -ɻ] (so typical of American English accents), & laterally contracted vocoids [-ɨ, -ɯ, -ɤ, -ɻ] (so typical of Pekingese Mandarin, *cf fig* 21.0), even non-contracted [-ɤ, -ɐ] (so typical of British English accents), including cases of monotimbric diphthongs: /Vɾ/→[VV] or half-long monophthongs [Vˑ]), [-ʀ̞-, -ɤ-, -ꜧ-, -ɦ̝-, -h-, -h̞-, -ɦ-].

[ɫ-, ɫ-] (& [l-] also before non-front vocoids), [-ɟ̞, -ɹ, -ɫ, -ɟ̞, -u, -ʊ, -o] (ˑ, in broader accents, → /-ɾ/ [-ɹ, -ɻ, -ʐ, -ɹ, -ɭ, -ɻ]); /li/ [ʎ-]; /ni/ [ɲ-];

Often /Vu#/ become '/Vl#/' [Vʊ, Vɟ̞, Vɟ̞] (causing neutralization); [f, v] (& [f, v]); [-s, -z] (& [-ʂ, -ʐ]; sometimes /s/ [ʂ], especially in /st/); [ʂ, ʐ] & [ʃ, ʒ]), [tʃ, dʒ] (& [tʂ,

fig 16.6. Brazilian regional accents: São Paulo hinterland.
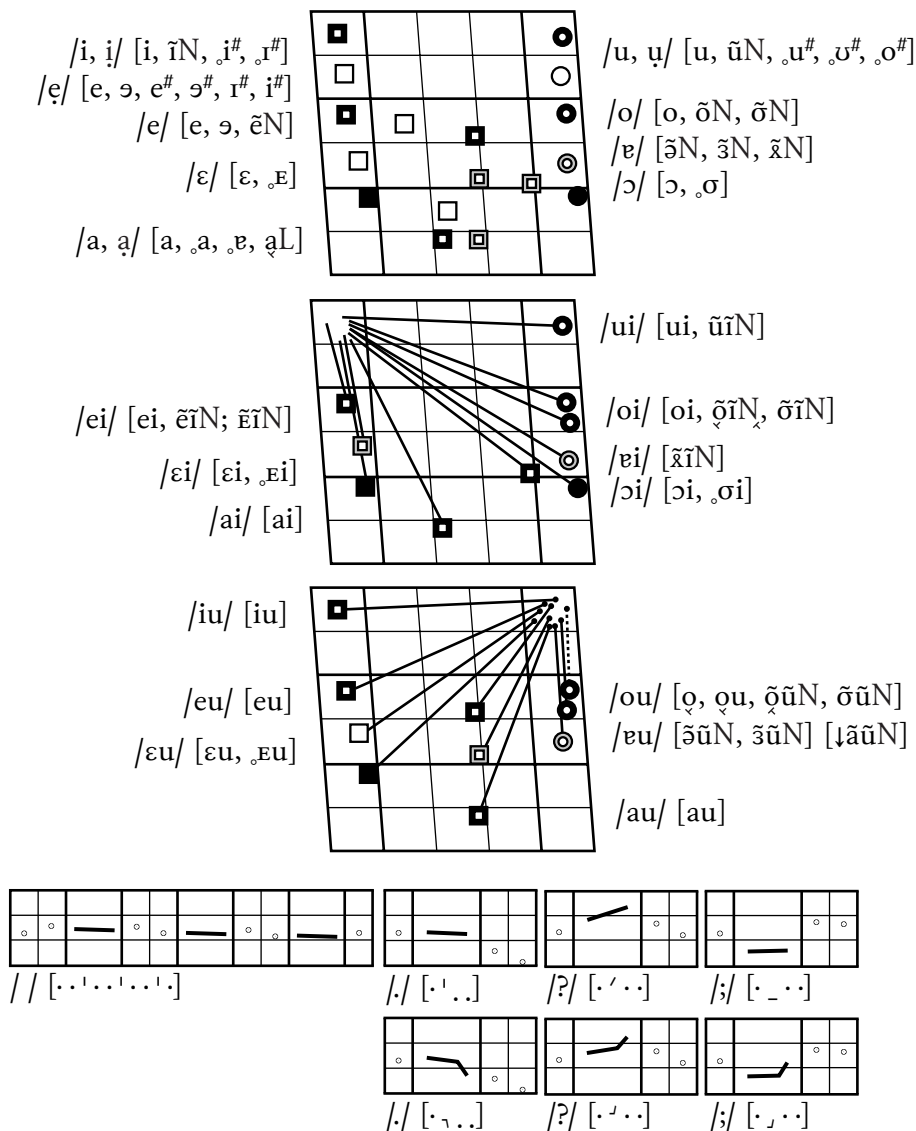
ʤ] & [ʈ, ɖ; t, d]); [ɲ, ɲ̃], [ʎ, l�j, j]; generally [Ṽ#N]; in addition, [ṼN̩#CV#|]); /VN#/ can become diphthongs or even triphthongs beginning as oral vocoids and becoming nasalized, with no [ŋ#]: *lã* [ˈɬaɣ̃(ɔ̃)]; almost systematically, /ˈVs#/ [ˈVɪs, -ʂ, -ʂ, ˈVi-] (especially in tunes), in addition, /(ˌ)Vis#/ [Vs] & [Vɪs, -ʂ, -ʂ, Vi-]; often [C̥i̥, C̥u̥] even in stressed syllables: *tipo* [ˈtʃi̥ˑpu̥].

Bahiano (Bahia: Salvador)

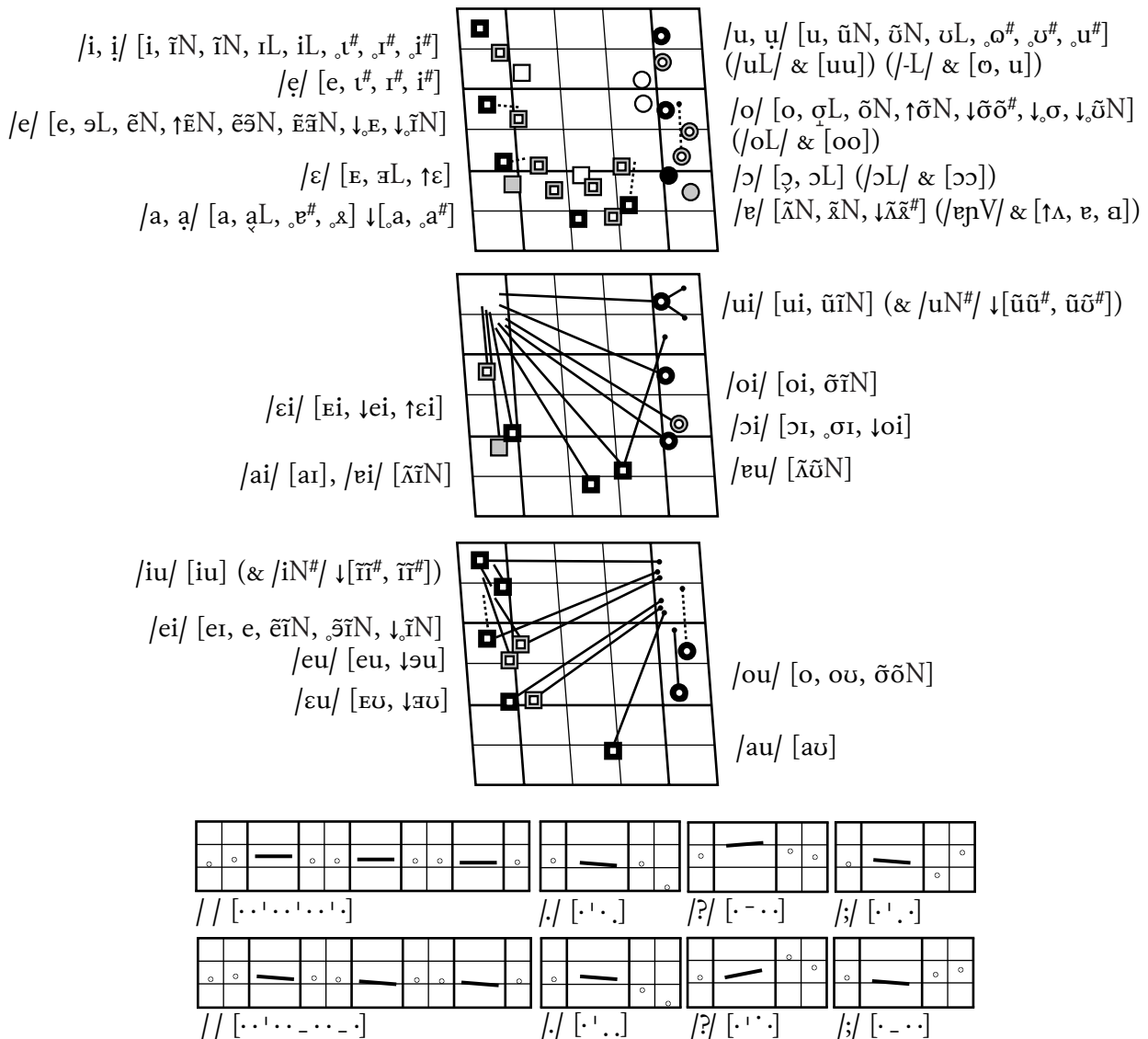16.10. *fig* 16.10 shows the *vowels* and *intonation* patterns of the *bahiano* accent. *Consonants*: [ʁ-, ɥ-, x-, ɐ-, ʀ-, h-, r-]; [-ʁ, -χ, -ʀ̥, -x, -ɥ, -h, -ɦ, -ɾ̥, -ʀ, -ɐ, -r, -ɾ] (including [-∅], or [-ˈ], not only for verbs); [-ʁ-, -ɥ-, -x-, -ɐ-, -ʀ-, -h-, -rː, -r-]; /-ɾ-/ [-ɾ-, -r-, -z-]; for /#CɾV/ it is possible to find [#Cɾ̩ˈV]; [l- ɫ- ɭ- ɺ-] (freely, & also [#Cl̩ˈV, #Cɭ̩V, #Cɺ̩V]); [-ɫ, -ʟ, -ɭ̩, -ɺ̩, -ɽ, -ɤ, -u] (sometimes also [-ɫ], *cf fig* 16.10 for possible monotimbric variants of /u, o, ɔ/+/L/); [ɲ, j̃, n̠ʲ], [ʎ, j, ɭ] (also for /lj/), [j, ɟ, ɹ, i, e; w, ɯ, u, o] (all possibilities, also for /lj/, including [ɛ, ɞ] in cases like *João* [ʒɔˈʎɞ̃ŋ] for [ˈʒwɐ̃ũŋ] /ˈʒwɐuN/, see below); in addition, /VjV/ also [ViV], but often /ejV, ɛjV/ and /owV/ become [eV, ɛV], [oV], respectively).

Furthermore, [-s, -z] (& [-ʂ, -ʐ, -ʂ, -ʑ, -ʃ, -ʒ] & [ʂt, ʐd; ʂt, ʑd]; [ʃ, ʒ] (& [ʂ, ʐ; ʃ, ʒ]); [tʃ, dʒ] (& [ʈ, ɖ; t, d]), *-tes*, *-des* also [ts, dz]; /ˈV(N)s#/ sequences almost systematically become [Vis, Ṽis, -ɪ-, -ʂ, -ʂ, -ʃ] (especially in tunes, while /ai/+/s, ʃV/ often has

fig 16.10. Brazilian regional accents: Bahia, Salvador.

/i, i̥/ [i, ĩN, ɪ̃N, ɪL, iL, ₒʊ#, ₒɾ#, ₒi#]

/e̥/ [e, ʊ#, ɾ#, i#]

/e/ [e, əL, ẽN, ↑ẽN, ẽɜN, ɛ̃ɐ̃N, ↓ₒɛ, ↓ₒɪ̃N]

/ɛ/ [ɛ, ɐL, ↑ɛ]

/a, ḁ/ [a, ḁL, ₒɐ#, ₒʌ] ↓[ₒa, ₒa#]

/u, u̥/ [u, ũN, ʊ̃N, ʊL, ₒo#, ₒʊ#, ₒu#] (/uL/ & [uu]) (/-L/ & [ɤ, u])

/o/ [o, o̥L, õN, ↑õN, ↓õõ#, ↓ₒo, ↓ₒũN] (/oL/ & [oo])

/ɔ/ [ɔ̥, ɔL] (/ɔL/ & [ɔɔ])

/ɐ/ [ɐ̃N, ɐ̃N, ↓ɐ̃ɐ̃#] (/ɐɲV/ & [↑ʌ, ɐ, ɐ])

/ui/ [ui, ũĩN] (& /uN#/ ↓[ũũ#, ũʊ̃#])

/oi/ [oi, õĩN]

/ɔi/ [ɔɪ, ₒɔɪ, ↓oi]

/ɐu/ [ɐ̃ʊ̃N]

/ɛi/ [ɛɪ, ↓ei, ↑ɛi]

/ai/ [aɪ], /ɐi/ [ɐ̃ĩN]

/iu/ [iu] (& /iN#/ ↓[ĩĩ#, ĩɪ̃#])

/ei/ [eɪ, e, ẽĩN, ₒẽĩN, ↓ₒĩN]

/eu/ [eu, ↓əu]

/ɛu/ [ɛʊ, ↓ɐʊ]

/ou/ [o, oʊ, õõN]

/au/ [aʊ]

/ / [·· ˈ··ˈ·ˈ·] /./ [·ˈ·.] /?/ [· ¯ ··] /;/ [·ˈ·.]

