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Persian Pronunciation & Accents

Geo-social Applications of the Natural Phonetics & Tonetics Method

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9	1.	Foreword
9		Persian writing and our transliteration
11		Why do Phonetics?
13		Typography & ^{can} IPA symbols
17	2.	Pronunciation & Phonetics
20		The Phonotonetic Method
33	3.	The phono-articulatory apparatus
38	,	The vocal folds
40		Resonators (five cavities)
42		The lips
43	4.	The classification of sounds
47	5.	Vowels & vocoids
52	,	How not to present the vowels of a language
57	6.	,
59		Non-regional accents
65		Regional accents
69		Bordering-country accents
73	7.	Consonants & contoids
74	•	Places and manners of articulation
77	8.	Persian consonants
78		Nasal
79		Stop
81		Stopstrictive
81		Constrictive
82		Approximant
83		Rhotic
83		Lateral
84		Variants
84		Consonant length
85		Notes on regional and neighboring variants

87	9.	Persian structures
87		Vowel length
88		Taxophonics
97		Stress
101		A practical summary of enclitic grammemes
103	10.	, 0
105		Tunings
106		Protunes
106		Tunes
109		Parentheses & quotations
110		Persian Intonation
116		Regional & bordering-country intonation
119	11.	Some texts in phonotonetic transcription
119		The North Wind and the Sun
120		Three short conversations
125	12.	Mini-phono-dictionary
-		•
129	13.	Bordering-country languages
130		Kurdish
131		Azeri
132		Tajik
133		Dari
134		Pashto
135		Urdu
137	14.	Two diachronic phonopses
137		Proto-Iranian
138		Middle-Persian (Pahlavi)
139	15.	The English and Italian 'accents' of Persian
139		English
142		Italian
148	16.	The Persian 'accent' of English
147	17.	Phonopses of 26 languages
148		English
149		German
149		Dutch
150		French
150		Spanish
151		Portuguese
151		Italian
152		Romanian
152		Russian
153		Czech
153		Polish
154		Bulgarian
154		Greek
155		Hungarian
155		Albanian
156		Finnish
156		Arabic

o. Contents 7

157		Hebrew
157		Turkish
158		Persian
158		Hindi
159		Burmese
159		Vietnamese
160		Chinese
160		Korean
161		Japanese
161		Principal consonant orograms
165	18.	Annotated bibliography
171		Official IPA chart (sorry!)

6.0.1. First of all, let us show two useful maps, which will help us to accurately place the kinds of pronunciations and accents, which we are about to present. fig 6.0.1 shows the borders of Iran, including seven internal subdivisions, and two western areas, which are part of Azerbaijan (Azeri) and Kurdistan (Kurdish).

fig 6.0.1. Pronunciation map of Iran.

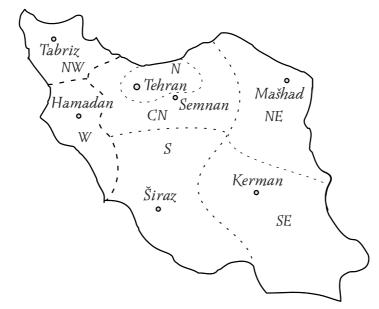
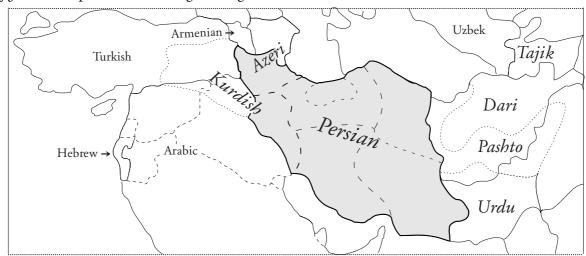


fig 6.0.2. Map of Iran and neighboring countries.



Besides, fig 6.0.2 shows some of the areas which surround Iran. Of all those, four (to the East) are particularly interested in Persian, because many of their speakers can use Persian, too, in addition to their mother tongues: *Tajik* (in Tajikistan), *Dari* and *Pashto* (in Afghanistan), *Urdu* (in Pakistan).

6.0.2. For the prevailing trascriptions in this book, we decided to represent the pronunciation of (modern) Persian using a *communicative accent*, which means a convenient and appropriate compromise between the *neutral*, *traditional*, *mediatic*, and *international* accents. In fact, the communicative vowel set is a fair middle course, while its consonant set is practically the same.

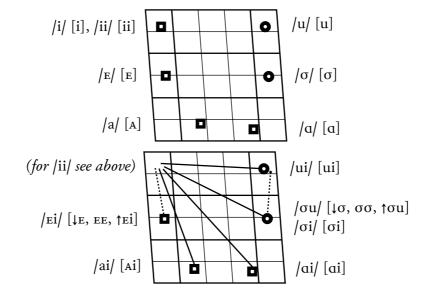
As we have already said, even professional speakers (also in language-teaching recordings, including those specifically done for pronunciation) oscillate much. In fact, real neutral speakers are difficult to find, because they happen to fluctuate between two or more accents (especially for certain vowels and consonants).

Furthermore, as for any other language, actual *neutral* speakers are very few: at best from 1% to 3%. *Traditional* speakers are even less, by now, while *mediatic* speakers may be much more numerous: about 15%. It must be clear that the mediatic accent is not a regional one, although it is not either (completely) neutral, or traditional.

But it is a fact that it is very often heard on the radio and on television, alternating with the more neutral or traditional ones. Even if with oscillations, it can also be used by speakers who are not typically regional.

Of course, the greater part of native speakers use some form of regional accents, including mixtures with other regional or with the more official accents indicated above.

fig 6.1.1. The vocalic elements of simplified international Persian.



Non-regional accents

6.0.3. Thus, although we provided first a simplified international version, it seemed quite reasonable to present a *native-like international accent*, which is by far more realistic than the 'supposed neutral' ones, we sadly found even in specialists' works, which are too approximate, superficial, and even banal (as any reasonable person can easily verify).

They are often less precise and less reliable than our simplified *international* accent (cf fig 5.2.1-3).

The second international vocogram also provides some possible choices for /Ei,

fig 6.1.2. Orograms and labiograms of /i, E, a/ [i; E, e; a, v] of communicative Persian.

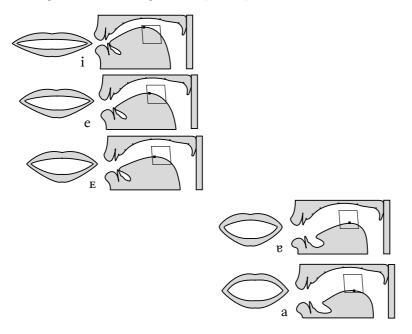
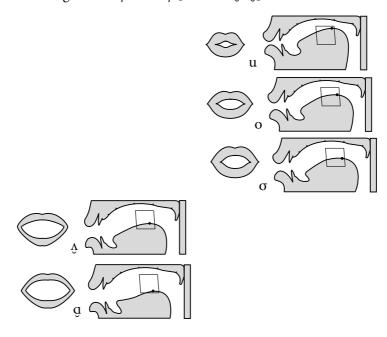


fig 6.1.3. Orograms and labiograms of /u, σ , $\alpha/[u$; σ , σ ; g, $\Delta]$ of communicative Persian.

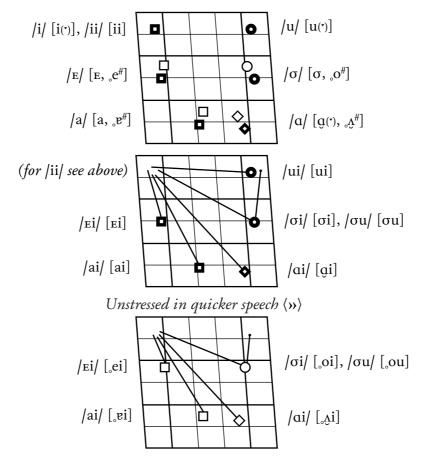


 $\sigma u/$ (either 'better', \,\), or 'worse', \,\): [\tau i, EE, \,\text{E}] and [\,\tau u, \,\sigma\,\tau\,], some of which can be either regional or foreign. Of course, also the international accents are somehow connected with those of fig 6.1.1-4.

Therefore, to avoid useless and unfruitful criticism, we may certainly define the native-like version a *communicative accent*.

Summing up, our transcriptions will use the vowel elements shown in fig 6.1.2-4, and the consonants and contoids indicated in fig 8.1.

fig 6.1.4. The vocalic elements of *communicative* (or *native-like international*) Persian.



6.0.4. Let us consider, now, some examples for all the six simple vowel phonemes, /i, E, a, α , σ , u/, and the two frequent 'normal' diphthongs, /Ei, σu /, also adding *five* other diphthongs, used less % in loanwords: /ii, ai, α i, α i, α i, ui/. Here, we show the *communicative* accent, followed by its native-like differences.

Examples: sin ['siṛn], ki ['chir], biš ['birʃ], šen [ʃeɪn], zendegi [zende'jir], dar ['dar], bad ['bad], ram ['raɪm], ram ['raɪm], dašt ['darʃt], dašt ['darʃt], ab ['ʔgɪb], dana [dar], ab [che'bgɪb], ab [che'bgɪb], ab [madar [mahdar], ab ['porft], ab ['mur], ab ['luɪr], ab ['luɪr], ab ['nuɪr]. Let us notice well: ab ['gorft], ab [do'rorst] (contrary to the usage of many other languages).

And: mey ['mei], seyf ['seif], now ['nou], towr ['tour], šowra [ʃouˈrg·]; nadiy [neˈdii], hay ['hai], sayyad [saiˈjaːd], ğay [ˈdʒui], lay [ˈlgi], xoy [ˈkoi], muy [ˈmui], ğuy [ˈdʒui].

6.0.5. The diphthongs just seen are those which we consider to be 'official', although with different usages. However, there are further phonetic diphthongs, derived from phonemic vowel sequences. Such sequences may be true ones, or they may be the result of some consonant droppings (mainly /?, h/).

School tradition still clings to the belief that they are bisyllabic, rather than veritable phonic diphthongs (['VV, VV], provided stress is not on their second element, [VV]). For instance, we have *guy* /'qui/ ['qui] and *gui* /gu'i/ [gu'ʔi'] (& [gu'ʔi', gu'ir]).

All our figures have to be carefully compared. Their differences (although small) will certainly help to identify their accents, which native speakers are generally ready to detect.

Using some of the examples given in § 6.0.4, we will show the main differences between these further accents. Although we present them in consistent normalized forms, it must be said clearly –once more– that speakers currently oscillate not only between two of them, but possibly also between all of them.

This happens, more or less frequently, for given words % for certain phonemes, while speakers (and often even listeners) may not be aware at all, not only among common speakers, but also in teaching recordings, even some about pronunciation.

The other five vowels (starting with /a/) have: [A, α , α , α] and [3, Λ]; /i/ [i] and [1, 1, 1]; /E/ [E, e] and [9, 1]; / σ / [σ , σ] and [σ , σ]; /u/ [u] and [u σ , u α].

Let us notice that transliteration sequences like *VyV* correspond to */VjV/* [VjV], while sequences like *VyyV* correspond to */Vj:V/* [Vj[#]jV], as in: *xayyat /* kaj'jɑt/ [xai'jɑt].

In addition, using some of the examples given in § 6.0.4, we will show the main differences between these further accents. Although we present them in consistent normalized forms, it must be said clearly that speakers currently oscillate not only between two or more of them, as we know.

6.0.7. Thus, to simplify somehow our presentation, we started from the simplified *international* accent of Persian (shown in fig 6.1.1), followed by the *communicative* (or *native-like international*) accent, which really exists, as a *refined compromise* also by fluent speakers mostly of other languages.

While fig 6.1.2 shows the orograms (with miniature vocograms) and labiograms of the *six* Persian vowel phonemes, /i, E, a, α , σ , u/ [i, E, a, α , σ , u], with the addition of *four* taxophones, occurring in free unstressed syllables, [e, e, α , o]. They are more natural, as in true native-speaker accents, especially as presented in the vocograms of fig 6.1.3.

They should constantly be referred to the corresponding ones given in fig 5.1.1-5. Let us notice that $[g, \lambda]$ have partially rounded lips. Also possible taxophones of

the diphthongs, mainly occurring in unstressed syllables in quicker speech ([,»]), are shown.

Later on, our figures will only provide the vocograms, which are much more precise and useful, when their mechanism is known, including variants.

6.1.1. Furthermore, fig 6.1.5 shows the vocograms of the *neutral* accent, while fig 6.1.5-6 give the *traditional* and the *mediatic* accents.