/ / [·· ˈ···¯···] /./ [·ˈ..] /?/ [·ˈ·ˈ] /;/ [·¯··]

simple [a-]); /sC/ sequences almost systematically have [ʃ, ʒ]; besides, we find [ˈVˑ(C)(V)#|] & [Ṽ#N, Ỵ#N] (more rarely [V#N]), but also in /V#CVN/: *coração* [ˌkɔɾɐ̃-ˈsʌ̃ʊ̃ŋ], *coragem* [kɔˈɾʌ̃ˑʒ(ə̃)ĩ̥ŋ].

In addition to what shown in *fig* 16.10, including /ei/ [eɪ, ↓e]; the most typical local peculiarity consists in the fact that in unstressed syllables we almost systematically find [ɛ, ɔ] for /e, o/ (also for written *ou*).

More precisely, we generally have [ɛ, ɔ] before stressed /ɛ, a, ɐ, ɔ/, also if in sequences: *Pelé* [pɛˈɫɛ], *pegar* [pɛˈgaɾ], *cooperar* [kɔˌɔpɛˈɾaɾ], *borogodó* [bɔˌɾɔgɔˈdɔ], *doação* [dɔaˈsʌ̃ʊ̃ŋ].

Instead, for /e, o/ before stressed /i, e, o, u/, we usually have [e, o], but in broader accents certain words can have either [i, u] or [ɛ, ɔ] (as can prefixes containing *e*).

Again, in broader accents, we can find [ɛ, ɔ] also for post-stressed /e, o/, or in inflected forms of words with stressed /ɛ, ɔ/: *cônego* [ˈkõˑnɛgu], *setenta* [sɛˈtẽɲtɐ] (from *sete* [ˈsɛˑʧi]).

In *rural* accents, /it, id/, followed by /V/, can typically become [tʃ, ʤ; ʈ, ɖ], as in *oito* /ˈoitu/ [ˈoˑtʃu, ˈoˑʈu], even between words.

fig 17.0.3. Lusitanian regional accents with place names; the last map shows accents and regions together for an easier comparison.
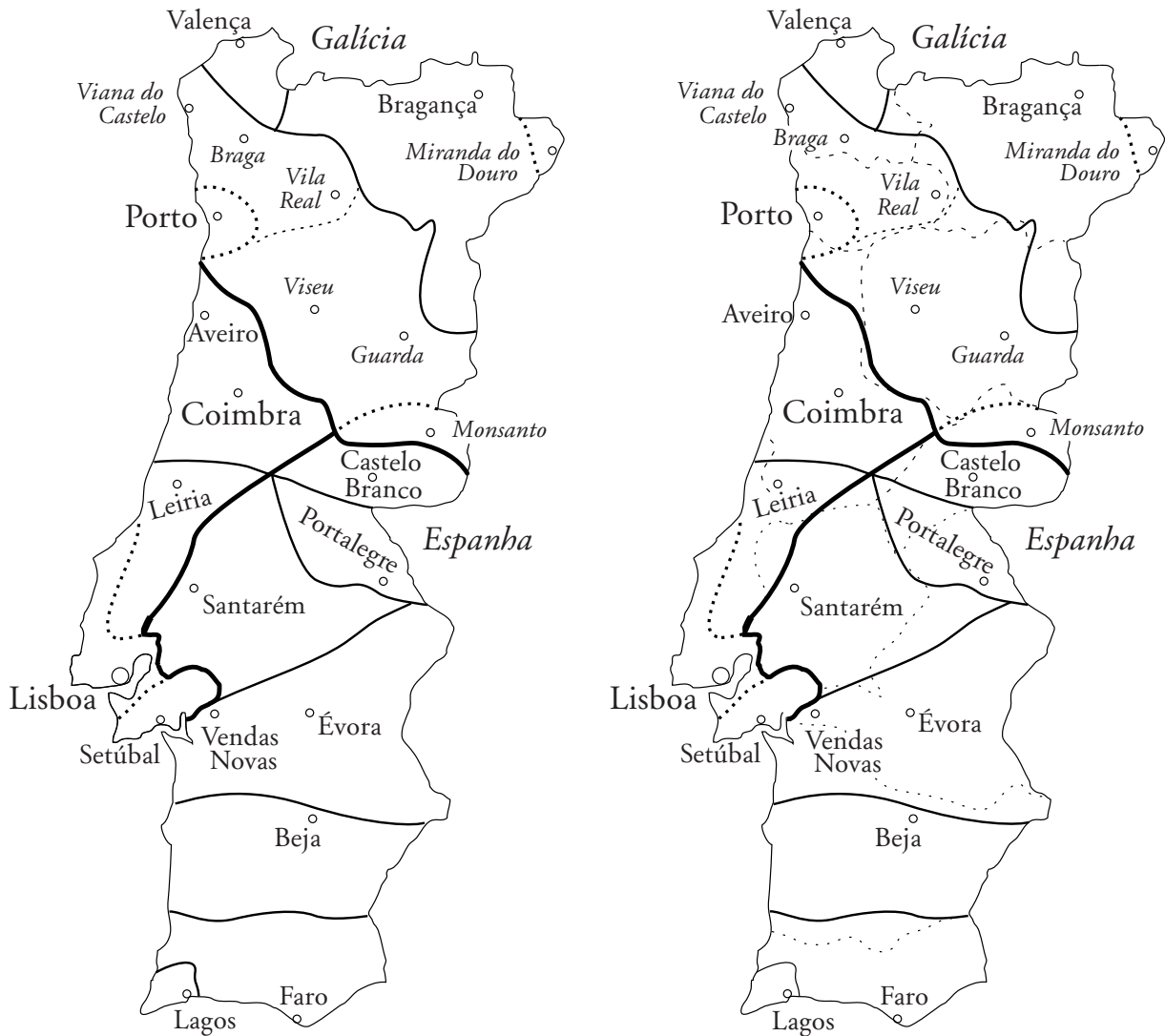
are also invited to search for adequate *examples* to be adapted to the different local accents, taking them from Ch 5-8 (& Ch 9-13).

17.0.4. For the *consonants*, we will indicate their peculiarities, especially when different from those of neutral Lusitanian. It goes without saying that what is said in Ch 1-13 can occur in these accents, too, including neutral and mediatic peculiarities, especially for the consonants. In fact, more educated and younger people can generally have less broad accents.

17.0.5. In addition, let us repeat that any speaker can oscillate rather freely between more regional accents and mediatic (or even neutral or traditional) ones. So, for instance, we generally do not even say anything about the behavior of /jV, wV/ after /C/, or /Cɾ, Cl/, since –generally– regional speakers can use alternatively
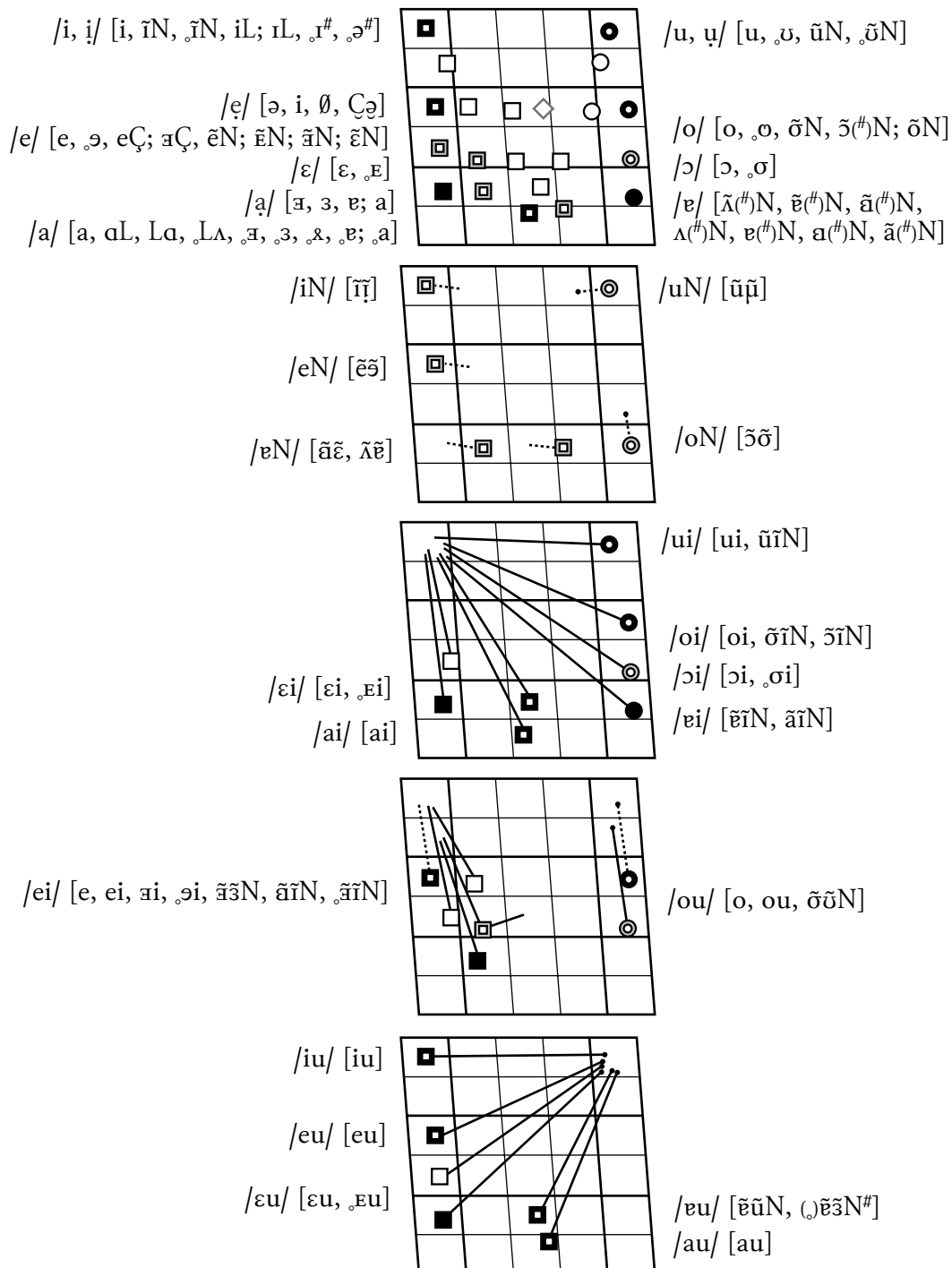
Algarvio (Faro)

17.8. *fig* 17.8 shows the *vowels* and *intonation* patterns of the *algarvio* accent.
Consonants: [rː-, ʁ-, ʀ-, ʁ̞-,], [-ɾ, -z], [-r(ː)ɾ-, -ʁ-, -ʁ̞-]; [ɫ-], [-ɫ, -ʝ̃, -u]; [ʃ̟, ʒ̟; ʃ, ʒ; ʂ, ʐ];
more frequently [Ṽ#N] than [V#N]; as shown, after labials, /e̞/ can become [ə]. There
may be no timbre difference between *-amos* and *-ámos*, mostly with [ɐ̃, ɐ] for both.
Devoicing of /i, i̧, e̞, u, u̧/ can also occur within words and in final position, not

fig 17.8. Lusitanian regional accents: Faro.

/i, i̧/ [i, ĩN, ᵒĩN, iL; ɪL, ᵒɪ#, ᵒə#] /u, u̧/ [u, ᵒʊ, ũN, ᵒũN]

/e̞/ [ə, i, ∅, Ç̧ə]
/e/ [e, ᵒə, eÇ̧; ɐÇ̧, ẽN; ɛ̃N; ã̞N; ɛ̃N] /o/ [o, ᵒo, õN, ɔ̃(#)N; õN]
/ɛ/ [ɛ, ᵒᴇ] /ɔ/ [ɔ, ᵒɔ]
/ɐ̧/ [ɐ, ɜ, ɐ̞; a] /ɐ/ [ʌ̃(#)N, ɐ̃(#)N, ã(#)N, ʌ(#)N, ɐ(#)N, ɐ(#)N, ã(#)N]
/a/ [a, ɑL, Lɑ, ᵒLʌ, ᵒɐ, ᵒɔ, ᵒʌ, ᵒɐ; ᵒa]

/iN/ [ĩĩ̧] /uN/ [ũũ̧]

/eN/ [ẽɜ̃]

/ɐN/ [ɐ̃ɛ̃, ʌ̃ɐ̃] /oN/ [ɔ̃õ]

/ui/ [ui, ũĩN]

/oi/ [oi, õĩN, ɔ̃ĩN]
/ɔi/ [ɔi, ᵒɔi]
/ɐi/ [ɐ̃ĩN, ã̞ĩN]
/ɛi/ [ɛi, ᵒᴇi]
/ai/ [ai]

/ei/ [e, ei, ɐi, ᵒəi, ã̞ɜ̃N, ã̞ĩN, ᵒã̞ĩN] /ou/ [o, ou, õũN]

/iu/ [iu]

/eu/ [eu]

/ɛu/ [ɛu, ᵒᴇu] /ɐu/ [ɐ̃ũN, (ᵒ)ɐ̃ɜ̃N#]
/au/ [au]

necessarily between voiceless contoids (or pause), but also in cases like *terrestre,* including their complete fall, as in *ele* [ˈeį̃], or *plano* [ˈpɫãɛ̃ɳ] (with a seminasal), or *Faro* [ˈfaˑɾu̥, -u̜, ˈfaˑɾ], or the second *o* in *filosofia* [u̥, u̜, Ø]. /e, ɛ; o, ɔ/ can be exchanged. Voiced consonants are often partially devoiced, [C̥], when followed by voiceless one or pauses.

Speech can typically be quick and with shortened unstressed vowels, but lengthened stressed ones. Furthermore, a *restricted* paraphonic setting can be quite typical.

/ / [·· ˈ ·· ˈ ·· ˈ ·]   /./ [· ˈ ..]   /?/ [· ˈ · ˈ]   /;/ [· ˈ ·]

/?/ [· ˊ ··]   /?/ [· ⁻ ˙ ·]
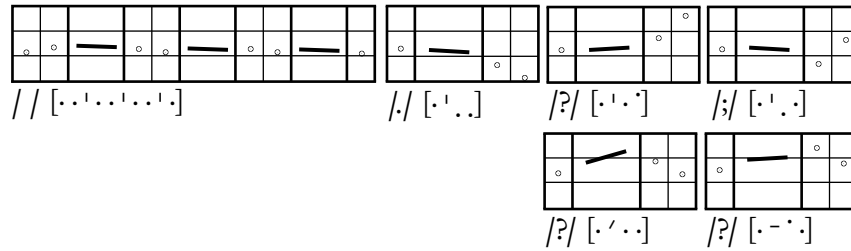
Restricted ⟨V̬̆⟩
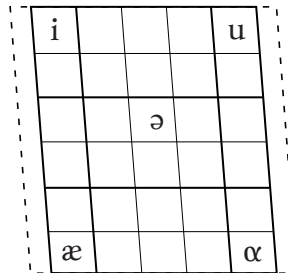
Portuense (Porto, Baixo Minhoto, Alto & Meio Beirão: Porto, Braga, Guarda, Monsanto)

17.10.1. *fig* 17.10 shows the *vowels* and *intonation* patterns of the portuense accent (and subvariants outside the Porto area proper). The first two vocograms give the monophthongs, while the other five ones show the diphthongs, all with taxophones and different variants. The variants shown in the second vocogram are broader ones and mostly found outside Porto.
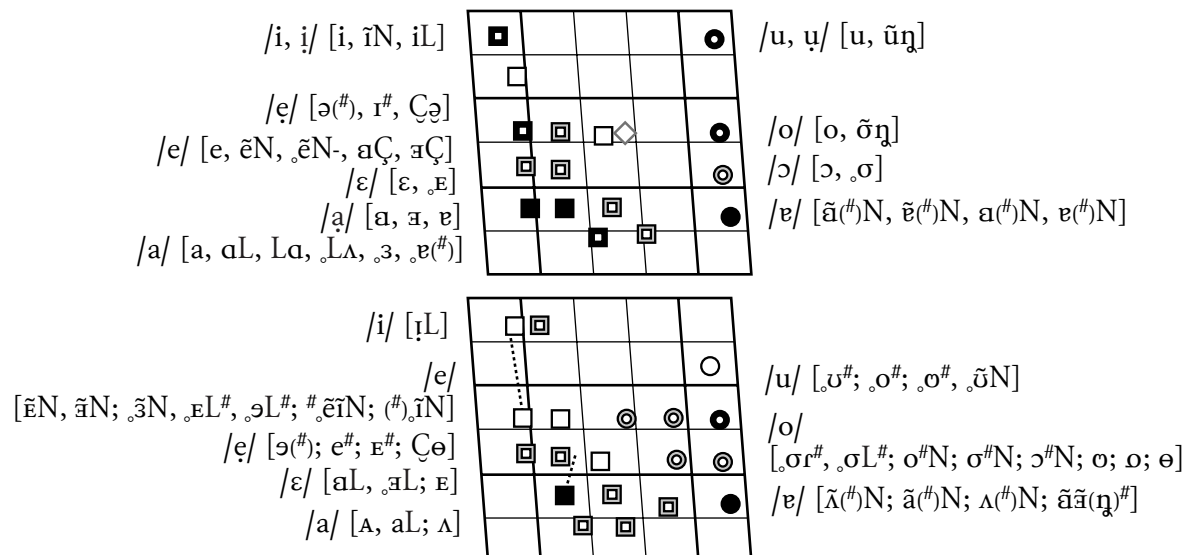
Also for intonation, we give two additional variants of the interrogative tune, /?/ [·ˈ·ˈ], for Baixo Minhoto & Alto-Beirão, [·‾·ˈ], and Meio Beirão, [·‾··].
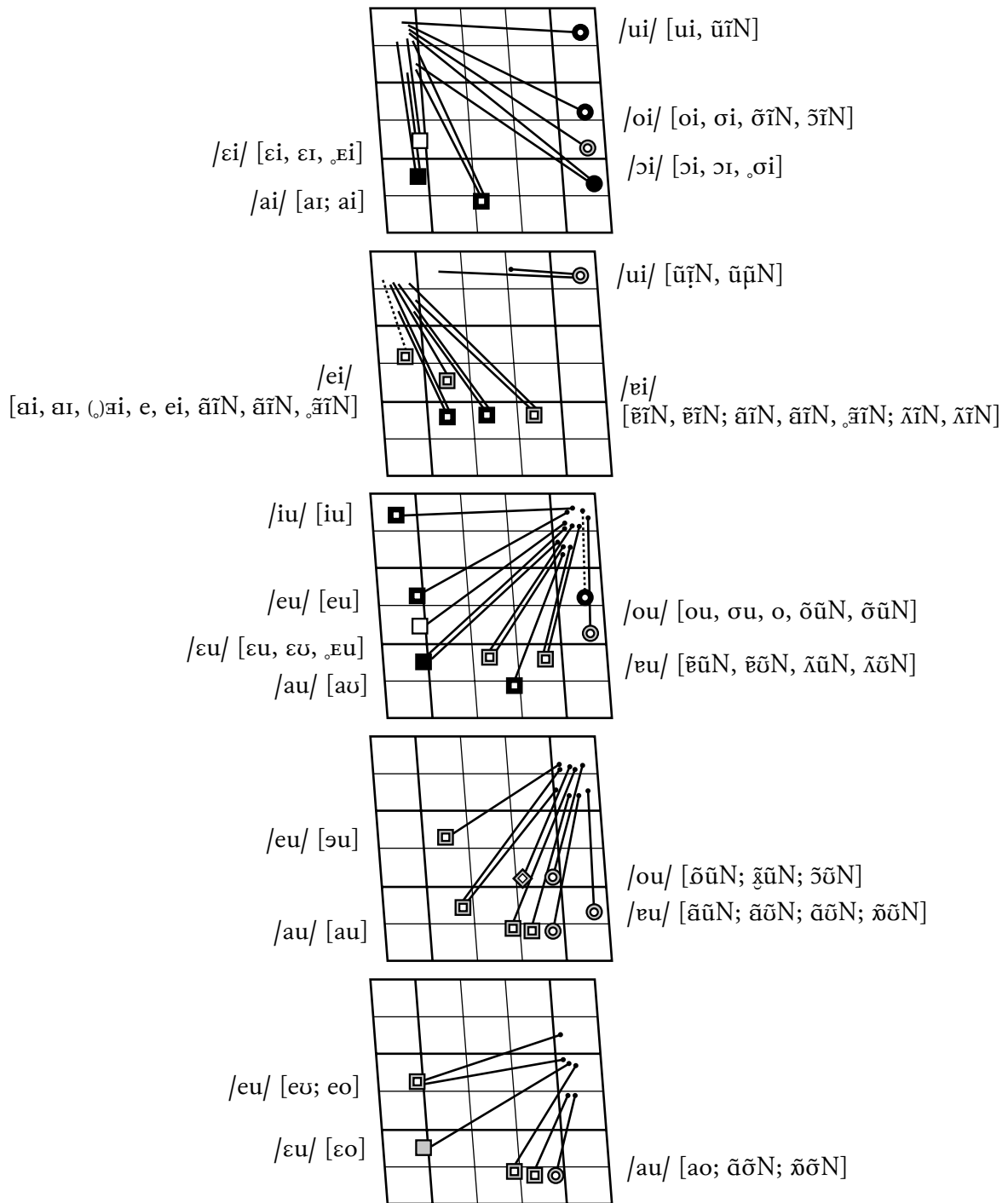
17.10.2. *Consonants*: [ʀ-, ʁ-, ʀ̥-, ꭓ-, ʜ-, ɦ-] (& [r̝-] especially outside Porto), [-ɾ, -ʂ, -ʐ, -ɾ̥, -r, -ɾ̥, -ɾ̊] (& [-ɾə#, -ɾɪ#, -ɾə#, -ɾe#]), [-ʁ-, -ꭓ-, -ʀ-, -Ꞓ-, -ꭓ-] (& [-rr-] especially outside Porto); /-ɾ-/ [-ɾ-] (sometimes, even [-r-]); [ɫ-], [-ɫ, -ʟ, -ʟ̝] (& [-ʊ, -o] mainly outside Porto); [ʎ, l̠]; [ɲ] (& broader [ɲ, ŋ], even after front vowels, or /ʁɲ/ [-ɪɲ]); /v/ [v] (& [b, β], including /b/ [v] by hypercorrection); [s, z; s̪, z̪; ʂ, ʐ], [-ş, -ʐ; -s̪, -z̪; -ʃ, -ʒ; -ʃ, -ʒ; ʃ, ʒ]. A phrase like *a África* can have [ʁjˈaˈ-, ʁˈjaˈ-].

We generally find [V#N] (also with [ɛ, ɔ] when not fully nasalized), oftener than [V̰#N, Ṽ#N] (except that in Porto); even /VN/ can sometimes lack nasalization, partially or completely (thus possibly with stressed [ɛ, ɔ]); besides, /Vu/ [Vu, Vɪ̃]; the actual timbres of /e, ɛ; o, ɔ/ can not be respected, as in *chapéu* with '/eu/'; let us also notice *e* (conj.) /i/, often realized as [ə].

17.10.3. Mostly in Porto and Baixo Minhoto, we find two very typical consonant behaviors. The first is the realization of tautosyllabic /VN/, which –in addition to its normal [ṼN]– can typically have two opposite results: [ṼN̩] (more with monophthongs, than diphthongs) and [ṼṼ̃], with diphthongization and with or without [ŋ̍], as shown in the second vocogram, for the more frequent sequence, /ʁ/ [ãã̃(ŋ)].

fig 17.10. Lusitanian regional accents: Porto (& Braga, Guarda, Monsanto).

/i, i̠/ [i, ĩN, iL]   /u, u̠/ [u, ũŋ]

/ẹ/ [ə(#), ɪ#, Çə]

/e/ [e, ẽN, ˳ẽN-, ɐÇ, ɐÇ]   /o/ [o, õŋ]

/ɛ/ [ɛ, ˳ᴇ]   /ɔ/ [ɔ, ˳ɒ]

/a̠/ [a, ɐ, ʁ]

/a/ [a, ɑL, Lɑ, ˳Lʌ, ˳ɜ, ˳ʁ(#)]   /ʁ/ [ã(#)N, ʁ̃(#)N, a(#)N, ʁ(#)N]

/i/ [i̩L]

/e/

[ɛ̃N, ã̃N; ˳ɜ̃N, ˳ᴇL#, ˳ɜL#; #ẽĩN; (#)˳ĩN]   /u/ [˳ʊ#; ˳o#; ˳o#, ũN]

/ẹ/ [ə(#); e#; ᴇ#; Çɵ]   /o/ [˳ɵɾ#, ˳ɵL#; o#N; ɵ#N; ɔ#N; ʊ; ɒ; ɵ]

/ɛ/ [ɐL, ˳ɐL; ᴇ]

/a/ [ʌ, ɑL; ʌ]   /ʁ/ [ʌ̃(#)N; ã(#)N; ʌ(#)N; ãã̃(ŋ)#]

/εi/ [εi, εɪ, ˳ɐi]

/ai/ [aɪ; ai]

/ui/ [ui, ũĩN]

/oi/ [oi, oi, õĩN, ɔ̃ĩN]

/ɔi/ [ɔi, ɔɪ, ˳oi]

/ei/
[ai, aɪ, (˳)ɐi, e, ei, ãĩN, ɐ̃ĩN, ˳ɐ̃ĩN]

/ɐi/
[ɐ̃ĩN, ɐ̃ĩN; ãĩN, ãĩN, ˳ãĩN; ʌ̃ĩN, ʌ̃ĩN]

/ui/ [ũĩN, ũj̃N]

/iu/ [iu]

/eu/ [eu]

/εu/ [εu, εʊ, ˳ɐu]

/au/ [aʊ]

/ou/ [ou, ou, o, õũN, õũN]

/ɐu/ [ɐ̃ũN, ɐ̃ʊ̃N, ʌ̃ũN, ʌ̃ʊ̃N]

/eu/ [əu]

/au/ [au]

/ou/ [õũN; ɤ̃ũN; ɔ̃ũN]

/ɐu/ [ɐ̃ũN; ɐ̃ʊ̃N; ɑ̃ʊ̃N; ɒ̃ʊ̃N]

/eu/ [eʊ; eo]

/εu/ [εo]

/au/ [ao; ɑ̃õN; ɒ̃õN]