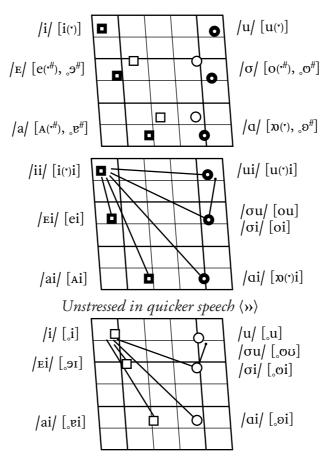
The latter is, as already said, more widespread than the other two, not only in Persian communities abroad, as for instance in Los Angeles (or 'Tehrangeles'), but even in Iran itself, also with its many speakers whose first language in not official Persian, but some local (although related) dialects. It is often present in teaching recordings, too.

So, fig 6.1.4 shows the *six* vowel phonemes of the *neutral* pronunciation of Persian, /i, E, a, α , σ , u/ [i', e, A, ν ', o, u'], including four taxophones of /E, a, α , σ /, [9, E, 9, σ], occurring mainly in unstressed free syllables.

However, in slow speech, they may be replaced by $[e, A, \infty, o]$, while, in fast speech, [e, v, o] may also occur in checked syllables (though less systematically).

Let us carefully notice the main differences, mostly consisting in $/E/[e, g^{\#}]$, $/a/[A, g^{\#}]$, $/a/[D, g^{\#}]$, /a/[D

fig 6.1.5. The vocalic elements of *neutral* Persian.



Examples mainly for differences: *šen* [ʃen], *zendegi* [ˌzendəˈji·], *dar* [ˈdaɾ], *ram* [ˈrɒm], *xol* [ˈkol], *dorost* [doˈrost], *mey* [ˈmei], *now* [ˈnou], *hay* [ˈhai], *ğay* [ˈdʒɒi], *xoy* [ˈkoi].

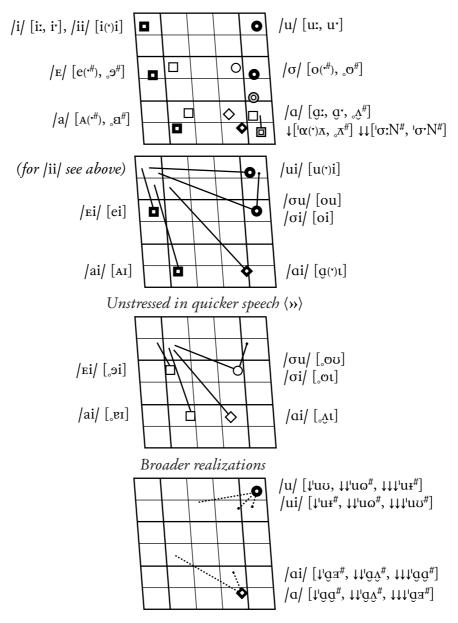
6.1.2. fig 6.1.6 shows the *traditional* accent of Persian, again with some possible variants. The first vocogram also indicates some variants mainly used by older or less educated speakers: $/u/[\downarrow uo^{\#}, \downarrow \downarrow uo^{\#}], /o/\downarrow [\dot u(x)x, \dot x^{\#}][\downarrow \dot u(x)x^{\#}, \downarrow \downarrow \dot u(x)x^{\#}] \downarrow \downarrow [\dot u(x)x, \dot u(x)x^{\#}]$

Let us also notice the frequent and current taxophones in unstressed free syllables for: $/E/[g^{\#}]$, $/a/[g^{\#}]$, $/\sigma/[g^{\#}]$ (and diphthongs in quicker speech, given in the third vocogram).

Examples mostly for main differences: *šen* [ʃenn], *zendegi* [zendeˈjiˈ], *dar* [ˈdar], *ram* [ˈrgːmn], *kabab* [chæˈbgːbn], *madar* [mʌuˈdar], *xol* [ˈkol], *dorost* [doˈroˈst], *mey* [ˈmei], *now* [ˈnoun], *hay* [ˈhaɪ], ǧay [ˈdʒgɪ], lay [ˈlgːn], xoy [ˈkoi].

The fourth vocogram shows five true diphthongs and a monotimbric ones, which

fig 6.1.6. The vocalic elements of traditional Persian.



are broader realizations, both of /u, a/ and /ui, ai/, with different –actually opposite—degrees of unacceptability, as can be seen.

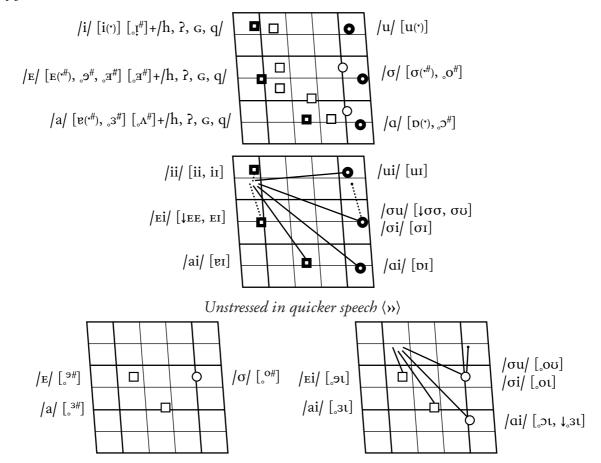
6.1.3. fig 6.1.7 shows the the vocograms of the *mediatic* Persian accent. In addition to their unstressed quick possibilities, notice the ending points of the diphthongs, with [-1, -1, -0], as shown.

But the most peculiar fact is given by the frequent taxophones of /i, E, a/, in unstressed free syllable, when followed by /h, ?, G/ (including /q/, possibly distinct from /G/, for some speakers, or in some words): [I, \exists , Λ].

Let us also notice the qualities of /E/ [E, $_{\circ}9^{\#}$, $_{\circ}1^{\#}$], /a/ [$_{\circ}1^{\#}$], and / $_{\circ}1^{\#}$], including the possible shortening of /E, a, $_{\circ}1^{\#}$, in unstressed free syllable, in quicker speech (first vocogram): [$_{\circ}1^{\#}$, $_{\circ}1^{\#}$], and the final elements of the diphthongs: [$_{\circ}1^{\#}$, $_{\circ}1^{\#}$].

Examples mostly for main differences: *šen* [ʃen], *zendegi* [zendeˈji·], *dana* [dɔˈnɒ·], *kabab* [cheˈbɒ·b̞], *madar* [mɔˈder], *mey* [ˈmei, ‡ˈmee], *now* [ˈnσu, ‡ˈnσσ], *hay* [ˈheɪ], *ğay* [ˈʤɒɪ], *xoy* [ˈκσɪ].

fig 6.1.7. The vocalic elements of *mediatic* Persian.



6.1.4. It is very important not to rely only on imitation, since, after two or three years of age, we inevitably start to lose the huge analysis and synthesis capacity which allowed us to play –from birth– with all the linguistic (and non-linguistic) sounds that we heard (inventing some, as well).

Therefore, the phonotonetics method is a great help for us, both to (still) perceive well, and to reproduce and then, finally, to produce the sounds that we hear and need.

The use of *transcriptions* is fundamental in our *natural phonetics method*. When we overcome our initial perplexities (and, perhaps, distrust), it is obvious that we are not talking about an extra useless toil.

On the contrary, we will free ourselves from the harmful reliance on *spelling*. So we become able to distinguish well between the two levels. The fundamental (and truly linguistic) one is the phonic level, although many people still seem to think that the real language is the one ambiguously represented by spelling (which is a terribly misleading impression).

Regional accents

6.2.0. This section will deal with the *six* regional accents of Persian to be found within Iran. We will concentrate especially on their peculiarities, in order to better highlight the differences. However, their speakers oscillate much between different accents, belonging to the groups presented in fig 6.2.1-6.

6.2.1. fig 6.2.1 shows the typical accent of *Teheran city* (in the North), for which let us notice mostly the taxophones of |E| $[E, e^{\#}]$, |a| $[a, e^{\#}]$, |a| $[a, o^{\#}]$, |a| $[a, o^{\#}]$, |a| $[a, o^{\#}]$, and the ending points of the diphthongs, mainly [-1, -v], which start with the vocoids shown in the first vocogram (including the possible ones given for unstressed syllables).

Examples mostly for main differences (for both vowels and consonants): *dana* [do'no:], *kabab* [che'bo:b], *madar* [mo'dar], *xol* ['kol], *dorost* [do'ro:st], *nadiy* [ne'dii, \lambda-'dii], *hay* ['hai], *ğay* ['dʒoi], *xoy* ['koi], *že* ['dʒei], *qar* ['go:z].

fig 6.2.1. The vocalic elements of *northern* Persian (Tehran city).

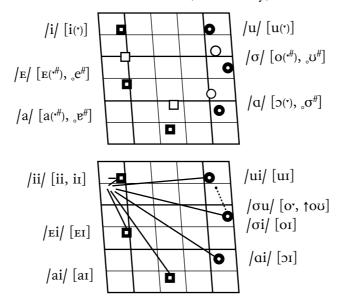
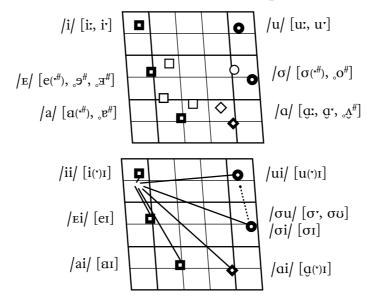


fig 6.2.2 shows the situation of the *province of Teheran* (in central-northern Iran), with its taxophonic situations (including word-final $/E/[_{\circ} I^{\sharp}]$. Let us particularly notice mainly the primary realizations of /E/[e], /a/[a], /a/[a], /a/[a], /a/[a]. In addition, the diphthongs follow a pattern similar to that of the city, although with the differences shown.

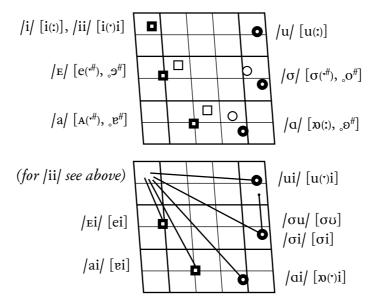
Examples mostly for main differences (for both vowels and consonants): že ['ze', t'dze'], šena /[ʃəˈngː], dana [dʌˌˈngː], kabab [chɐˈbaːb̞], madar [mʌˌˈdar], mey [ˈmeɪ], now [ˈnoʊ, tˈnoʊ], hay [ˈhaɪ], ǯay [ˈdʒaɪ], xoy [ˈκoɪ], qar [ˈɡaːz, ˈq-].

fig 6.2.2. The vocalic elements of *northern* Persian (Tehran province).



6.2.2. fig 6.2.3 provides the accent of *eastern Iran*, which has to be carefully analized and compared, too. They also have two different intonation patterns, for their northern and southern areas, as we will see in \mathfrak{G} 10.

fig 6.2.3. The vocalic elements of *eastern* Persian.

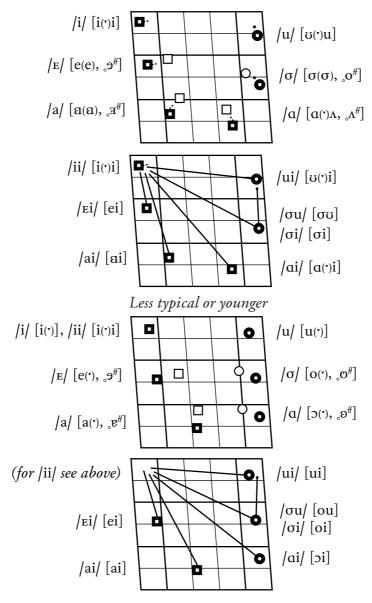


Examples mainly for differences (for both vowels and consonants): že ['ze'], še-na [ʃəˈnxv], dana [dəˈnxv], kabab [cheˈbxvb], madar [məˈdar], mey [ˈmei], hay [ˈhei], ğay [ˈdʒxvi], qar [ˈɡxvz, ˈq-].

6.2.3. Instead, fig 6.2.4 shows the typical *southern accent* (in the first two vocograms), with its peculiarities. In addition, the two lower vocograms show the less typical (mostly younger) accent, more similar to the mediatic accent (given in fig 6.1.6). Let us also notice the (narrow or monotimbric) diphthongal nature of both long and short vowels. In addition, the typical accent also has longer stressed vowels, often becoming [V:V, V:V] (including [VV]).