17.10.4. The other very typical peculiarity concerns the realization of stressed /e, ε/ and /o, ɔ/, which –respectively– are preceded by [ɹ] (prepalatal approximant) or [ɰ] (velar semi-approximant semi-rounded). Occasionally, the contoids can also be [ȷ] (palatal semi-approximant) or [ɯ] (velar semi-approximant rounded), which are more marked and more typical of Baixo Minhoto.
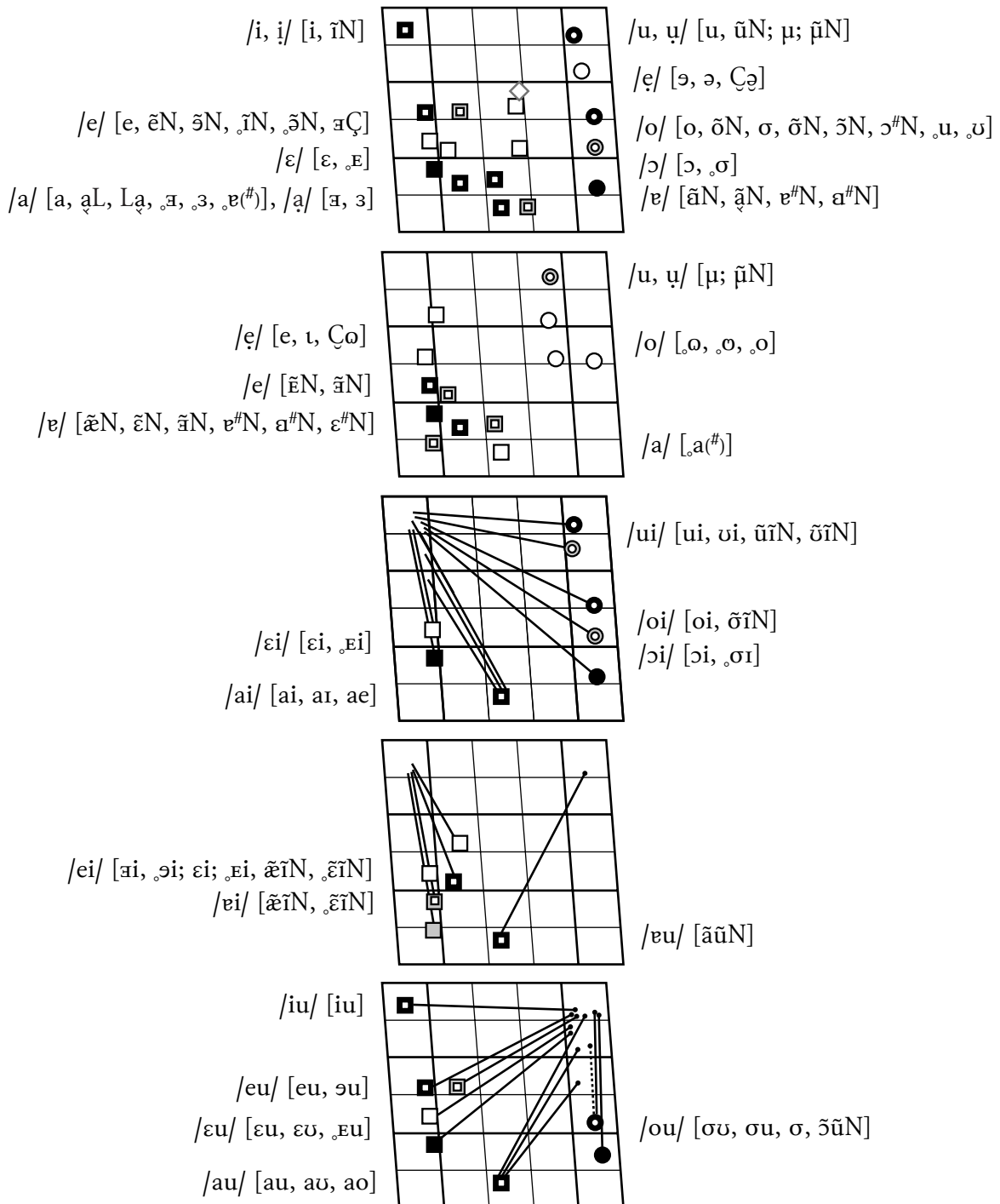
Here are some examples: *vento* [ˈbɹɛ̃ntʊ̩], *época* [ˈɹɛˑpʊ̩kɐ], *Porto* [ˈpɰoɾtʊ̩], *ora* [ˈwɔˑɾɐ]. However, current 'descriptions' and 'transcriptions' keep on presenting them as true '[je, jɛ; wo, wɔ]'!

Metaphony can also occur with /eN, oN/. For *ch*, we can find both [ʃ] and [tʃ].

/ / [··'··'··‿·]   /./ [·'·.]   /?/ [·'·˙]   /;/ [·‿··]

outside Porto /?/ [·‾˙·]   /?/ [·‾··] *Monsanto*

17.10.5. In the *Monsanto* area the following realizations prevail: [i] for /ẹ#/; [ʌ] for /a/; [ɐ#N, ʌ̃N]; /e, o/ rather more than /ei, ou/; [ʌ̃ĩŋ] for /ɐiN/; [ʌ̃ũŋ̩, ãũ-, ɔ̃ũ-, ãõ-, ɔ̃õ-]; [rː-, -rrː-].

Trasmontano (& mirandês: Bragança, Miranda do Douro)

17.12.1. *fig* 17.12.1 shows the *vowels* and *intonation* patterns of the *trasmontano* accent. Stressed /e, ɛ/ and /o, ɔ/, which are occasionally exchanged, can be preceded, respectively, by [ɪ] (prepalatal approximant) or [w] (velar semi-approximant semi-rounded); /ẹ/ [ɤ, ə] (& [Ø#]), after labials, can become [ə], or even [ɵ]. /Vu/ diphthongs can also be [Vi̯]; generally, we have [V#N], occasionally, simply [V̯N]. It is possible to have [o] for unstressed *o* in free syllable.

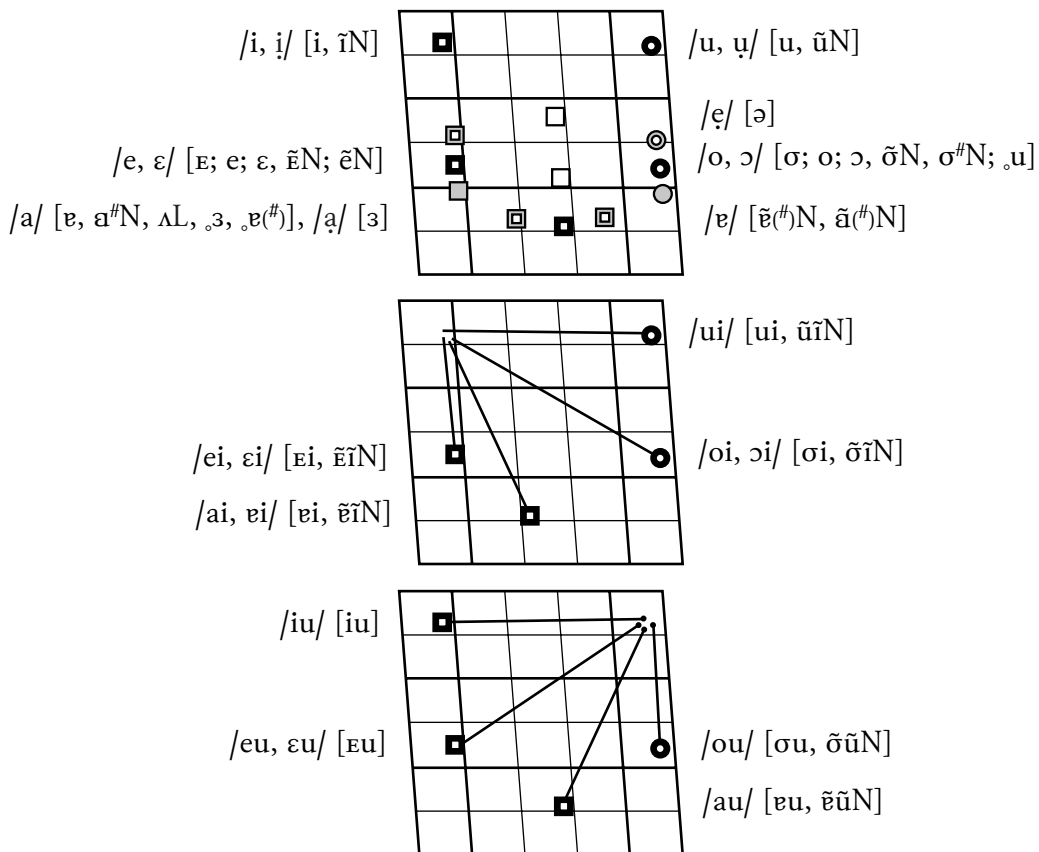*fig* 17.12.1. Lusitanian regional accents: Bragança.

/i, i̯/ [i, ĩN]   /u, u̯/ [u, ũN; μ; μ̃N]

/ẹ/ [ɤ, ə, Çə]

/e/ [e, ẽN, ɜ̃N, ˌɪ̃N, ˌɜ̃N, ɐÇ]   /o/ [o, õN, ɵ, ɵ̃N, ɔ̃N, ɔ#N, ˌu, ˌʊ]

/ɛ/ [ɛ, ˌE]   /ɔ/ [ɔ, ˌɵ]

/a/ [a, ạL, Lạ, ˌɐ, ˌɜ, ˌɐ(#)], /ạ/ [ɐ, ɜ]   /ɐ/ [ãN, ɐ̃N, ɐ#N, ɑ#N]

/ẹ/ [e, ι, Çɵ]

/e/ [ɛ̃N, ɜ̃N]   /u, u̯/ [μ; μ̃N]

/ɐ/ [æ̃N, ɛ̃N, ɜ̃N, ɐ#N, ɑ#N, ɛ#N]   /o/ [ˌɵ, ˌɵ, ˌo]

/a/ [ˌa(#)]

/ui/ [ui, ʊi, ũĩN, ʊ̃ĩN]

/oi/ [oi, õĩN]

/ɛi/ [ɛi, ˌEi]   /ɔi/ [ɔi, ˌɔι]

/ai/ [ai, aι, ae]

/ei/ [ɐi, ˌɵi; ɛi; ˌEi, æ̃ĩN, ˌɛ̃ĩN]

/ɐi/ [æ̃ĩN, ˌɛ̃ĩN]

/ɐu/ [ãũN]

/iu/ [iu]

/eu/ [eu, ɵu]

/ɛu/ [ɛu, ɛʊ, ˌEu]   /ou/ [ɵʊ, ɵu, ɵ, ɔ̃ũN]

/au/ [au, aʊ, ao]

Consonants: [ʁ-, ʀ-, ʁ̞-, ʁ̥-, χ-, rː-, r̝ː-, r̝ː-], [-ɾ] (& [-z, -ᶻ] especially before /t, d/, & [-ɾᵊ#], [-ʁ-, -rrː-, -rr-, -zɾ-, -ɾz-]; /-ɾ/ [-ɾ-] (& [C̬ɾ, C̬ɾ̥])); [ɫ-, ɫ̝-] (& [L-, ɫ̝-] especially between vowels), [-ɫ, -ɫ̝, -ʟ, -ʟ̃, -o, -u]; [ʎ, j,]]; [ɲ, ɲ̥]; /b/ [b, b] (which is a semi-stop) [ß, v, v, ɣ]; often /Vgw/ is [Vɣw, Vɣ̂]; [f, f̬; v, v̂]; ; *s* [s, z; ş, ẓ; ş, ẓ; ş, z], [-ş, -ẓ; -ş, -ẓ; -ş, -ẓ; -ş, -ẓ; -ʃ, -ʒ]; ç, *z* [s, z]; [ʃ, ʒ; ʃ, ʒ; ş, ẓ; ʃ, ʒ]; *ch* [ʃ, tʃ]. In the southeastern area, with Guarda, /o/ is used rather than /ou/.

/ / [· · ' · · ' · · _ ·]   /·/ [· – · ·]   /?/ [· – · ˙]   /;/ [· – · ·]
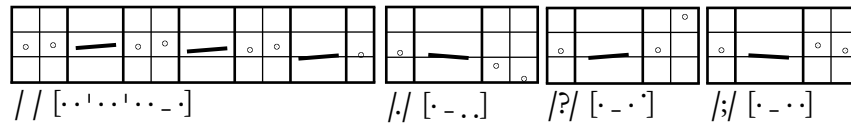
17.12.2. In addition, *fig* 17.12.2 shows a simpler version of this accent, with normal or possible neutralizations, which render it more similar to the following accent of Miranda do Douro.

fig 17.12.2. Lusitanian regional accents: Bragança variants.