Examples mostly for main differences (for both vowels and consonants): *šen* [ˈʃeen, ˌˈṣeren], *dar* [ˈdaar, ˌˈdarar], *dana* [dʌˈnɑʌ, ˌdəˈnɔrɔ], *kabab* ↓[chəˈbɑʌb, chɐ-ˈbɔrɔb], *mey* [ˈmeri], *now* [ˈnorʊ, ˈnoru], *hay* [ˈhari, ˌˈhari], *ğay* [ˈdʒɔri, ˌˈdʒori], *čap* [ˈtʃhaap,

fig 6.2.4. The vocalic elements of *southern* Persian, with differences.



t'tṣha·ap], kif [ˈchiif, tˈkghi·if], giğ [ˈjiiʤ, tˈɡgi·id̞͡], χου [ˈκσ·i, ˈκο·i], qar [ˈɡgʌr, tˈqg·ʌz], gav [ˈɪaay, tˈɡga·ay].

6.2.4. fig 6.2.5 shows the accent of *bilingual Azeri* speakers (or *north-western* Persian accent), whose main peculiarity consists in |a| [a, α], |a| [a, α] (but look at the other collocations, too, including frequent variants of |a| [\$\pm\$e\$, \$\sigm\$o\$, \$\pm\$o\$]). Oscillations are certainly possible.

Examples mainly for differences (for both vowels and consonants): *sin* ['sin, †'si'n], *dar* ['dar], *ram* ['ram, 'z-], *dašt* ['daʃt], *dašt* ['daʃt], *ab* ['ab, †'?ab], *dana* [daˈna], *kabab* [caˈbab, †'ch-], *madar* [meˈdar], *mey* ['me, '†mei], *now* ['no, †'noʊ], *hay* ['hai], *ğay* ['dʒai], *tir* ['tir, †'thir], *kuk* ['kuk, †'khurk].

fig 6.2.5. The vocalic elements of northwestern Persian (influenced by Azeri).

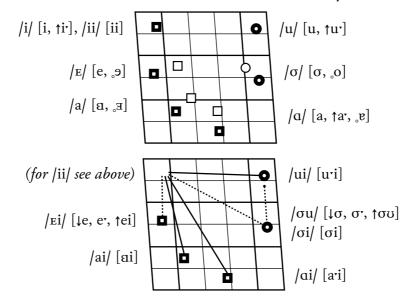
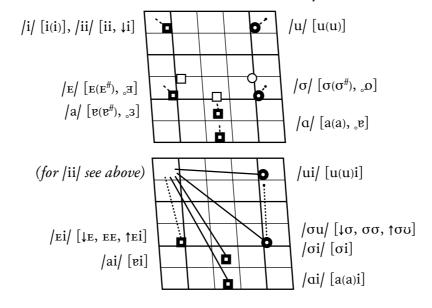


fig 6.2.6. The vocalic elements of western Persian (influenced by Kurdish).



6.2.5. fig 6.2.6 gives the accent of *bilingual Kurdish* speakers (or *western* Persian accent), with their more typical monotimbric diphthongs for the *six* stressed vowels. Let us notice particularly $/E/[E(E), \Im]$, $/a/[E(E), \Im]$, /a/[a(a), E], /a

Examples mainly for differences (for both vowels and consonants): *šen* [ʃen], dana [deˈnaa], kabab [kɜˈbab, ↑kh-], mey [ˈmee, ↑ˈmei], now [ˈnσσ, ↑ˈnσσ], hay [ˈhei], ğay [ˈdʒai], tir [ˈtiir, ↑'th-] ↓[-i-, -ɛ], rig [ˈriig, ↓-dʒ], gol [ˈgσl, ↓-t],

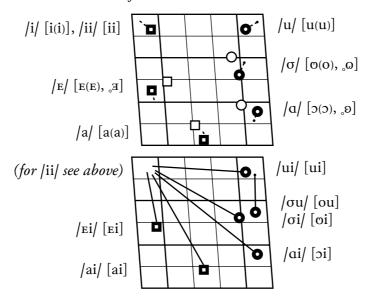
Bordering-country accents

6.3.0. In this section, we will deal with the Persian accents of people speaking Tajik, Dari, Pashto, and Urdu. Again, oscillations are quite common even for these accents. In & 13, we will present the different phonemic systems of these languages, too (for useful comparisons), including Azeri and Kurdish.

6.3.1. fig 6.3.1 shows the *Tajik accent* of Persian, whose main peculiarity lies in the quality of $|\sigma|$ [$\sigma(\sigma)$, σ].

Examples mostly for main differences (for both vowels and consonants): *dana* [do'nɔɔ], *kabab* [ka'bɔɔb, ↑kh-], *madar* [mo'daar], *xol* ['κool], *dorost* [do'rost], *hay* ['hai], *ğay* ['dʒɔi], *xoy* ['κoi], *kif* ['kiiφ, ↑'chiif], *vam* ['vam, ↓'β-], *šin* ['ʃiin], *qar* ['Gɔɔɾ, 'q-].

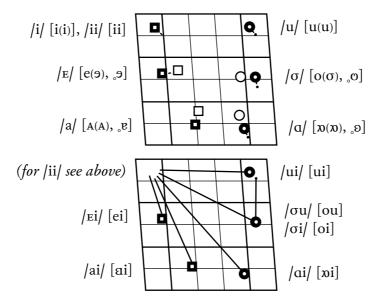
fig 6.3.1. The vocalic elements of Tajik Persian.



6.3.2. fig 6.3.2 gives the *Dari accent* of Persian, whose main peculiarity lies in the narrow diphthongs for the six vowels, as shown.

Examples mostly for main differences (for both vowels and consonants): *šen* [ʃeɔn, lˈʃ-], *dana* [dəˈnɒɒ], *kabab* [keˈbab, †kh-], *madar* [məˈdaɾ], *mey* [ˈmei], *now* [ˈnou], *hay* [ˈhai], *ğay* [ˈdʒɒi], *xoy* [ˈkoi], *kif* [ˈcif, †ˈch-], *qar* [ˈgɒɒɾ, 'q-], *mahi* [maˈhii] (rarely [-ˈh-]).

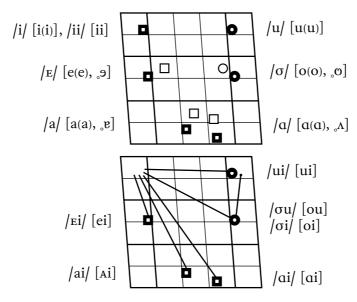
fig 6.3.2. The vocalic elements of Dari Persian.



6.3.3. fig 6.3.3 shows the *Pashto accent* of Persian, whose main peculiarity lies in the qualities of |a| [a(a), e], |a| [a(a), A].

Examples mostly for main differences (for both vowels and consonants): *dana* [dʌˈnɑː], *kif* [ˈkif, †ˈkh-], *kabab* [kɐˈbɑːb, †kh-], *madar* [mʌˈdaː], *mey* [ˈmei], *now* [ˈnou], *hay* [ˈhʌi], *ğay* [ˈdʒɑi], *xoy* [ˈqoɪ], *qar* [ˈqoɑr] (less often [ˈg-]), *ab* [ˈʔɑɑb], *xar* [ˈqoɑr], *gad* [ˈqad].

fig 6.3.3. The vocalic elements of *Pashto* Persian.

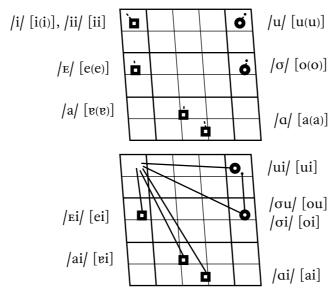


6.3.4. fig 6.3.4 gives the *Urdu accent* of Persian, whose main peculiarity lies in the narrow diphthongs for the six vowels, as shown, and in the qualities of |a| [e(e)], |a| [a(a)].

Examples mostly for main differences (for both vowels and consonants): šen

[ʃen], dana [daˈnaa], kabab [keˈbaab, †kh-], madar [maˈder], xol [ˈxol], mey [ˈmei], now [ˈnou], hay [ˈhei], $\check{g}ay$ [ˈdʒai], gad [ˈked], xoy [ˈxoi], qar [ˈqaar, †ˈk-], ab [ˈʔaab, 'ʔ-, ˈaab-], mahi [meˈĥii, -ˈh-].

fig 6.3.4. The vocalic elements of *Urdu* Persian.



Persian consonants

8.0. The examples that we provide in this chapter show both the consonants and contoids of modern Persian. fig 8.1 shows the consonantal elements that we use in our transcriptions representing the *communicative pronunciation*, which we chose as the most convenient in this book.

However, fig 8.2-8 show many more articulations than those ones. In fact, they include contoids occurring in all other accents that we describe, including some further contoids also appropriate for useful comparisons with foreign languages.

Our presentations are mainly normalized, almost idealized ones. In fact, as we already saw especially for the Persian vowels, speakers are not always consistent in the realizations of the phonemes of their language.

Even 'neutral' speakers (as they should be, in teaching recordings, especially if for pronunciation) happen to oscillate between modern and the other kinds of non-regional accents, but —not rarely— also between some regional ones, depending on speakers and words, and situations.

To simplify things for consonant devoicing (cf § 8.10, where more is said and shown), we will more systematically use $[\Cappa]$ for the voiced final consonants and for final /m, n/ (but not for final $[\Cappa]$, unless preceded by a voiceless consonat).

fig 8.1. Persian consonants: main elements.

	bilabial	labiodental	dental	alveolar	postalveo-palalatal	postalveo-palalatal protruded	palatal	velar	velar rounded preuvular	uvular	laryngeal
N	m	[ŋ]	[n] t d	n	[ů]		[ɲ]	[ŋ] k g	[e] [¥]	[N]	
N K KS	рb		t d			[[c]]	k g	$[{\mathfrak E}]$	G	[5] 3
KS						tf dz					[2]
X		f v	s z			∫ 3			$[\chi]$	[χ]	
J							j [J]				h [h]
,							IJ	Į.	យ]		[h]
R				ſ						${\rm k}_{\left[{\rm \mathcal{k}} \right]}$	
L			[1]	1	[[]		$[\lambda]$			•	

8.1. Persian has only two *nasal* phonemes, m/m/[m] and n/n/[n]: mum ['murm], nan ['ngrn], mehman [meh'man, mer-], šim [ʃirm], zaxm ['zarxm, 'zarxm], matn ['matn, 'matn], mard ['mard] (cf fig 8.2).

For /nC, n[#]C/, inside or between words, in spontaneous and more normal speech, assimilation is regular, although with possible oscillations, also depending on speed utterance. Obviously, the less slowly one talks and without too much attention (also to spelling), the more natural and normal the result is.

Examples: man mi-danan ['mam midʌʃˈnan̩], zemni [zemˈni-], amγa [ʔamˈʔg-], menval [memˈvg-l], randan [rgnˈdan̩], ranǧ [ˈra-n̞dʒ], sangin [sap-ji-n̩], sang [ˈsa-n̞-j], donya [don-jg-], angur [ʔan-gu-r], anqadr [ʔgn-ga-dr, -adr, -ˈq-], toxm [ˈtho-xm, -xm̩].

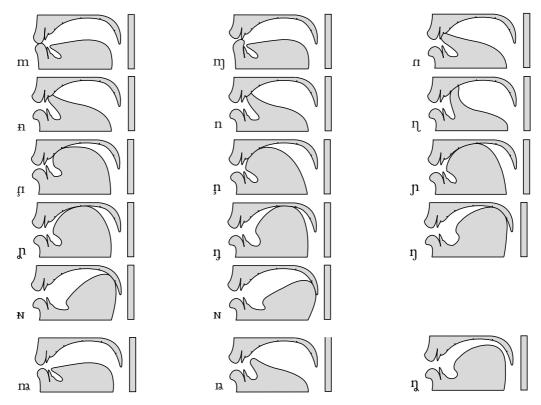
In careful speech (either *neutral* or *traditional*, including the international accent), only /NVN/ are automatically [NVN], or at least [NVN] (seminasalization), as in any other languages, by assimilation, with no necessity to show it explicitly in transcriptions.

Typically, however, although with oscillations, the vowels occurring in stressed or unstressed checked syllables in /m, n/ are more or less nasalized, especially in *mediatic* pronunciation, without any distinctive function, neither losing their nasal contoids, which become seminasal before a pause. $VN^{\#}/[\tilde{V}N^{\#}]$: mum ['mūrma], nan ['nārma].