/i, i̯/ [i, ĩN]   /u, u̯/ [u, ũN]

/ę/ [ə]

/e, ɛ/ [ɛ; e; ɛ, ɛ̃N; ẽN]   /o, ɔ/ [σ; o; ɔ, õN, σ#N; ˌu]

/a/ [ɐ, a#N, ʌL, ˌɜ, ˌɐ(#)], /a̧/ [ɜ]   /ɐ/ [ɐ̃(#)N, ã(#)N]

/ui/ [ui, ũĩN]

/ei, ɛi/ [ɛi, ɛ̃ĩN]   /oi, ɔi/ [σi, õĩN]

/ai, ɐi/ [ɐi, ɐ̃ĩN]

/iu/ [iu]

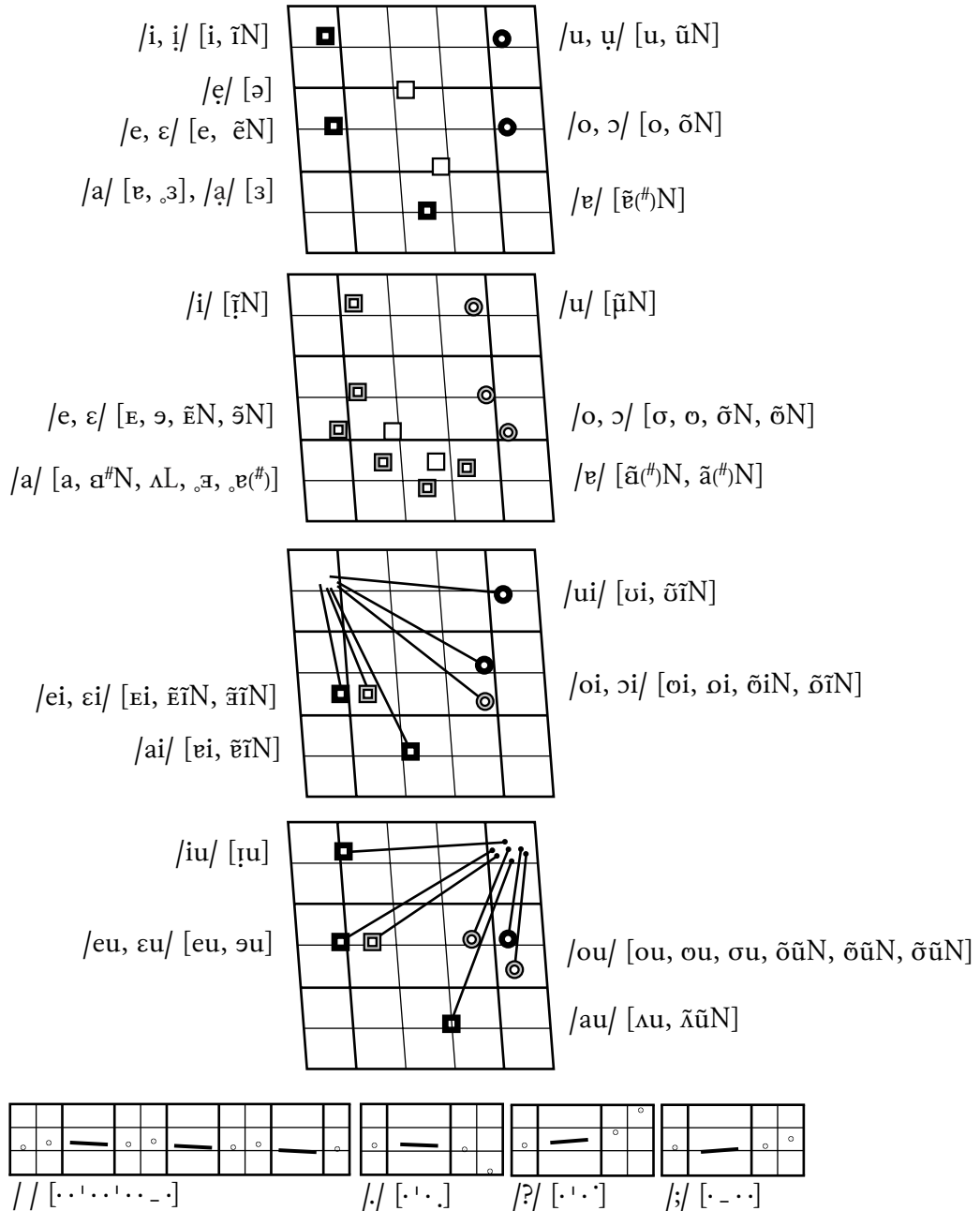/eu, ɛu/ [ɛu]   /ou/ [σu, õũN]

/au/ [ɐu, ɐ̃ũN]

17.12.3. As just said, there a peculiar subarea, which is shown in *fig* 17.12.3: *Miranda do Douro*, the easternmost part of Portugal, with a clear influence from Spanish, producing a mixed accent, with many neutralizations.

Although we indicate full nasalization for vowels and diphthongs followed either by tautosyllabic or heterosyllabic /N/, in both cases we can frequently have

half-nasalization, and sometimes even full de-nasalization. Stressed /e, ɛ/ and /o, ɔ/ can be preceded, respectively, by [ʝ] (prepalatal approximant) or [ɰ] (velar semi--approximant semi-rounded). /Vu/ diphthongs can be [Vɥ̃].

Consonants: [rː; ʁ-, ʀ-], [-ɾ, -r, -ɾ⁹#, -ɾ⁹#], [-rrː; -ʁ-, -ʀ-], /-ɾ-/ [-ɾ-, -r-]; [ɫ-, l-], [-l, -ɫ, -ɫ, -ɥ̃]; /v/ becomes /b/ [b, β]; [s, z], [-ʂ, -ʐ; -ʂ, -ʐ; -ʂ, -ʐ; -ʂ, -ʐ]; [ʃ, ʒ; ʃ, ʒ]. A phrase like *a África* can have [ʒʝˈɐ-, ʒˈjɐ-].

fig 17.12.3. Lusitanian regional accents: Miranda do Douro.

/i, i̯/ [i, ĩN]   /u, u̯/ [u, ũN]
/ḛ/ [ə]
/e, ɛ/ [e, ẽN]   /o, ɔ/ [o, õN]
/a/ [ɐ, ̥ɜ], /a̱/ [ɜ]   /ɐ/ [ɛ̃⁽#⁾N]

/i/ [ɪ̃N]   /u/ [ʊ̃N]

/e, ɛ/ [ɛ, ə, ɛ̃N, ɜ̃N]   /o, ɔ/ [σ, ɤ, õN, õN]
/a/ [a, ɑ#N, ʌL, ̥ɜ, ̥ɐ⁽#⁾]   /ɐ/ [ã⁽#⁾N, ã⁽#⁾N]

/ei, ɛi/ [ɛi, ɛ̃ĩN, ɜ̃ĩN]   /ui/ [ʊi, ʊ̃ĩN]
/ai/ [ɐi, ɐ̃ĩN]   /oi, ɔi/ [ʊi, ɔi, ʊ̃iN, õĩN]

/iu/ [ɪu]
/eu, ɛu/ [eu, əu]   /ou/ [ou, ʊu, σu, õũN, ʊ̃ũN, õũN]
/au/ [ʌu, ʌ̃ũN]

/ / [· ·ˈ· ·ˈ· · _ ·]   /./ [·ˈ·.]   /?/ [·ˈ· ˈ]   /;/ [· _ ··]

18.
Beyond Brazil
& continental Portugal
(& maps)

18.0.1. As will be seen, this chapter deals with the pronunciation of Portuguese that we find outside Brazil and Lusitania, as shown in the maps of *fig* 18.0.1 & *fig* 18.3.1. These are the two Atlantic and five African areas outside continental Portugal.

The two Asian Portuguese accents still found in Macau and Timor-Leste are not shown on any maps here, but it is quite easy to find where they are.

Generally, these accents have a more Lusitanian basis than Brasilian, although with some intermediate choices, as we will see for each of them.

The Azorian and Madeiran ones show several peculiar characteristics of their own, given their long isolation periods from continental Portuguese.

18.0.2. For phones not shown in ₢ 5-6, see ₢ 21, especially for contoids.

fig 18.0.1. Açores & Madeira.

Açores

Portugal

Espanha
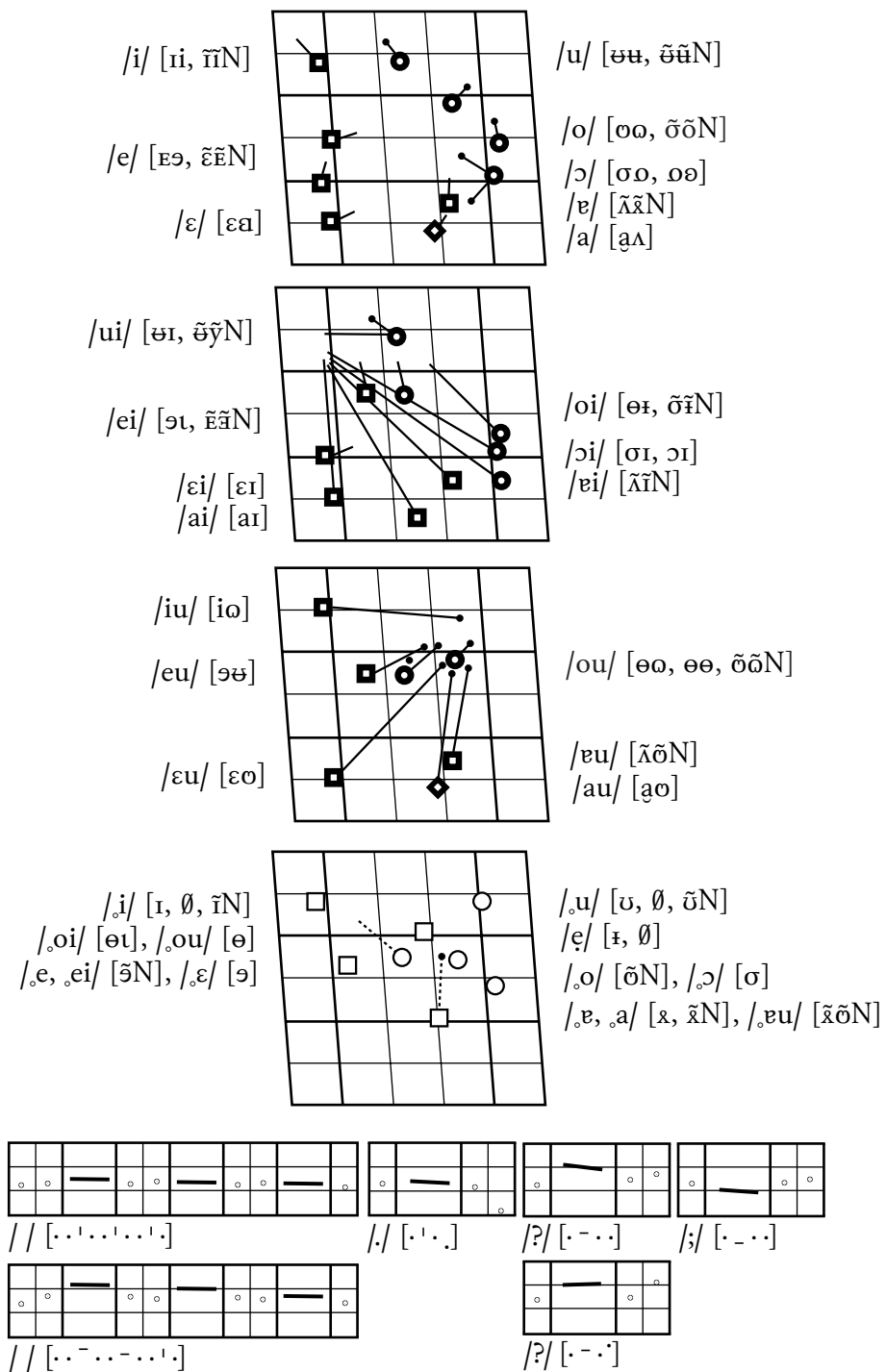
Madeira
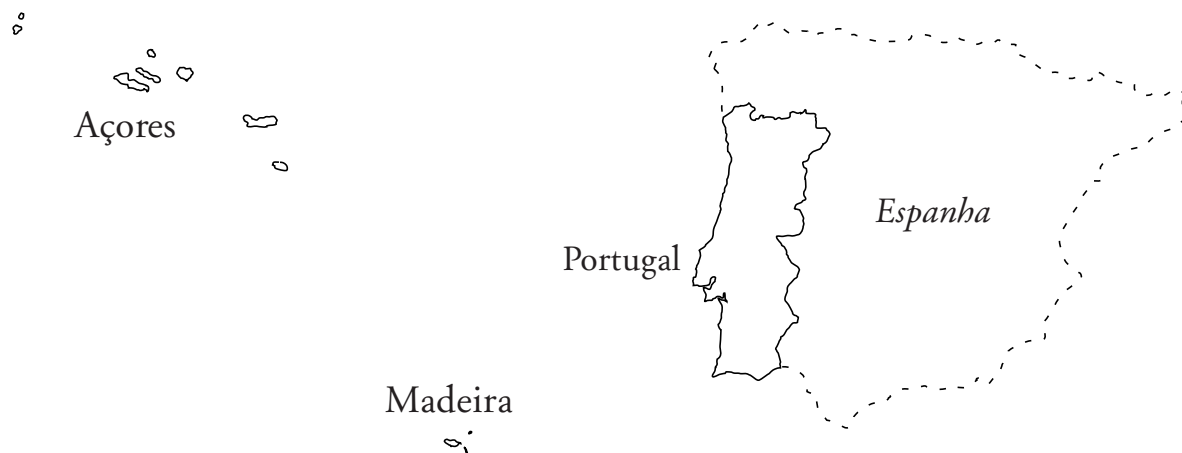
Açoriano (Açores: São Miguel)

18.1. *fig* 18.1 shows the *vowels* and *intonation* patterns of the *açoriano* accent of São Miguel (in the larger island), which has the most typical Azorian pronunciation, while in the other islands there are fewer and milder peculiarities.

Consonants: [ʀ-, ʁ-, ʀ̥-], [-ʐ, -ʐ̥, -ɾ#, -∅#], [-ʀ-, -ʁ-, -ɾ-, -ɾ-]; /-ɾ-/ [-ɾ-, -ʐ-]; [ɫ-, l-], [-ɫ, -ɫ,

-u] (sometimes [ʎ-, -ʎ]); [ʎ, j]; [ɲ, j̃]; [t, d; ʈ, ɖ]; rarely [β, δ, ɣ]; [s-, z-; -ʃ̬, -ʒ; -ʃ, -ʒ]; [ʃ, ʒ; ʃ, ʒ]; [ɟ, ɯ; j, w]; sonants become [C̥] in contact with [C̥]; generally [V(ʰ)N] & [Ṽŋ̊ʰ, Ṽŋ̊ʰ, ṼṼ̊ʰ].

We generally have /ˈVʰ/ [ˈV·V], /ˈVʰ/ [ˈVV], /ˈVN/ [ˈṼ·N], while, in unstressed syllables, /i, e̞, u/ can typically become shorter, [ᵛ, ᵛ̊, Ø], not only in contact with [C̥], as in *temeu* [tᵻˈmɘɯ, tˈm-]; final /e̞, u/, even if preceded by voiced contoids, currently become [Ø], but while /Ce̞ʰ/ is simply [C], /Cuʰ/ becomes [C̥], with any /C/,

fig 18.1.1. Portuguese regional accents: Açores (including typical unaccented vowels).

as in *copeiro* [kʊ̯ˈpəɪɜ̂, -ɾ̂, kʲp-]; for /Nẹ#, nNu#/, we can also have [ŋ̍#, ŋ̍̃#], as in *fome* [ˈfσɔm, -ŋ], *uno* [ˈʊ̃ɐ̃n̂, -ŋ̃], and for /VNNẹ#, VNNu#/, even [ŋ̍#, ŋ̍̃#], as in *cânone* [ˈkɐʌnʊn, ˈkɐʌ̃ŋ̍], *fenómeno* [fɪ̯ˈnσɔmɪn̂, -ŋ̃, fʲn-]; /ViÇV/ [VÇV, VɪÇV], as in *mais* [ˈma(ɪ)ʃ].

Besides, /e,ɛ; o, ɔ/ can often be exchanged. In broader accents, all stressed diphthongs can be ralized as plain vowels, according to their first element: /i, e, ɛ, ɐ, a, ɔ, o, u/, keeping their diphthongized length, as shown in the vocograms of *fig* 18.1.1.
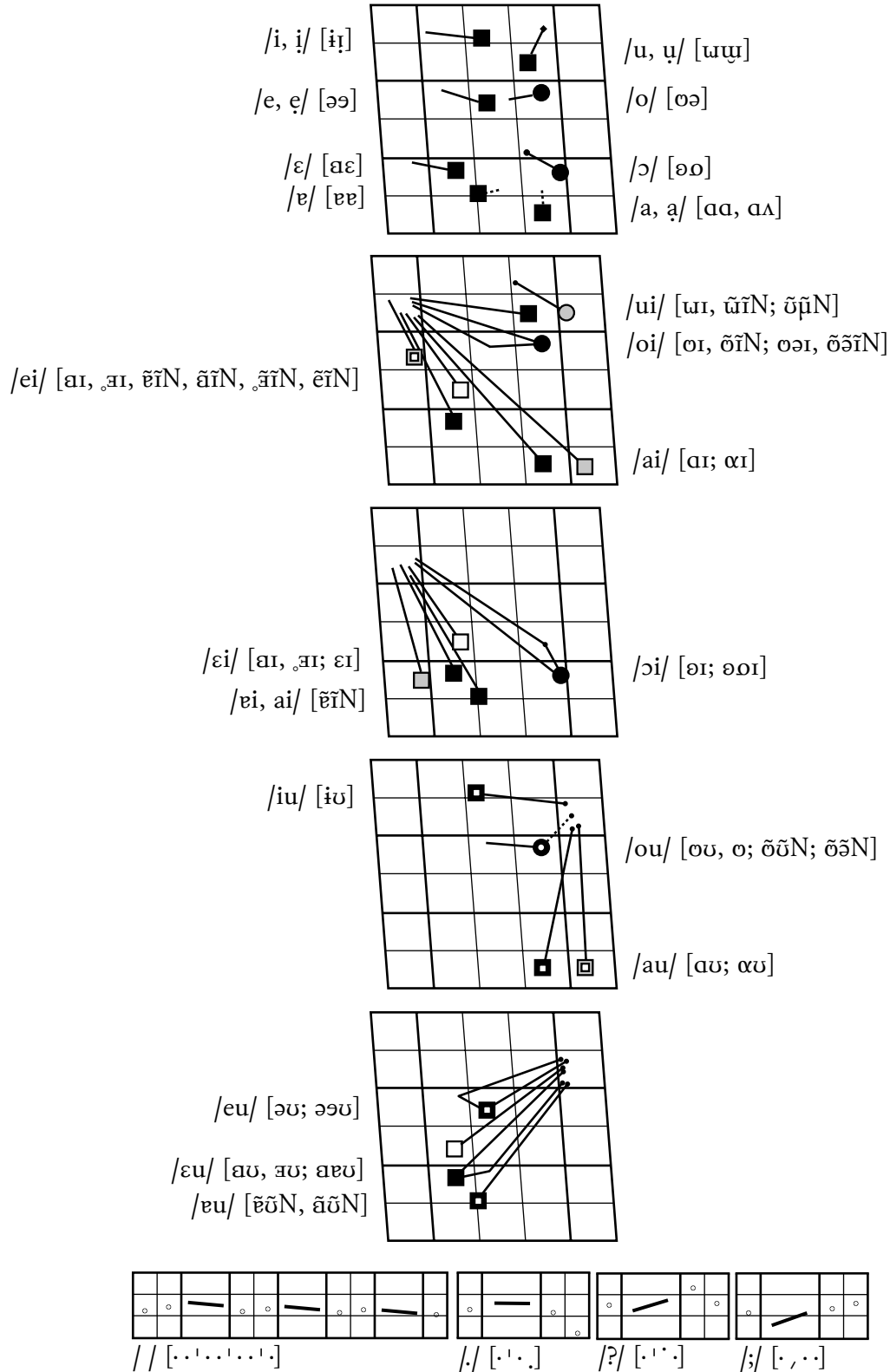
fig 18.1.2. Portuguese regional accents: Açores variants.

/i/ ↓[ɪi, ĩ̃ĩN]   /u/ ↑[ʉʉ, ũ̃ʉ̃N]
                        /o/ ↓[ʊu]

/e/ ↓[ɹ̈ə]

                        /ɔ/ ↑[σɵ]

/i/ [i, ̥i, ̥ɹ, ̥Ø, iN, ̥ɹN/, /i̥/ [ɪ, Ø]   /u/ [ʉ, ʉ, ̥ɔ, ʉ̃N, ̥õN], /u̥/ [̥ɔ, Ø]

/e/ [ə, ɐ̃N, ̥ə̃N, ̥ɛ̞ɾ#, ̥ɛ̞L#]   /o/ [ʊ, ̥oɾ#, ̥oL#, õN]
/ɛ/ [ɛ̞]   /ɔ/ [σ]
                 /ɐ/ [ʌ, ̥ɜ, ̥ə]
                 /a, ḁ/ [ʌ]

/ui/ [ʉɪ, ɣɪ]
/ei/ [ɐ̃ə̃N, ̥ə̃N]   /oi/ [ʊɪ]
                        /ɐi/ [ʌ̃ə̃N, ̥ə̃ə̃N]

/iu/ [iɔ, ɪ̯ɔ, ↑iʉ, ↓iʉ]
                        /ou/ [ʊʊ, ʊʉ, ↓ɵʉ]
                        /ɐu/ [ʌ̃õN, ̥ə̃õN]

                        /ui/ ↑[ʉɪ, ʉ̃ĩN]

                        /oi/ ↑[ɵɪ, ɵɪ]
                        /oi/ ↑[õĩN]
/ei/ ↕[ɐɪ]
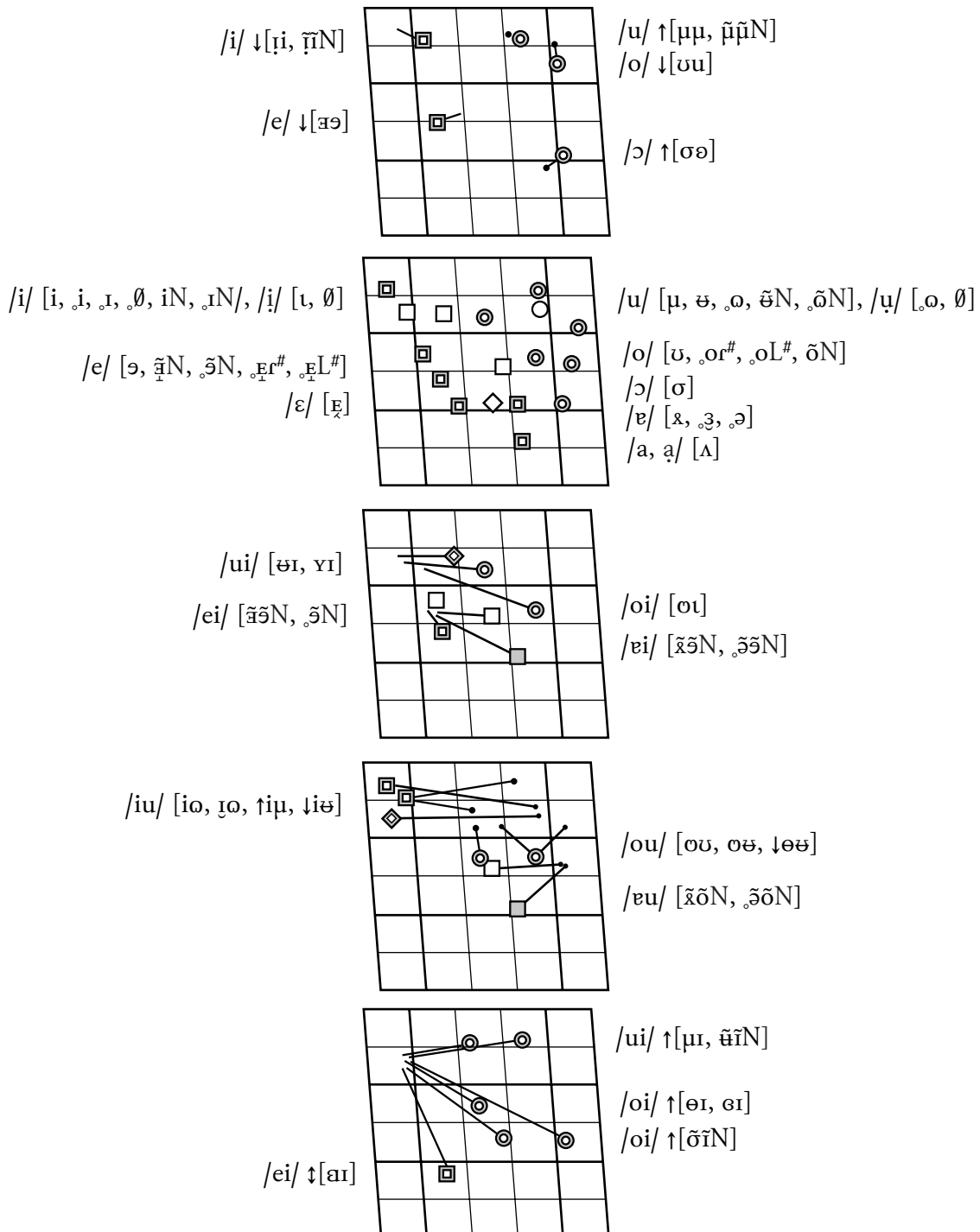
Madeirense (Madeira: Funchal)

18.2. fig 18.2.1 shows the *vowels* and *intonation* patterns of the *madeirense* accent. fig 18.2.2 shows the very many variants and certain taxophones, while fig 18.2.3 gives
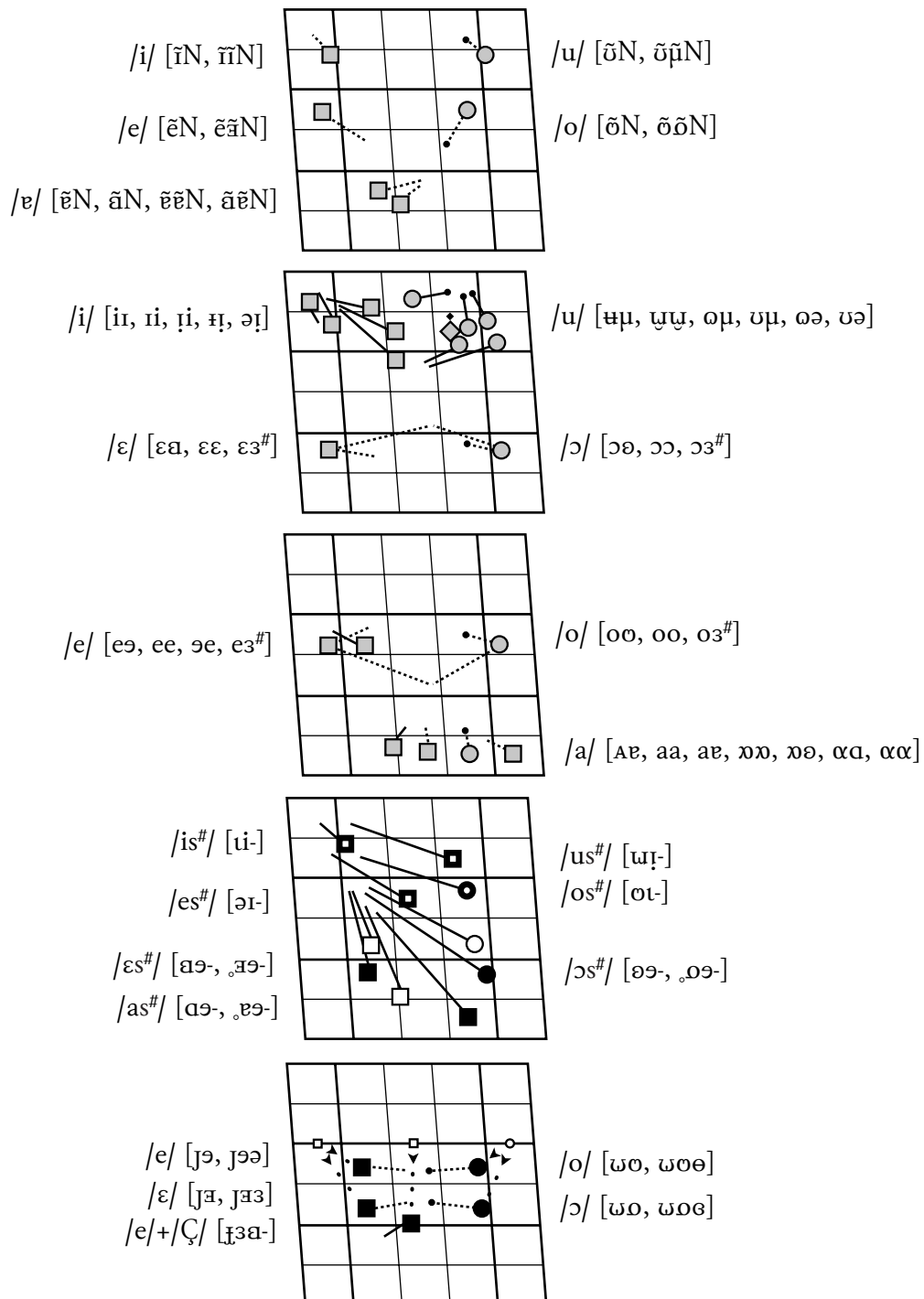
fig 18.2.1. Portuguese regional accents: Madeira.