In *international* pronunciation (either simple or native-like), nasalization is not necessary, nor usually present, although with many fluctuations.

In other accents, ie regional, bilingual or foreign, the degree of nasalization depends on individual speakers, too, in any case, also distinguishing formal from casual speech. The latter exhibiting more nasalizations.

fig 8.2. Nasal consonants.



8. Persian consonants

8.2. Persian has *three* (diphonic) pairs of *stops*: /p, b; t, d/ [p, b; t, d], and /k, g/ [k, g], with palatal taxophones, [c,], before front vowels, /i, E, a/, and in syllable-or word-final postneuclear position, as we will see (cf fig 8.3).

Examples: pa ['phg'], separ [se'phar], čap ['tʃhap], bu ['bu'], abi ['Pe'bir], kabab [che'bg'b], tup ['thurp], ketab [che'thg'b], taxt ['tharxt], dom ['dom], medad [me'dg'd], mard ['mard], kuh ['khurh, -u'], tak ['thg'c], 7aks ['Parcs], gur ['jurr], agar ['Pe'jar], gis ['jirs], sag ['saj].

In prenuclear stressed syllables, /p, t, k/ (and /tʃ/, but not /q/, in case) have 'aspiration', ['Ch], which is weaker in less prominent positions, and absent before a consonant or a pause, [Ch, Ch, Cl, CC]: kapar [che'phar], pakat [phʌjˈkhg·t], čap [ˈtʃhap], satr [ˈsa·tɪ, ˈsatɪ].

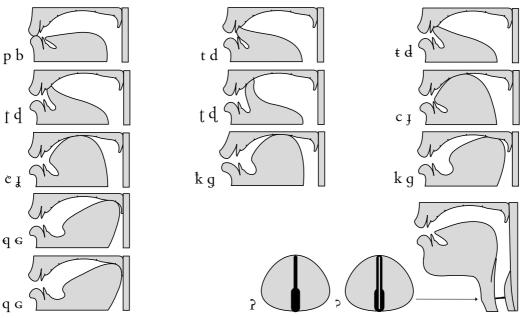
Sometimes, [Ch] may occur even in word-final position, although, more typically, they are not actually 'aspirated' but simply realized (mostly, though not systematically) with perceptible explosion, [C_{*}] (instead of unexplosion, [C'], which is also possible, with no particular connotation, although more typical of *casual* speech), as all other Persian final consonants. However, it is not necessary to indicate it in our usual transcriptions.

The use of 'aspiration' may have more systematically [Ch] in the traditional accent, independently from stress, while in the mediatic accent it is by far less systematic, or entirely missing, as in the international accent (again, with oscillations). For neutral pronunciation, of § 8.5.

The *mediatic* accent, in addition to normal /k, g/ [c, \mathfrak{z}], can also have [e, \mathfrak{z} ; kç, g \mathfrak{z}] (occurring in traditional pronunciation, too), and [k¢, g \mathfrak{z} ; k, g] (as some oscillating regional usages, too, including some variants more typical of the southern accents). Furthermore, in mediatic or regional accents, we can find /t, d/ [\mathfrak{t} , d] (dentalveolar), and possible /b/ [ß] intervocalically.

In a simpler international accent, [k, g] are more likely to occur than [c,]. In

fig 8.3. *Stop* consonants.



certain regional accents, especially in southern areas, instead of [c, \mathfrak{z}] (or the other variants shown), we can certainly find [kg, \mathfrak{g} g) (cf fig 8.4), which for some listeners might seem to be confused with /tʃ, dʒ/, but these last ones are generally not protruded in those accents, [tʃ, dʒ; tʃ, dʒ] (including their frequent southern variants, [tş, dʒ], cf fig 8.4), maintaining a certain sufficient difference. In those areas, also /ʃ, z/ are generally [ʃ, ʒ; ʃ, ʒ].

8.3. In addition, Persian also has two unpaired 'stop' phonemes. The first one is a voiced uvular stop, g/G/[G] (and [G], in contact with front vowels, always different from /g/[g, J]), occurring in word-initial position, $[^{\#}G, ^{\#}G]$, after /n/, [NG, NG, NG, NG] (depending on the kind of vowels they are in contact with: front or back ones), and when lengthened, /G:/[GG, GG].

This phoneme also has a uvular constrictive tap taxophone, $[\beta]$, occurring between voiced segments, or $[\beta]$, when followed by a voiceless consonant or a pause.

Let us anticipate that, in *neutral* Persian pronunciation, this same phoneme (/G/A) and its taxophones) also occurs for q, instead of being a little different and still realized as (/Q) (/A) (/A

Instead of unifying g and q, into |g|, as in (modern) neutral pronunciation, the traditional accent usually has [q, q], for q, in all positions, even final, except |nq| [NG, NG]. The mediatic accent can oscillate much, including [q, q], while the international one tends to unify g and q (cf fig 8.3).

The other additional stop phoneme is the (voiceless) laryngeal one, $\frac{7}{7}$ [?], occurring weaker in less prominent positions, [,?, ,?].

Examples: fagfur [façˈfur, fa̞κ-], gig [ˈsi·ç, -κ̞], aga [ʔʌ̞ˈsg·, -ˈκ̞g·], eglim [ʔesˈli·m, ʔe̞κ-], nagš [ˈnae̞ʃ, -κ̞ʃ], barg [ˈbarɾe̞]; qam [ˈsaṃ, -m; ˈqa-], qalb [ˈsalb̞; ˈqalb̞], naqqaš [naeˈsgʊʃ; -qˈq-], buq [ˈbure̞, -κ̞; -q], rags [ˈrare̞s; -qs], meqdar [mesˈdʊ̞r; -qˈd-].

8.4. /V?C/ sequences are realized as [VVC] (with creaky voice), mainly in neutral and traditional pronunciations, or simply as [VVC, V·C], in other accents. But /V?#, V?V, C?V, C?#/ sequences, *colloquially* (and in mediatic or international accents), readily lose /?/, in spite of possible minimal pairs such as *man* /ˈman/ [ˈman/ [ˈman/] 'I' and *man*/ /ˈman/ [ˈman/] 'prohibition'.

/ʔ/ is also used before word-initial vowels, although it is not usually indicated in transliterations, including ours (something like in German, as in: *ich auch* [ˌʔɪç-ʔaox, ˌʔɪç-]). In word-final position, in addition to [ʔ], it can become 'zero', [Ø].

In all kinds of pronunciation, between vowels, in word-middle position, we generally have [\mathbb{P}] in strong syllables and [\mathbb{P} , \mathbb{P}] in weaker syllables, although with possible [\mathbb{M}], especially in the mediatic and international accents.

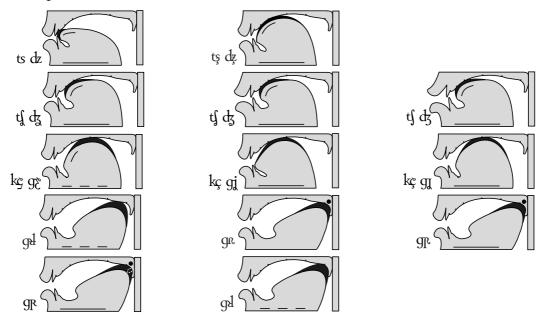
Examples: γud [ˈʔurd̞], $sa\gamma at$ [sʌ̞ˈʔat], $da\gamma i$ [dʌ̞ˈʔir], $\check{so\gamma}a\gamma$ [ʃorʔg·ˀ, ʃorʔg·], $ba\gamma d$ [ˈbarˀd̞, ˈbard̞], $\check{se\gamma}r$ [ʃerˀr, ʃerɪ], $\check{g}am\gamma$ [ˈdʒarm̞ˀ, ˈdʒam̞], $\check{sey}\gamma$ [ʃeiˀ, ʃei].

8. Persian consonants

For $\gamma / ? /$, the traditional accent prefers [?] rather systematically, including /*V/ [*?V] and /V?*/ [V?*] (but /C?/ [C]): \check{sopa} [\check{sopa}], \check{sopa} [\check{sopa}]. Instead, the mediatic accent oscillates much, with no precise 'rule', as in the international accent, which tends to prefer [\emptyset], practically in any position.

8.5. Typical modern Persian has one *stopstrictive* pair (cf fig 8.4): č, ž/tʃ, dʒ/ [tʃ, dʒ]: čand ['tʃharnd], pačin [phʌ'tʃhirn], mač ['mgrtʃ], ğan ['dʒgrn], ağil [ˈreˈdʒirl], borğ [ˈborrdʒ]. The *mediatic* accent can also have [tʃ, dʒ; tʃ, dʒ] (as some oscillating regional usages, too).

fig 8.4. Stopstrictive consonants.

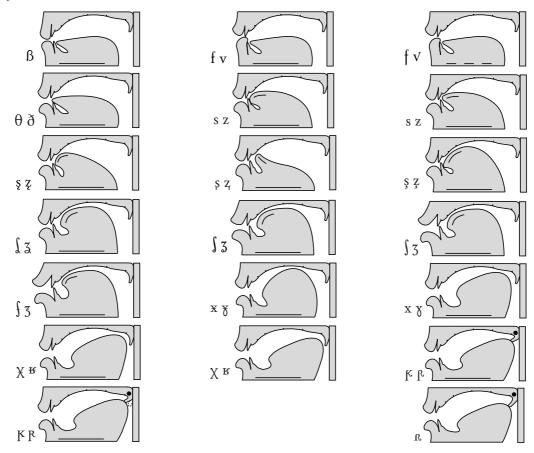


8.6. Persian has three diphonic pairs of *constrictives* (cf fig 8.5): f, v, s, z, ξ , ξ /f, v; s, z; $\int_s J$ [f, v; s, z; $\int_s J$ [even if /z/ is only a xenophoneme used in loans). The *mediatic* accent can also have [f, v] and [$\int_s J$; $\int_s J$] (again, as in some oscillating regional usages, too). There is also an isolated voiceless uvular constrictive trill, $x/|\kappa|$ [κ], with 'weaker' taxophones, [χ], in less prominent positions (and preuvular, [χ], in contact with /i, κ , a/). The *mediatic* accent can also have [κ] and [κ , κ], respectively.

Examples: fil [ˈfiˈl], felfel [felˈfel], kif [ˈchiˈf], harf [ˈhar̞f], vam [ˈvgːm], divar [di-ˈvgːr], gav [ˈɡgːv], div [ˈdiːv], sal [ˈsgːl], mesal [meˈsgːl], asman [ʔʌsˈmgːn], maxsus [max-ˈsuːs], xis [ˈˈkiːs], žale [ʒeˈleː], može [moˈʒeː], každom [chazˈdoːm], dež [ˈdeːʒ], xar [ˈkgːr], xam [ˈkam], axar [ʔʌʃˈkar], baxt [ˈbarχt], baxš [ˈbarχs], toxm [ˈthorxm, ˈthoxm], zaxm [ˈzarxm, ˈzaxm], rox [ˈrox], six [ˈsiːx].

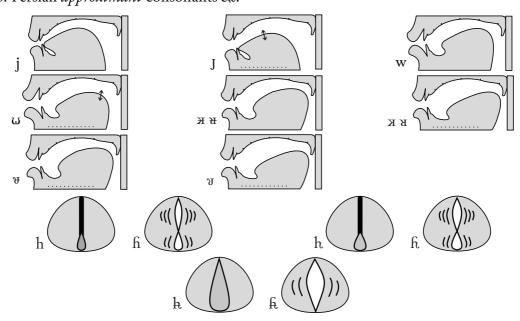
The traditional accent, generally, has $x/\kappa/[\kappa]$, rather systematically. Instead, the mediatic accent oscillates much, also including 'weaker' contoids, such as x [x], velar (or [x], prevelar, in contact with /i, E, a/).

fig 8.5. Constrictive consonants.



8.7. Persian also has the *approximant* y/j/[j], palatal, including a possible semiapproximant, [J], in less prominent syllables and when inserted between vowels (as also labiovelar, [ω], often is, between $|\sigma|$ or |u| and a vowel, cf fig 8.6): yek ['jec] (& ['jer, 'je, je, je, je]), siya ['siŋʌ], aya [ʔʌʃˈjgr], nafy ['narfʃ], mey ['mei].

fig 8.6. Persian approximant consonants &c.



8. Persian consonants

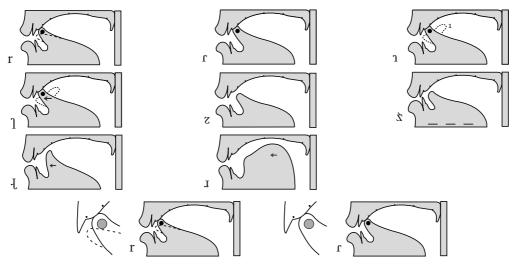
Persian has /h/ [h], laryngeal approximant, occurring even lengthened, /h:/ [hh]. Between vowels, or after a voiced consonant, it is generally [h] (voiced). Examples: har [har], mahi [mɐˈhir], šahr [ʃarhṛ, ʃarhṛ, ʃarhṛ, ʃarhṛ, sahm [ˈsarhṃ, -hṃ, ˈsarṃ], mah [ˈmah, ˈmar]. In mediatic accents, we can find weaker, [h, h] (semiapproximant), or stronger, [h, h] (semiconstrictive), laryngeal articulations.

The traditional accent, generally, has h/h/[h], rather systematically (cf fig 8.6). Instead, the mediatic accent oscillates much, also including 'weaker' contoids, such as h/h/[h, h, h], including [\emptyset]. The same goes for the international accent.

8.8. For the *rhotic* grapheme r, in normalized communicative and neutral Persian, we generally have an alveolar tap, [r], in every position, although a trill, [r], may be frequent especially in stressed syllables, mainly in traditional pronunciation (cf fig 8.7).

Examples: ruz [ˈruʊz], rig [ˈriʊʒ], arak [ʔeˈrʊc], dorost [doˈrʊˈst], arre [ʔarˈɾeː], bara-dar [ˌbarʌˌˈdar], farsi [fʊ̞rˈsiː], čador [tʃhʌˌˈdor], dur [ˈdurɪ]. Before a pause, or a voiceless consonant, [C], they are usually [C] (halfvoiced). In other cases, they are fully voiced, of course.

fig 8.7. Rhotic consonants.

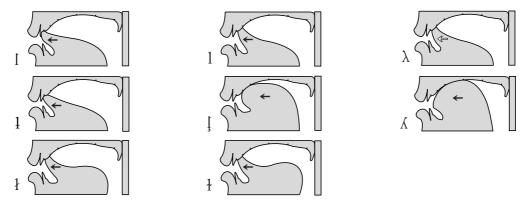


On the other hand, independently from its position and strength, we can also find weaker realizations, like the alveolar approximant, [z], or stronger, like the alveolar slit semiconstrictive, [x], which are more colloquial. In mediatic pronunciation, these two contoids are often used especially in word-initial position, while in final position, before a pause or a voiceless consonant, we also find [z, x].

8.9. Persian has only one *lateral* phoneme, /l/ [l] (with some taxophones: dental, postalveo-palatal, and palatal, [l, ļ, Λ], by assimilation to corresponding following contoids). Examples: *lale* [l Λ 'le Λ], *boland* [bo'la'nd], *gol* ['gol], *del* ['del], *deltang* [del'tha' Λ], *pol šahri* ['pho[Λ ah'ri', Λ a'ri'], *šolge* [d Λ o Λ 'Je'].

fig 8.8 shows a number of different articulations, for useful comparisons with other languages (as we also do for other consonants).

fig 8.8. Lateral consonants.



Variants

After a pause, [|], or a voiceless consonant, [\Cilon{C}], \Cilon{C} , d, g, G/ can also become [\Cilon{C}], though less often. Let us notice: rob_7 [\Cilon{C}] (especially in slow speech), which shows that even \Cilon{C} , t, k/ (and [c]), including \Cilon{C} ?/ (and the possible \Cilon{C}) can become [\Cilon{C}].

The non-nasal *sonants*, /r, 1/, before a pause or $[\Cinc_{i}]$, may become $[\Cinc_{i}]$: $[\Cinc_{i}, \Cinc_{i}, \Cinc_{i}]$. However, when final and preceded by a vowel or a voiced consonant, they are often *intense* (rather than misleadingly 'syllabic'): $[\Cinc_{i}, \Cinc_{i}, \Cinc_{i}]$, or $[\Cinc_{i}]$ especially $[\Cinc_{i}]$. After a voiceless consonant, even in initial position, we generally find $[\Cinc_{i}]$, too.

The *nasal* sonants, /m, n/, also become [n, m], before a pause or a voiceless consonant, but, in slow speech, they may become intense, [m, n]. If between a voiceless consonant and a pause, we can often have completely devoiced nasals: [n], n], as in n [n] (even if we do not usually show them).

Furthermore, especially colloquially or mediatically, in final position, we find seminasals with a (half)nasalized preceding vowel, [Vm, Vn, Vm, Vn]: mum [mum, -m, -u-, -u-], zan [zan, -n, -a-, -a-].

Consonant length

8.11. We have: /C:/ [CC], which is fairly systematically used, especially in *traditional* (but also in *neutral* and *communicative*) pronunciation, while in *mediatic* and *international* accents it is practically absent (though, again, with oscillations).

In word-final position, -VCC is regularly /VC/ [VC], not /VC:/ [VCC], except in -VCC V- /VC:#V/ [VC#CV] (but [C] in the *mediatic* accent –with possible oscillations—and systematically so in the *international* accent).

Let us always keep well in mind that /C:/ are [C#C] (or, in case, [C], as just said); while sequences of different /CC/ are clearly [C#C].

8. Persian consonants

Also notice that |CCC| are $|CC^{\#}C|$ (being formed by |CC| + |C|, rather than |C| + |CC|). Practically, neutral and communicative usages coincide.

True *consonant length* is present mostly in Arabic words, although mostly realized as [CC] instead of [CC]: *madde* [mgdder], *sekke* [seccher], *amma* [Pammgr], *Allah* [Pallgh, -gr].

In genuine Persian words it may be present, although often reduced: bačče [bat]tʃher], tikke [thiclcher]. It can also derive from total assimilation: peste [phes-ther, phestser], baste [bastser], zemestun [zemestsurn].

Notes on regional and neighboring variants

8.12. In a concise way, we will here indicate the most typical peculiarities concerning the use of the consonants in the regional and bordering accents of Persian (cf fig 6.0.1-2). Of course, what has been said (and shown) in § 8.0-11 must be kept well in mind, too.

Starting from the *northern* accent of *Teheran city*, we have to notice that |G| and |dg| practically substitute |q, g|, and that |r| may often be $[z, \dot{x}]$. In addition, *vowel length* is very little important, generally with [V], both for stressed |i|, |a|, |a| and for stressed syllable and word-final |E|, |a|, |a|.

For the *central-northern* accent of *Teheran province*, /q, z/ can appear in addition to /G, dz/ and /r/ [z, \times]. Its *vowel length* is more similar to the traditional one, with ['V:] prevailing for stressed /i, a, u/, and ['V-] in many other cases, including the first element of /ii, ai, ui/.

The *eastern* accent has a frequent use of /G/ and /q/, and of [z, \xists] (and no further peculiarities), and with *vowel length* fairly corresponding to that of Teheran province.

Also the *southern* accent uses frequently /q/ and [z, \times], in addition to /ts, dz, s, z/ [ts, dz, s, z], and to [kz, gz] more than [c, s]. There, *vowel length* is more consistent and evident than in other accents, with ['V·V] used systematically in long vowels and diphthongs, often even becoming ['V·V, 'V·V] (also including [.VV]). Of course, younger and less typical speakers have more normal length usages and more 'northern' vocalic timbres (as shown).

The *northwestern* accent, influenced by *Azeri*, may use no [Ch, Ch] or [?, ?]. In addition, vowel length is very poor (also with some peculiar timbres, such as those of /a, α ; ϵ i, δ u/, as shown in fig 6.2.5).

The *Dari* accent can use /q/, intervocalic [h] rather than [h], possibly no [Ch, Ch]; /tʃ, dʒ, ʃ, ʒ/ [tʃ, dʒ, ʃ, ʒ]. It has quite reduced *vowel length*, with some peculiar timbres as shown in fig 6.3.2.

The *Pashto* accent has frequent use of /q, ?/, and $/\kappa/[\eta]$, $/G/[\eta]$ (pharyngealized uvular constrictive), no [Ch, Ch]; [k, g] more than [c, j]. A moderate use of vowel length, with no real difference between 'long' and 'short' vowels and diphthongs.

10. Intonation

10.1. For a complete treatment of intonation and prosodic & paraphonic features in language, the readers are invited to see & 12-14 of *Natural Phonetics* & *Tonetics*, or the corresponding updated sections on our ^{can}IPA website.

Intonation is the product of the relative pitch of syllables forming more or less long sequences of connected speech.

These sequences are called TUNINGS and can consist of pause groups (which, in turn, consist of rhythm groups); but they can also simply consist of a single word, even a monosyllable: No. - No? - No! - No...

What is essential is that pitch —through given differences— adds (or, rather, gives) different pragmasemantic nuances—such as 'statement, question, command' &c— to phonic sequences which would otherwise be identical or rather similar.

Thus the difference obtained is not merely semantic, or conceptual, as in the case of ton(em)e languages, such as Chinese or Vietnamese.

However, by using the same principles and the same symbols of syllabic-tone notation, one can accurately (and without too many problems) transcribe the characteristics of pitch and strength of the syllables in a whole utterance.

In fact, stress-tonal signs show both the relative pitch and degrees of stress on the syllables before which they are put.

First, let us see (fig 10.1) an iconic and simple way to introduce people to intonation (applied to neutral British English, as recordings are easy to be found): by carefully reading the examples given, and following the heights shown for every grapheme.

fig 10.1. 'Icono-tono-graphic' representation of neutral British-English intonation.

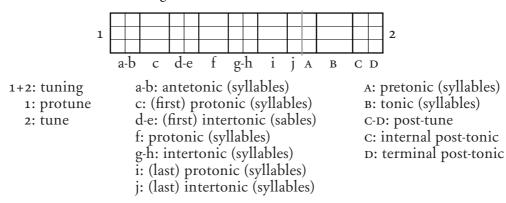
1	See you on Saturday.	
(Will they)		
(If they don't)	see you on Sat _{urda} y	(it'll be a total di sas ter.)
(If they don't)	see you on Saturday	(don't worry a bout it.)

After, we can go to fig 10.2, where one can see the whole pitch extension of a tuning. It is divided into a protune and a tune. Here, let us anticipate that a general *tune* consists of three parts: a pretonic syllable, the tonic (ie the stressed) one, and (two) posttonic syllables.

A *protune* consists of one or more *stressed* syllables, or 'protonic' syllables, and some *unstressed* ones, or 'intertonic' syllables.

Sometimes, it might be important to refer explicitly to the first or last 'protonic' syllable, in the description of certain languages with particular protunes. Usually, the first protonic can be preceded by some ANTETONIC (ie initial unstressed) syllables.

fig 10.2. The structure of tunings.



10.2. In anticipation of what will be dealt with presently, one may say that there is a 'normal' *protune*, for statements, which has no particular symbol since it is the unmarked one: / /. In addition, there are three marked protunes: *interrogative* (/¿/), *imperative* (/¡/), and *emphatic* (/¡/).

We must make it clear at once that *written* sentences are one thing, while the *spoken* language is quite another reality, often very different, indeed.

Naturally, in the spoken language, tunings are much more numerous than 'simple sentences' of grammar and syntax, as will be seen below.

But let us consider *tunes*. Generally they are formed by the *tonic* syllable (ie the stressed one, which is also the last strong syllable in an utterance, in a sense).

The *pretonic* (ie the possible unstressed syllable before it), and the *posttonic* syllables (ie the possible unstressed syllables after it). In the tonetic diagrams (or rather *tonograms*), two posttonic syllables are indicated (ie the *internal* and *terminal* ones).

Sometimes it is useful to refer to one of them, clearly, in order to highlight typical movements more clearly, above all, to distinguish interrogative tunes of the rising type ($[\cdot \cdot \cdot]$) from those of the falling type ($[\cdot \cdot \cdot]$). In any case, the term POST-TUNE may be used to refer to both syllables, collectively.

Let us now consider —concisely (and by looking closely at fig 10.3)— the three marked tunes (of neutral British English): conclusive (/./), interrogative (/?/), suspensive (/;/), and the unmarked: continuative (/,/): On Saturday /./ [DIISET-POLIT.], On Saturday? /¿?/ [¿DIISET-POLIT.], (If not) on Saturday... (then...) /;/ [DIISET-POLIT.], (Perhaps) on Saturday, (but...) /,/ [DIISET-POLIT.].

10. Intonation

10.3. The best way of dealing with the intonation of a language consists in presenting its structures through appropriate diagrams, ie tonograms, with clear examples and a simple and notational system that is accurate enough without being cumbersome and impractical.