/i, i̯/ [ɨi̯]   /u, u̯/ [ɯɯ̯]

/e, ẹ/ [əə]   /o/ [ʊə]

/ɛ/ [aɛ]   /ɔ/ [əɒ]

/ɐ/ [ɐɐ]   /a, ạ/ [ɑɑ, ɑʌ]

/ei/ [ɑɪ, ̥ɑɪ, ɐ̃ɪ̃N, ɑ̃ɪ̃N, ̥ɑ̃ɪ̃N, ɐ̃ɪ̃N]

/ui/ [ɯɪ, ɯ̃ɪ̃N; ʊ̃ɥ̃N]

/oi/ [ʊɪ, ʊ̃ɪ̃N; ʊəɪ, ʊ̃ə̃ɪ̃N]

/ai/ [ɑɪ; ɑɪ]

/ɛi/ [ɑɪ, ̥ɑɪ; ɛɪ]   /ɔi/ [əɪ; əɒɪ]

/ɐi, ai/ [ɐ̃ɪ̃N]

/iu/ [ɨʊ]   /ou/ [ʊʊ, ʊ; ʊ̃ʊ̃N; ʊ̃ə̃N]

/au/ [ɑʊ; ɑʊ]

/eu/ [əʊ; əəʊ]

/ɛu/ [ɑʊ, ɐʊ; ɑɐʊ]

/ɐu/ [ɐ̃ʊ̃N, ɑ̃ʊ̃N]

/ / [·· ' ·· ' ·· ' ·]   /./ [· ' ·.]   /?/ [· ' ·]   /;/ [· , ··]

the unstressed vowels.

Consonants: [ʁ-, ʀ-, ʁ̥-, ʀ̥-], [-ɾ, -r] (for /-ɾ#/ also see *fig* 18.2.3); [-ʁ-, -ʀ-]; /-ɾ-/ [-ɾ-, -r-]; [ɫ-, ɫ�-] (even before /i/), [-ɫ, -ɫ̵] (& [l̠] after /i/ plus /V, C, #/); for /-l#/ also see *fig* 18.2.3); [ʎ; l̠]; [ɲ; ŋ]; [s, z], [-ʃ, -ʒ] (& see *fig* 18.2.2 for diphthongizations; in broader accents, we can find the firstvocoids followed by [ɦ̩, ɦÇ, ɦ̩Ç], as in *as vezes* [ɐ�̩-ˈvəəzɪ̩ɦ]); [ʃ, ʒ]; /m, p, b/ are often [m̥, p̥, b̥], while /b, d, g/ can be [β, δ, ɣ] only in milder accents.

fig 18.2.2. Portuguese regional accents: Madeira variants and certain taxophones.

In addition, as shown in *fig* 18.2.3, /ˌi(C)CV, ˌu(C)CV/ are typically [ɪ#ÇV, ʊ#ÇV], with /ik, ig/ [ɪɕ, ɪɟ], as in *cuidado* [kʊɾˈɖaɑɖ], *romano* [ʁʊˈmaɑɲ], *lúdica* [ˈɬʊɱɖɪɕɐ, ˈɬɯ̃ɯ̃-], *dúvida* [ˈdʊɱṽɪ̃ɖɐ, ˈdɯ̃ɯ̃-], *hipódromo* [ɪˈpɐodɾʊm̥] (with [m̥] for two reasons), *em casa* [ɐ̃ɪ̃ɲˈɕʌɐ̃z̥ɐ], *por casa* [pʊɾˈk̥aɑzɐ]; [ɟ, ɯ]; very often, we have [Ṽ(#)N, V̱(#)N], but [ˌV(#)N].

As can be seen from the phonetic notation used, stressed vowels become diphthongs, or even triphthongs, not only in free syllables; let us also notice *põem* [ˈpõ̃ɐ̃ɪ̃ŋ].

It is interesting to observe well the last vocogram of *fig* 18.2.2, which shows that stressed /e, ɛ; o, ɔ/, in the typical accent, are preceded by the semiapproximants given, in addition, they can be realized as the diphthongs shown.

fig 18.2.3. Portuguese regional accents: Madeira unstressed vowels, including epenthetic ones.
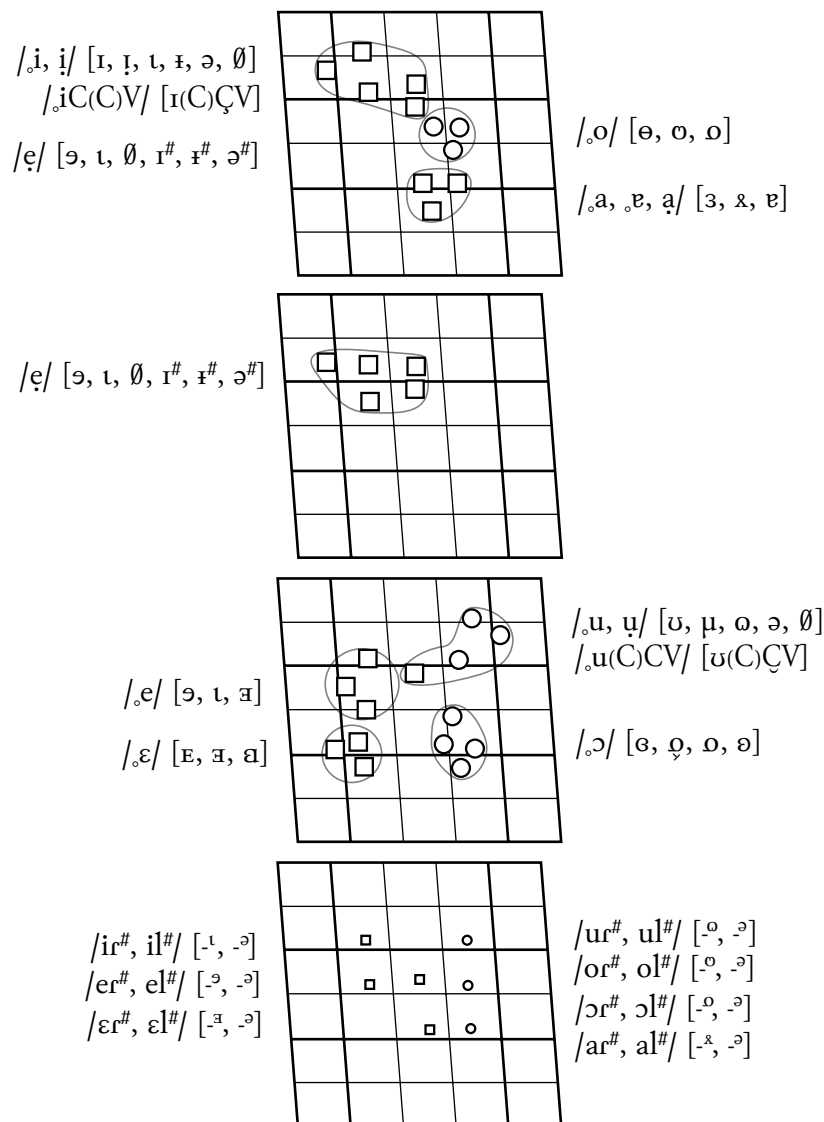
21.
Orogram collection

All contoids dealt with in the book, and particularly those in Ϭ 16-19, are shown here, including four vocoids treated in Ϭ 16, which begin this part.

fig 20.27.0. Special vocoid: laterally contracted taxophones.

/-ɾ/ [ɨ̞]
/-ɾ/ [ɯ̞]
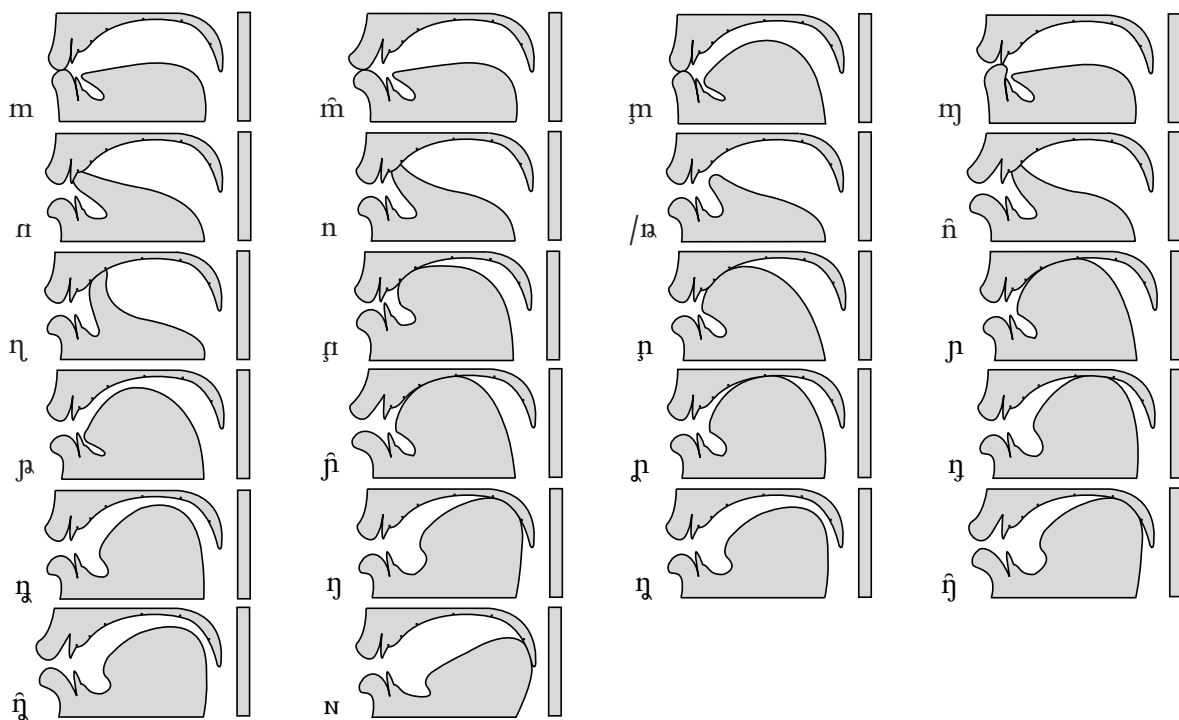/-ɾ/ [ɣ̞]
/-ɾ/ [ɤ̞]
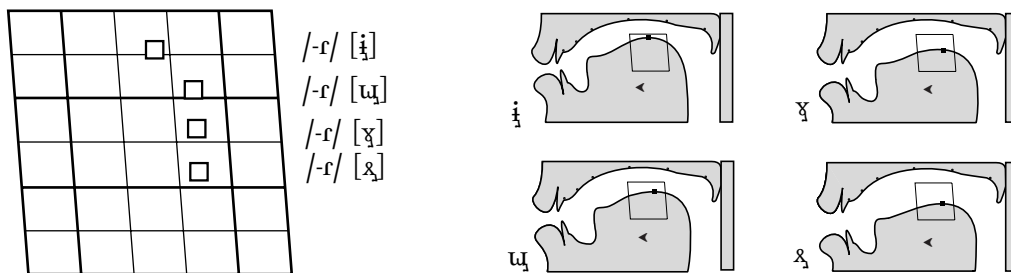
fig 20.27.1. Principal nasals & seminasals.