First of all, we must repeat that the use and choice of intonation patterns do not depend on syntax at all, but on *semantics* and *pragmatics*, and above all on *communicative goals*.

Even if the syntactic formulation is, in the end, the most evident linguistic rendering (for those who are used to reading and writing), in actual fact it is nothing but a representation of the pragma-semantic way to express concepts and thoughts, which are peculiar to every language.

If, for instance, one writes –and beforehand says– *I've been looking for this for ages* [asvbin¯lok-in fə'ðis. fiˈEidʒiz..], the superficial formulation at hand is only the inevitable result of the mental and linguistic processes that produce, in English, the sentence just seen, although with slight possible variations.

In actual fact, it results from the juxtaposition of different concepts (each one indicated by /./, or $[\cdot]$.) in a single syntactic string. Apparently, this string is simple and straightforward, but once we annotate it with our intonation symbols, it immediately becomes apparent how complex its intonational structure really is.

Let us now examine the intonation structure of neutral British English. However, one must first consider a general scheme, which will enable us to really *see* its characteristics.

Thus fig 10.2 gives the diagram of tunings (or intonation groups). It shows the use one makes —when speaking normally— of pitch heights on the various syllables forming the different possible utterances in a given language.

Tunings

10.4. As seen, tunings consist of a protune (in our example: *I am transcribing the following example* [aəmtæn sktaəbiŋ ðəˈfɒl-soiŋ igˈzɑːmpt]) and a tune (*phonetically* [fəˈnet-ik-li.]). In this case, one has a normal protune and a conclusive tune.

The latter is represented, tonemically (ie in a theoretical way) by /./, and tonetically (ie in a more realistic way) by $[\cdot].$.

The number of syllables in the example has been calculated on purpose, in order to have full correspondence between the tonogram and the syllables of the sentence. This, in turn, will make it easier to clearly understand how intonation works.

Of course, in normal speech, it is unlikely to find sentences with the same number of syllables; nevertheless, the usefulness of the diagram is not jeopardized, since the actual syllables available (whether more or less than 14) share pitch heights in a balanced way.

So they may either compress the movement of several syllables into only one or two, or expand it over a larger number of syllables (cf fig 10.5 for the tunes).

For instance: Yes, we do or Our aim is to pass on ideas, techniques, and practical activities, which we know work in the classroom (even if this last example, more realistically, will be divided into more parts, with the addition of the respective tunes, mostly continuative).

Thus: Our aim is to pass on ideas, techniques, and practical activities, which we know work in the classroom. In a phono-tonetic transcription, you have: [aʊ[eɪm uʊtəˈphaɪs ˈɒɪnː aəˈduɜzː thekˈnɪiks· əm phiæktikt ækˈthi-vətiz· ˌwitʃwi nɜro ˈwɜrk.. linðuˈkhlaɪsˌjom...].

Protunes

10.5. fig 10.3 shows the four protunes (of neutral British English): one is unmarked, or *normal*, and has no symbol; three are marked: *interrogative* /¿/ [¿], *imperative* /¡/ [¡] (for instance: *Pay attention!* [¡¬phe¹ɪ ə'theңfn.]), and *emphatic* /¡/ [½] (We have to check everything very carefully! [¿wi¬hæv tə'tʃhek· ½'ev-qi,θuŋ· ½'veq-i 'khesfli.]).

The same tonograms are shown twice in fig 10.3: on the right, in a rather sketchy form; and on the left, in a more realistic way. The sketchy ones are clear enough to understand the tonetic movements and actually are more convenient for the learner, as they provide the necessary generalization and normalization without which it would be much harder for complete beginners to lay the foundation for futher studies.

By indicating nothing but the essential, which necessarily is more legible and less distracting, any comparison with the intonation patterns of other languages becomes intuitive and straightforward. Along this very same criterion, only the schematic tonograms will be provided for Persian.

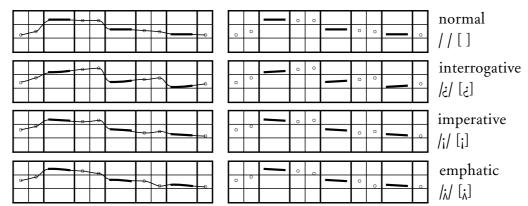


fig 10.3. The four protunes of neutral British English.

Tunes

10.6. fig 10.4 shows the three marked tunes (of neutral British pronunciation, again both realistically and schematically) – *conclusive* /./ [·'..], *interrogative* /?/

10. Intonation

[·'·], and *suspensive* /;/ [·'·] – in addition to the 'unmarked' one, /,/ [·'·], conventionally denominated *continuative tune*.

The marked tunes oppose one another distinctively, as they have different functions, which are crucial for communication purposes. The continuative tune may be considered as the neutralization of the three marked ones, which would be too specific and therefore inappropriate in certain contexts that are, instead, supposed to be 'communicatively neutral'.

Thus, the unmarked continuative tune is quite different from a straightforward and progressive flow of enunciation, without the slightest variation (or break), even theoretical or potential. We might say that the aim of the continuative tune is to oppose a theoretical 'zero' tune; or, in other words, to slightly highlight a word—the one containing the tonic syllable, of course—instead of a complete non-occurrence of tunes, as it happens within a protune.

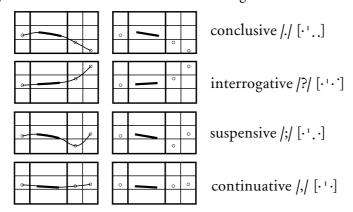
Indeed, there is a difference between *I saw six men* [a9¯soː 'sɪks 'menː..] and *I saw six men* [a9¯soː 'sɪks 'menː..]; in the latter, *six* is more prominent than in the former, since it has its own tune, *although no pause follows that word*. That makes a noticeable difference in terms of communicative strategy: the listener perceives that *six* is not a mere numerical attribution of *men*, as he or she would be tempted to think if that word simply floated away in the same 'protune stream'.

At the end of § 10.4, we have seen that a syntactic string does not necessarily correspond to just one tune; in fact, more or less numerous continuative tunes occur, otherwise the sentence would not sound spontaneous and convincing.

When attempting to learn intonation, many beginners do not fully realize the existence and importance of such internal subdivision, which nevertheless is completely natural. And if its appropriate usage may go entirely unnoticed, its absence would *not* pass unnoticed at all, as the bookish monotone of unprofessional actors and public speakers easily prove.

For instance, if one considers an utterance such as *Look! the imprints of a bear*, it is soon realized that it can be said in many ways – apart from actual and paraphonic considerations such as the *fright* taken at the sight, or the *delight* expressed by naturalists, or the *satisfaction* felt by hideous poachers... (all of them are rendered with different nuances, clear and easy to interpret).

fig 10.4. The four tunes of neutral British English.



Of course, this is different from a unitary sentence such as *Look at the imprints* of a bear, in just one tuning: [ˈlok-wt ðiˈtmptunts əvəˈbeˈɜ...].

10.7. Let us go back to the original utterance. What we find is something closer to a natural exposition, such as *Look: the imprints of a bear* [ˈlok. ði mpunts əvəˈbeˈɜ..]; in fact, there are two pragmatic concepts in the same sentence: the imprints and the sighting of them.

But, if one, then, divides the entire string into three parts (of course, with three tunes), the nuances expressed are more detailed: *Look at the imprints of a bear* ['lok.. ði'tmptuts.. əvə'be'3..]; in this way, one can manage to separate, conceptually too, imprints of different shapes.

After all, it is possible to use some continuative tunes (the /,/ presented in the previous section), and this will add something to elocution (in opposition to a unitary utterance, although this is not for emphasis, of course).

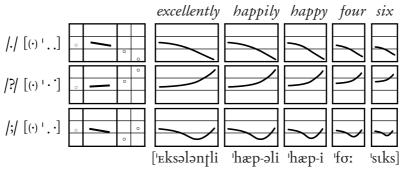
It is only a way to make enunciation a little more effective and natural: ['lok-ut·ði'umpunts·əvə'be'3..] (and variations).

By considering an example like You must read further books on this particular subject, again, one can easily see that there are several ways of saying it.

Apart from a quite flat realization in a single tuning, as: [ˌjµuməs-ɪrid ˈfɜˈðə ˈboks ɒnˌðɪspə-ˈthɪkjələ ˈsɐbdʒɪkt̪..], one can have: [ˌjµuməs-ɪrid ˈfɜˈðə ˈboks ɒnˌðɪspə--thɪk-jələ ˈsɐbdʒɪkt̪..], or: [ˌjµuməsˈɪrid -fɜˈðə ˈboks ɒnˌðɪspə-thɪk-jələ ˈsɐbdʒɪkt̪..], or else: [ˌjµuməsˈɪrid -fɜˈðə ˈboks ɒnˌðɪspə-thɪk-jələ ˈsɐbdʒɪkt̪..].

One could also have ['juu-], or even: ['juu-məs'urid-'fa'ðə-'boks.. on'ðis-pə'thik-jələ-'sebdukt..] (with many more possible nuances and implications).

fig 10.5.1. The four tunes of neutral British English, expanded or contracted according to the number of their syllables (here with no pretonic one).



10.8. Each tune has a specific function. A *conclusive* tune is necessarily used whenever a given concept is completed in the speaker's mind. Thus, in addition to the words which form the sentences, it concerns communicative functions as well, as if, in saying *It's raining cats and dogs*, you added 'I am stating' – so: *It's raining cats and dogs* [its terming that son'dogz.]. The *interrogative* tune communicates 'I am asking': *Is it raining cats and dogs?* [ciuzit terming that son'dogz.]; the *suspensive* tune communicates 'I am underlining': *If it's raining cats and dogs...* (it's a calamity!) [itstalkulam-əţi.)].

10. Intonation

As pointed out before, the *continuative* tune simply communicates 'I'm not finished': *It's raining cats and dogs (but I don't care)* [uts-leining 'khæts ən'dorgz. (bəf-aədaoŋ'khera..)].

It is possible to have a series of conclusive tunes, as well: Yesterday it rained. Today it's raining. Tomorrow it'll pour. I'm sick and tired. I'll go away! [¬jestədei ut'le'ind...| thə¬de'i uts'leinin...| thə¬mol-30 ut'lpho:...| aəm¬sik ən'thaəəd...| aət¬gɔ'o ut'we'i...]. However, a suspensive tune is very likely for Tomorrow it'll pour [thə¬mol-30 ut'lpho:..].

Too often, current writing (which is not at all sophisticated) uses only commas: Yesterday it rained, today it is raining, tomorrow it'll pour, I am sick and tired, I'll go away.

Thus, with the guilty complicity of schools, one is led to a kind of 'child-like' reading, which makes people utter things like: [°-jestədei utterind...° tə-dei utsteinun...° tə-molao uttehor...° aam-sık ənthaəəd...° aat-garo utweil...°].

The small rings show the additional pitch movements that are typical of 'bookish intonation', which must be kept well apart from normal (ie conversational) intonation and also from the typical intonation of text exposition (even if simply done mentally).

A further example will show that, normally, writing and punctuation are barely enough to convey concepts and mark some syntactical boundaries within a sentence, certainly not to provide precise instructions for proper intonation and expressive reading: *I'm terribly busy: I can't come; I'll let you know; don't be cross* [aəm-the-tabli buzi. aə-khan khem: aət-let-u 'nəro..; dəom bikhtəs.].

Also the example *I've been looking for this for ages* shows how poorly a perfectly legitimate *written* sentence manages to tell us the exact way the author meant that very sentence to be read aloud. A decent rendering, but in no way the only one, could be [asvbin lok-in folding file in the could be could b

Contrary to what grammars keep on repeating, a *comma* does not necessarily indicate a short pause, as a *semicolon* does not indicate a pause half-way between the 'short' one of commas and the 'long' one of *full stops*. It is an absurd prescription, but you do not have to believe us *a priori*. Try and *slowly* read aloud any passage you like: pause for one second after each comma, two seconds after a semicolon, and three seconds after a full stop; and let your own voice... 'speak for itself'.

Parentheses & quotations

10.9. Lastly, fig 10.6 shows the diagram of *parenthetic phrases*, or simply *parentheses* (either *low*, [[]]; or *mid*, [[]]), and of *quotations*, [[]] (*high*). In the following sentence, each of them occurs once:

First of all—he said—let's consider 'Natural' Phonetics, as it's properly called.

[fs'st əv'oːl· hi'seːd· lets kun'sıd-ə "nætʃ-ɪl." fə'net-ɪks... ləzıts phipp-əli khoːld...].

fig 10.5.2. Difference between total questions (1) and partial questions (2).

(Will they)	see you on Saturday?
2 (\text{VVI}	
(Why won't they)	see you on Saturday?

Parentheses typically feature an overall reduction of their stress and an increase in the rate of speech, while the pitch is compressed in the low –or mid– range of the tonogram.

Quotations, instead, are quite the opposite, as their role is –precisely– to put one or more words in full evidence, by means of a slightly louder and distinct enunciation. Thus, their stress is increased, their speech rate is reduced, and their pitch is raised (without compression).

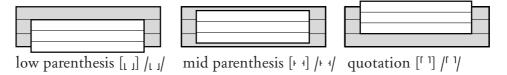
Marking such prosodic subtleties in phonetic –let alone *phonemic*– detailed transcriptions is neither necessary nor recommendable. The symbols [[1]], [1] are more than sufficient to bear in mind all these differences, with respect to 'normal' utterances.

Quotations must not be confused with *direct speech*. Let us go back to *First of all –he said– let's consider 'Natural' Phonetics, as it's properly called*.

In that sentence, only *he said* should be excluded, because all the rest –and what may follow– *is* direct speech, indeed.

Persian *parentheses* are low, [1], but generally mid, [1], after non-conclusive tunes; *quotations*, as said, are high, [1].

fig 10.6. Tonograms of parentheses and quotations.



Persian intonation

10.10. As far as Persian intonation is concerned, fig 10.7-10 show the two fundamental *protunes* and the four *tunes* of communicative & neutral, traditional, mediatic, and international Persian. Any combination of two of them is called a *tuning*, as we know.

Aural imitation –but not prone aping!– plays an important role in acquiring linguistic intonation (and even more so, paraphonic intonation).

We are confident that a good number of examples accurately annotated with our intonational symbols will greatly help learners get the most out of their listening practice. 10. Intonation

fig 10.7. The fundamental protunes & tunes of communicative and neutral Persian.

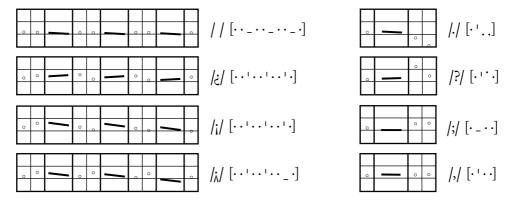


fig 10.8. The fundamental protunes & tunes of traditional Persian.

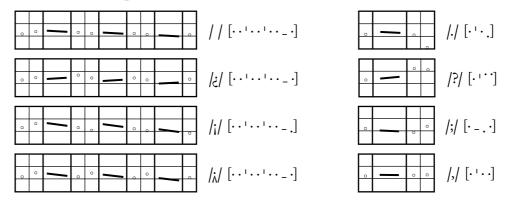


fig 10.9. The fundamental protunes & tunes of mediatic Persian.

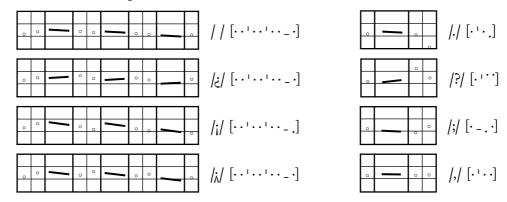
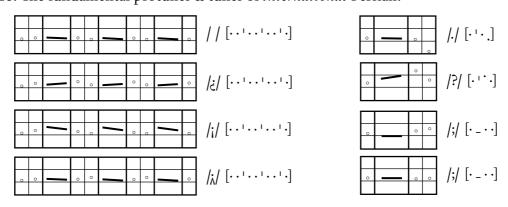


fig 10.10. The fundamental protunes & tunes of international Persian.



10.11. Now, let us provide some good examples to practice the intonation patterns of the communicative Persian accent.

Let us start from the *conclusive* tune, $/./[\cdot \cdot .]$, in the following examples (further examples of it will be given when dealing with the other tunes):

Man dust daram farsi ra xub harf bezanam.

[man-durst -dgram fgr-sirry knp. | -harf be-zarnam...] ([fgr-sirro])

I'd like to speak Persian well.

Ma manzur e šoma-ra mifahmim.

[-mgr· man-zurre \o_mgrr_\ _mifah_mim_.] ([-ro _mifar_mim_.])

We know what you mean.

Besyar mamnun.

[be_sjgrr mam'nu'n..]

Thank you very much.

10.12. The conclusive tune is used in *partial questions*, as well, but in that case, it follows an *interrogative protune*, $\frac{1}{2}$. $\frac{1}{2}$.

Depending on the relevant paraphonic settings used, and the very issue referred to in the conversation, such combination may sound like anything ranging from a neutral question without any particular undertone, down to a cold-hearted, even hostile, police-style interrogation.

In order to avoid misunderstandings, all languages feature a somewhat milder version of asking *partial questions*, in general with a *continuative* tune instead of a conclusive one: $\frac{1}{6}$, $\frac{1}{6}$ (in order to sound gentler, especially when talking to strangers).

By keeping the post-tonic coda in the mid tonal band, instead of letting it fall brusquely, the hearer perceives that the question is posed with discretion, almost with a corteous hesitation.

It is not rare, however, that foreigners lacking politeness % education use the conclusive tune, often, making them sound rude and impolite...

So, /¿, / should be regarded as the first and primary pattern to be chosen, and taught to foreigners, as far as partial questions are considered, reserving /¿./ to informal and casual conversation, not talking to strangers, or if one really wants to convey indifference, impatience, dissatisfaction, suspicion, hostility...

Regardless of how gentle a speaker aims to sound, let us make it quite clear, though, that it is completely wrong to conclude a partial question with a full interrogative pattern, /; ?/.

However, that is quite typical and frequent on the part of many who passively interpret a question mark at the end of a sentence as a peremptory call for rising their voice pitch, to signal that they are putting a question... with incredibly annoying results (and possible misunderstanding, as well). Unfortunately, this often depends on false principles embraced by obtuse traditional school and grammar.

Therefore, let us examine the following examples:

10. Intonation

Nazar-e šoma dar in bare čist?

[¿nɐ-zare ʃo-mg dɐ-rim bˌʃre ¿-tʃhist..]

What do you think about it?

Emruz hal e šoma če towr ast?

[¿ʔemˈruz ˈl ¿-hg ·le ʃoˈmg · ˈ ¿tʃhe-thoures(t)..]

How are you feeling today?

Koğa darim miravim?

[¿kho-dʒg dʌʃˈriːm · ˈ ¿ˌmireˈviːm ..]

Where are we going?

10.13. A question requiring an overall answer, such as *yes* or *no* (or *maybe*, *dunno*, &c), is called a *total question*, and requires an interrogative tune on the word, or group of words, which the question is focused on.

That implies that the interrogative tune may not necessarily occur at the end of the sentence, as the graphemic question mark, once more, leads many to think.

Secondly, more than one interrogative tune (and possibly as many interrogative protunes) may occur in a row, in longer and more articulated questions, even though only one 'total' answer is expected, anyway.

Carefully noticing the different patterns that we show, let us examine the following examples:

Šoma mitavanid farsi harf bezanid?
[¿ʃo-mg' miˌthavʌ̞ˈnird̞-ˈˌ ¿fɑrˈsir-ˈˌ ¿-harf bezɐˈnird̞-]
Can you speak Persian?

Aya baradar e šoma in ra mifahmad?
[¿-ʔgˈjʌˌ bɐ-rgˈdaˌrɛ ʃoˈmg·-ˈ ¿ʔinˈrgˈ ˌmifahˈmad̞-] [ˌmifar--]
Does your brother understand it?

U farda xahad amad?
[¿ˈʔu·-ˈ ¿far-dgˈ χʌ̞-ɦad ʔʌ̞ˈmad̞-]
Is he coming tomorrow?

10.14. The *suspensive tune* is used to create... 'suspense', with very different implications depending on whether the sentence is a question or a statement and, as usual, the nuances provided by paraphonics.

Agar šoma šambe nayayid, ma ba moškel movaģe xahim šod. [Pe_jar so_mgr_sambe najā_jird·| _mgr bāmoschel·| mo_vgrdze 'kgrhimsod..] If you can't come on Saturday, we'll be in trouble

Vaqti be istgah residam, qatar rafte bud.
[-vaxthi |bepis(t)|ggrho|| residamo|| Gepthgro|| rafthe|bud...] ([-vaqthi, qepthgro||)
When I arrived at the station, the train had gone.

```
Ba otobus beravim ya piade?

[¿-bgʻ ʔotho-bus·| ¿-beɾeˈviːmː¦ ¿-jgʻ phiʌ̞ˈdeː..] ([phiʔʌ̞ˈdeː..])

Shall we go by bus, or on foot?

Yek-i, do ta, se ta, čahar ta panǧ ta hastand.

[jeˈchi-ˈ doˈthg·-ˌ seˈthg·-ˌ tʃhe-hgrˌthg·-| -phandʒthʌ-ˌ hasˈtharnd..]

([ˈjaˈchi-ˌ', ˈje--, je--] [ˌtʃhafiʌ̞ɾ-thg·--|])

There are: one, two, three, four, five.
```

10.15. As a general rule, /;/ [·¹··] calls for the hearer's attention on a part of the sentence. Or simply adds vividness to long sentences made of multiple clauses, which would otherwise sound flat and inexpressive, or even hard to parse into meaningful units. Thus, /;/ [·¹··] is also normally used in the first part of alternative questions.

While, the *continuative tune*, /, / [· · ·], can be seen as the terminal part of an unmarked protune bearing a full stress, with two functions: to attract less attention than a suspensive tune, or to underline a word or concept without resorting to emphasis.

```
Yak-i, do ta, se ta, čahar ta panž ta hastand...

[je'chi-i do'thg·i se'thg·i tʃhe'hg·rithg·i 'phandʒthg·i has'tha'nd·]

(['ja'chi-i, 'je'-, je'-] [ˌtʃhahar'thg·i]])

There are: one, two, three, four, five...

Agar natavanid šambe biya(y)id eškal-i nadarad.

['Pe'jar neithava-ni-d -ʃambe ˈbije'ji'd-i 'Peʃ-kharli 'nardarad.] ([ˌbije'Pi'd-i])

If you can't come on Saturday, there's no problem.

Ba otobus xahid raft, ya qatar, ya xodrow?

[¿-bg· Potho'bu's-i ¿xa'fii'd 'rarft-i ¿-jg· Ge-thg·r··i ¿-jg· Xodˈrou..] ([qe-thg·r··i])

Are you going by bus, by train, or by car?

In yak logat name ye besyar mofid yi ast.

[-Pi'p jac-lo-jat -ng·me 'je-i bes'jg·r·i mo'fi'dist..] ([jec-, mo'fid-jist..])

This is a very useful dictionary.
```

10.16. The following examples show how *emphasis* can affect the general sense of a sentence by assigning more prominence to certain words. For simplicity and consistency, we shall not alter the number and order of the words, even though our informants have suggested alternative translations that, though more idiomatic, would have made intonational comparison –our priority in this case– much less transparent and revealing. Some of the following examples also feature the *emphatic protune* $|\dot{\gamma}|$ [$\dot{\gamma}$]:

```
In yak logat name ye besyar mofid yi ast [¡"ʔi'n-¦ jac-lo-jat name-je bes'jar-| mo'fi'dist..] ([jec-, mo'fid-jist..]) This is a very useful dictionary.
```

In yak logat name ye besyar mofid yi ast [¡-ʔip jac-lo-jat ˌngme-je bes"jgr | moˈfi dist..] ([jec-, moˈfid-jist..]) This is a very useful dictionary.

In yak logat name ye besyar mofid yi ast [¡-ʔip jac-lo-jat |ngme-jer bes'jgrr| mo=firdist..] ([jec-, mo=fid-jist..]) This is a very useful dictionary.

In yak logat name ye besyar mofid yi ast ['-2in jac-lo=jat 'ngme=je' bes'jg'r' | mo'fi'dist..] ([jec-, mo'fid-jist..]) This is a very useful dictionary.

10.17. Finally, we provide a few examples of *parentheses*, [l] (after or with /./) & [++] (in other cases, often including at the beginning), and *quotations*, [^{†]} (see fig 10.8):

U goft: «na, man in kar-ra na kardam».

[LPu'gorft: | "nar. || _manPip _chgr'rg: | _na'char,dam...] ([Pu'gorft:])

'No', he said, 'I haven't done it'.

Albatte, paziz-am.
[palbatther...| pazizam...]
Of course, my dear.