fig 20.27.2. Principal stops & some slightly different ones.
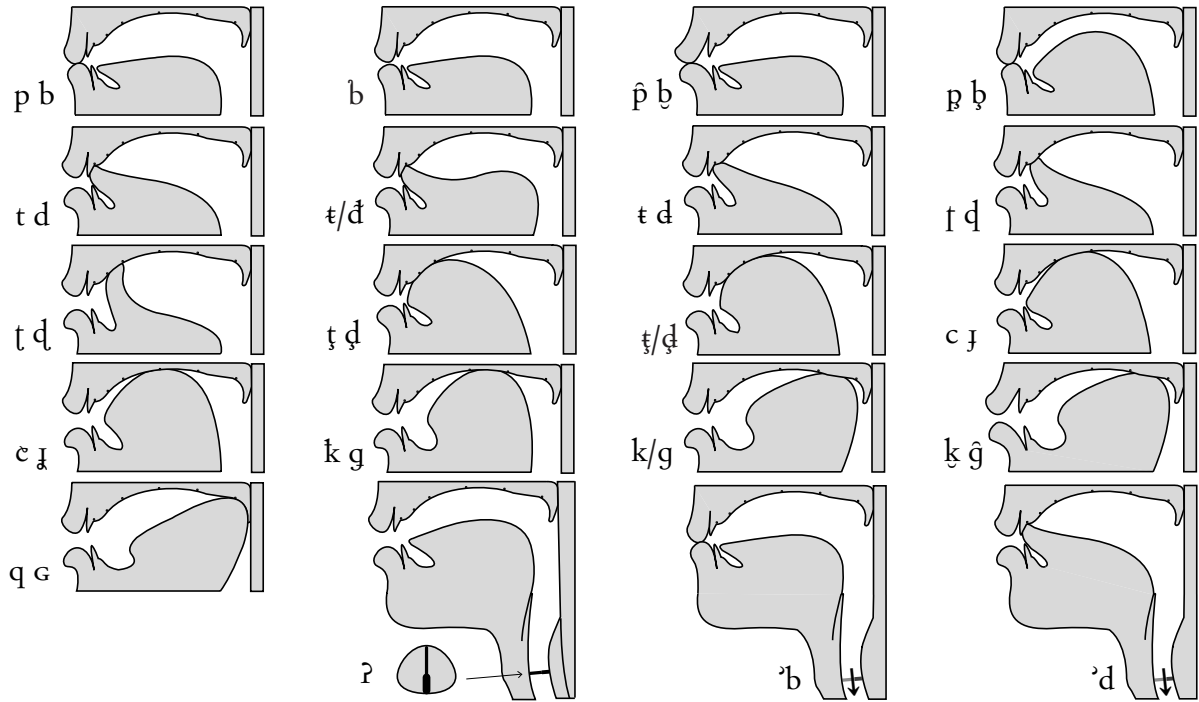
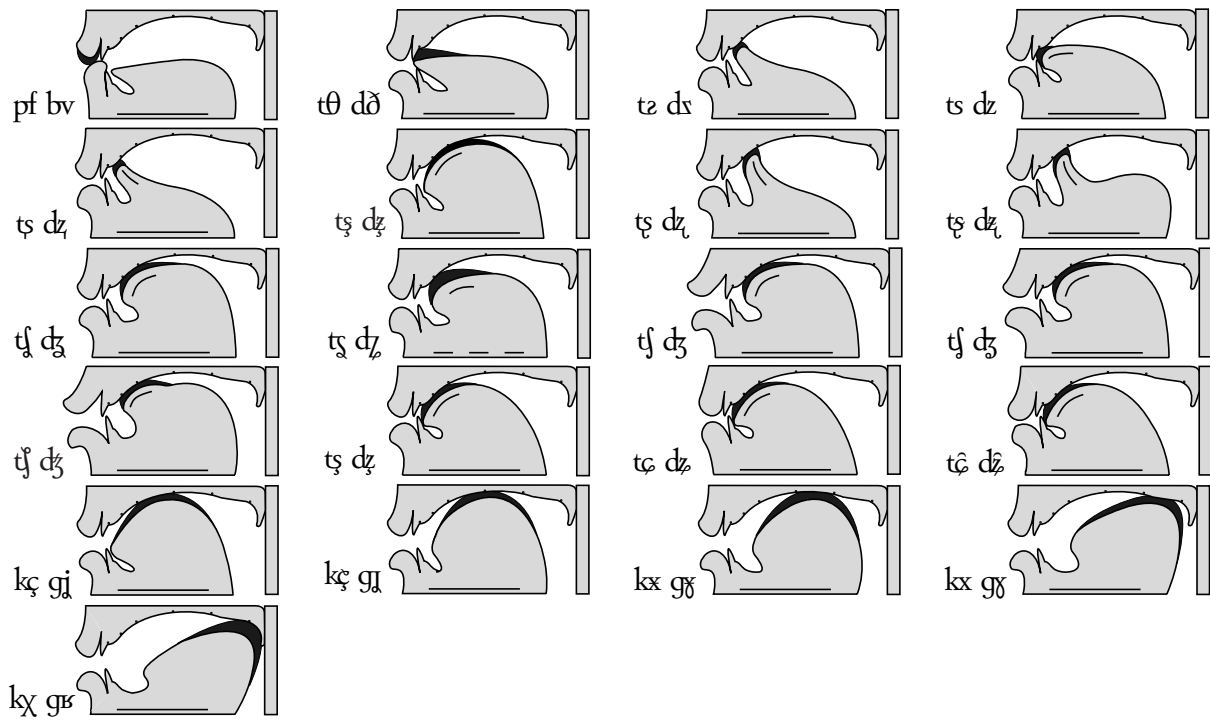*fig* 20.27.3. Principal stop-strictives (or 'affricates') & a semi-stop-strictive pair.

fig 20.27.4. Principal constrictives (or 'fricatives') & semi-constrictives.
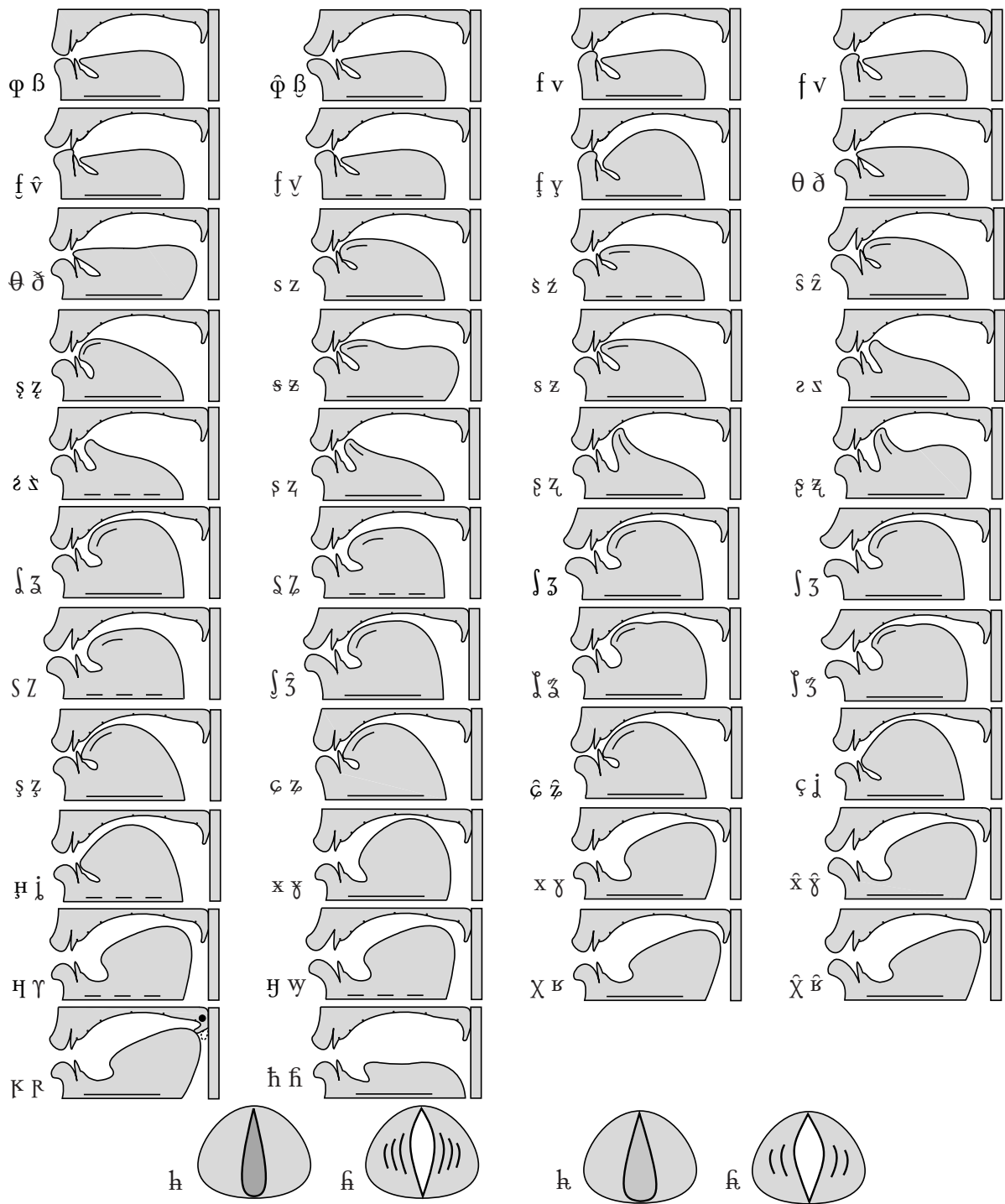
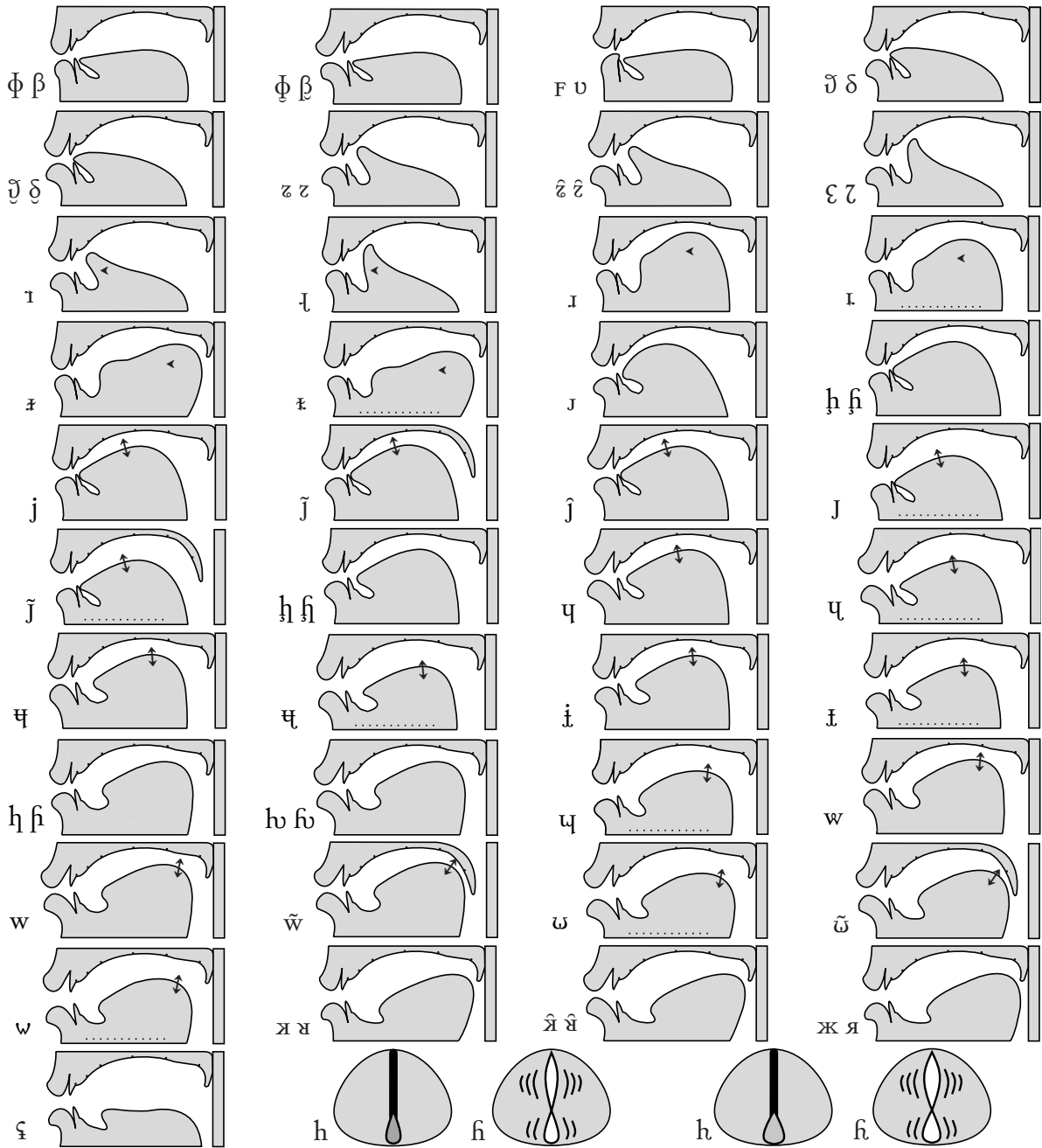*fig* 20.27.5. Principal approximants & semi-approximants.
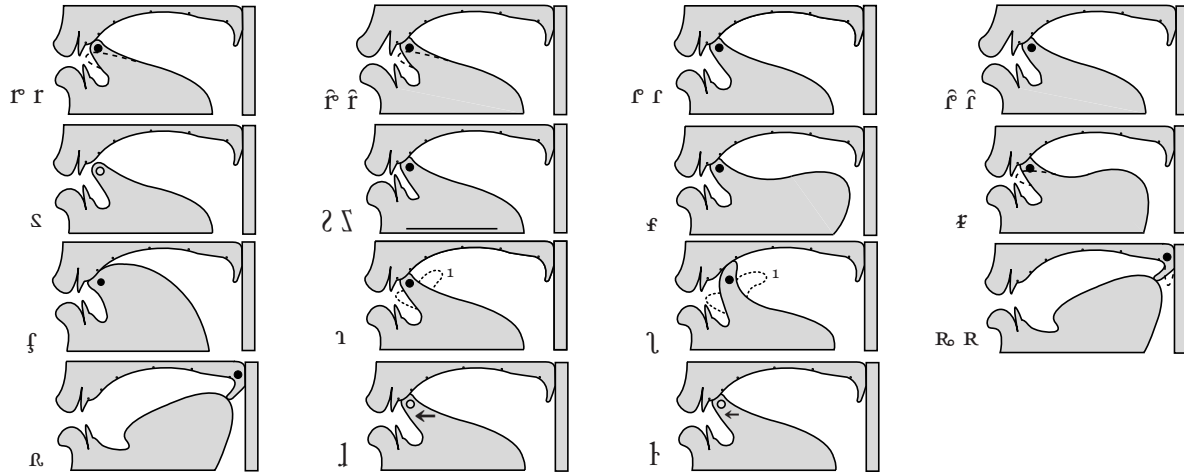
fig 20.27.6. Principal 'rhotics': trills, taps, flaps, &c.

fig 20.27.7. Principal laterals & semi-laterals.