Albatte, ¡aziz-am. Farda an-ra xahi dašt.
[¡albatther...| ¡aridatther...| ¡aridatther...| ¡aridatther...| [aridatther...| aridatther...| arid

Of course, my dear. You'll have it tomorrow.

Albatte, ¡aziz-am, farda an-ra xahi dašt.
[ˌʔalbat'theː..| ˌ'ʔaˈziˌzam̞-ɹ| farˈdg-ˌˈ ˈʔg·nrʌ̞-ˌˈ χʌ̞ˈhirdʌʃ(t)] ([ˌ'ʔaˈziˌzam̞-ɹ])
Of course, my dear, you'll have it tomorrow.

U goft: «haqiqat yi ast, man xeili etminan na daram». [[[Puˈgorft·]| hasi-sat-Jist·]] -man -χεili [Petmi-nan ˈnardʌˌɾam̞..] ([[hasiˈsarthist·]) As a matter of fact, he said. I'm not at all sure.

?aziz-am, be xater nadari ke in film-ra hafte-ye piš didim?
[l'ʔaˈziˌzam̞-ɹ¦ ¿ˌbeχʌ-ther ˈnaˈdʌ̞ɾi-̩ ¿che-ʔim̊ ˈfilmˌɾg-ˌˈ l¿hgf-the-je -phi-ʃ diˈdiˈm̞--]
([ˈfilmɾo-ḷ])

Dear, don't you remember, we saw that movie last week?

Az xod miporsam, čera šoma goftid ke «baraye man mohem nist», dar hali-ke aks-e an sedq darad?

[l²azˈkơd ˈmiˈphơrˌsaṃ·]¦ ¿-tʃheˈrɪ̞ ʃo-mg· gơfˈthiˈd̞-¦ ˈˌchebɐˈrg·jeˌman̞-¦ mo-ĥem ˈniˈs(t)..]|| ¿-dar ˈhg·liˌche-¦ ¿-ʔakse ˈʔg·n̞-| ¿-sed(G) dʌʃˈrad̞..]

Why did you say 'I don't mind', I wonder, when the opposite is true?

Regional & bordering-country intonation

10.18. In addition to *communicative & neutral*, *traditional*, *mediatic*, and *international* intonation patterns, let us here concisely show seven regional patterns (cf fig 6.0.1).

They are those of *Teheran city* (in the North, which substantially coincides with the mediatic one), *Teheran province* (again in the North, around the city), of the *North-east*, *South-east*, *South*, *North-west* (influenced by Azeri), and the *West* (influenced by Kurdish). Their vowels and consonants are dealt with in § 6.2.0-5 and § 8.12, respectively.

Besides, we add the intonation patterns of four bordering countries, where the following languages are spoken (cf fig 6.0.2): Tajik, Dari, Pashto, and Urdu. The vowels and consonants of their foreign accents are dealt with in § 6.3.0-4 and § 8.12, respectively; while the phonopses of their actual languages are shown in \mathfrak{G} 13).

fig 10.11. The fundamental protunes & tunes of *Teheran city* Persian.

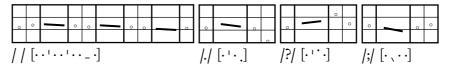


fig 10.12. The fundamental protunes & tunes of Teheran province Persian.

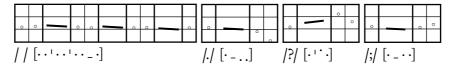


fig 10.13. The fundamental protunes & tunes of North-eastern Persian.

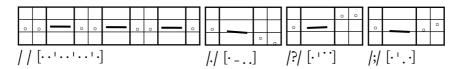


fig 10.14. The fundamental protunes & tunes of South-eastern Persian.

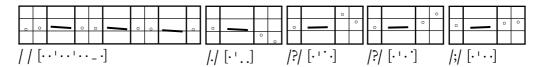


fig 10.15. The fundamental protunes & tunes of Southern Persian.

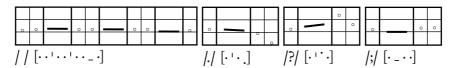
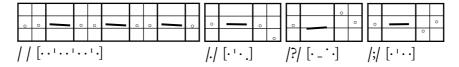


fig 10.16. The fundamental protunes & tunes of North-western Persian (Azeri).



10. Intonation

fig 10.17. The fundamental protunes & tunes of Western Persian (Kurdish).

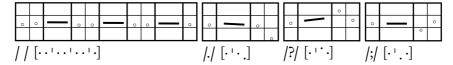


fig 10.18. The fundamental protunes & tunes of Tajik Persian.

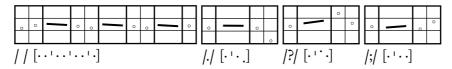


fig 10.19. The fundamental protunes & tunes of Dari Persian.

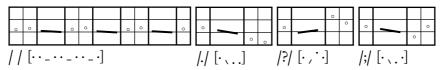


fig 10.20. The fundamental protunes & tunes of Pashto Persian.

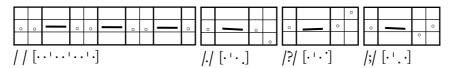
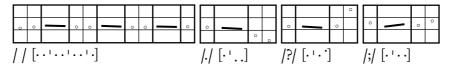


fig 10.21. The fundamental protunes & tunes of *Urdu* Persian.



13. Bordering-country languages

13.0. In \$\text{G}\$ & 8 & 10, we concisely saw the pronunciation of the Persian vowels, consonants and intonation of bilingual speakers, whose first language is Kurdish, Azeri, Tajik, Dari, Pashto, or Urdu.

In addition to observations about their consonantal peculiarities, we saw the vocograms and fundamental tonograms. Here, we show the actual vocograms and consonant tables, including the tonograms (which coincide with those already given in b 10, because intonation —as everyone should easily come to know— is the most difficult aspect of pronunciation to master, when speaking another language.

In fact, it is the very first aspect of language that children recognize and learn, even before actually speaking. It is true, however, that intonation is preceded by the paraphonic patterns, which identify emotions, attitudes, social roles, exclamations, hesitations, and spasmodic features, such as giggling, sighing, grunts, while speaking, including changes in speed, loudness, and overall pitch range.

Including non-linguistic use of voice qualities, such as breathy or creaky voice, falsetto, staccato, but it is outside language, although, without mastering it, we would speak like machines

All this for signaling, for instance (here presented randomly), high spirits, low spirits, surprise, impatience, love, fear, anger, sadness, joy, disgust, trust, satisfaction, desire, sexual desire, sympathy, triumph, anticipation, calmness, friendship, courage, shame, confidence, kindness, cruelty, pity, indignation, envy, suffering, weeping, anxiety, grief, dejection, despair, tender feeling, devotion, reflection, meditation.

Besides, ill-temper, sulkiness, determination, hatred, disdain, contempt, guilt, pride, helplessness, patience, affirmation, negation, astonishment, horror, self-attention, shyness, modesty, blushing, admiration, adoration, appreciation, amusement, awe, awkwardness, boredom, confusion, craving, pain, entrancement, excitement, interest, nostalgia, romance, and so on.

Let us recall, once and for all, that those 'linguists' who think that also phonotonetics is outside 'language' (unlike phonemics or phonology) are completely wrong and somehow even 'half-linguists'.

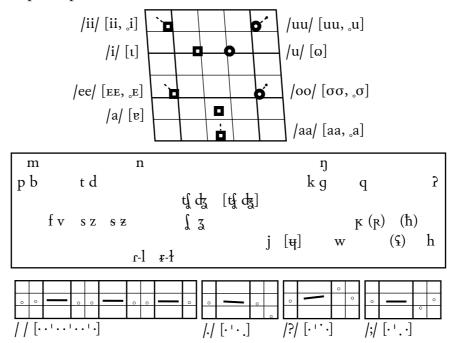
Some of the symbols we will use in these sections may not be present in the main chapters of this book; however, they are shown and described (also with orograms and vocograms) in the updated chapters of our book *Natural Phonetics & Tonetics*, whose pdf files can be found in our website *canipa.net*.

Kurdish

13.1. Spoken in Kurdistan [& parts of Persia, Iraq, Siria, Turkey: Indo-Iranian, IE, has three short and five long vowels. The latter are narrow diphthongs, with different timbres from short vowels. There are also phonemic diphthongs with /i, u/ as second elements. Non-neutral accents may have more vowel phonemes, including /u, 1, 6/, not shown on the vocogram.

When stressed long vowels are followed by several consonants, they are realized as short monophthongs maintaining their original first timbres; the same holds when they are unstressed in final position. Initial vowels are preceded by /?/; the sequences /ijV, uwV/ are realized as [iV, uV].

fig 13.1. Kurdish phonopsis.

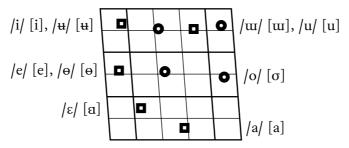


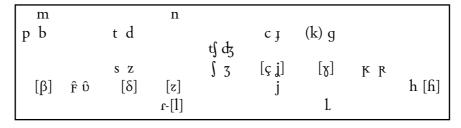
Azeri

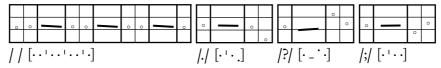
13.2. Spoken in Azerbaijan: Altaic, has nine short vowels and several vowel sequences (functioning as long vowels when identical). It has the following diphthongs: /a, p, o, u/+/i/ and /a/+/u/. Final vowels are [Vh].

It presents opposition between simple and geminated consonants; $[n\equiv C]$ (ie homorganic by assimilation). The voiceless stops and stopstrictives are 'aspirated' (except when followed by a consonant or when geminated), while their voiced counterparts are devoiced, they are fully voiced only in voiced contexts. /b, d, J, g/ have the following prevocalic taxophones $[\beta, \delta, j, \gamma]$; /r/ $[r, z, z^{\#}]$; /c[#], k[#]/ $[\varsigma, \kappa]$; /l/ is [l] in contact with front vowels, elsewhere [L].

fig 13.2. Azeri phonopsis.





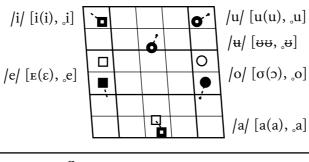


Tajik

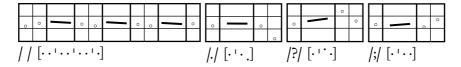
13.3. Spoken in Tajikistan: Indo-Iranian, 1E, has six short vowels (narrow diphthongs when phonetically lengthened), with the variants indicated.

As for the *consonants*, we have $[n\equiv C]$ (ie homorganic by assimilation); /3/[3] in loanwords.

fig 13.3. Tajik phonopsis.



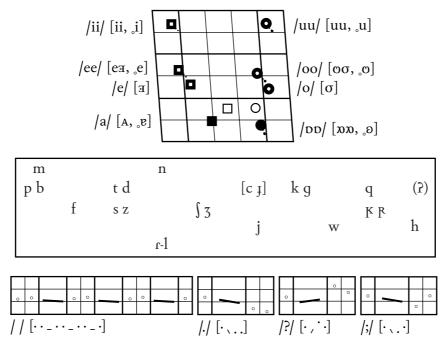
m		n						
рb	t d				k g	q		5
	ts		र्पू क्ये					
φВ	SZ		[(z)			k	ħ	
		1		j		Я		
		r-I						



Dari

As for the *consonants*, it must be noticed that /p, t, k/ are 'aspirated', [Ch], and that /k, q/ have palatal taxophones, [ch, 1], before front vowels or in final position.

fig 13.4. Dari phonopsis.

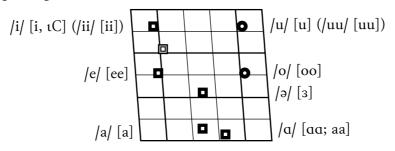


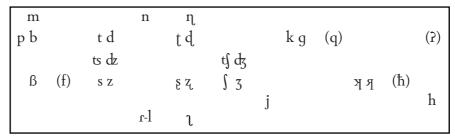
Pashto

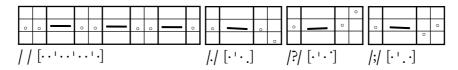
13.5. Spoken in Afghanistan: Indo-Iranian, IE, properly *paṣto* [paṣˈtoo], has four short and five long vowels (or rather three, since the 'elegant' xenophonemes /ii, uu/ very often become /i, u/). There is a taxophone for /i/ in checked syllables, [tC], and a frequent variant [aa], for /a/ [aa]; there are also sequences of short or long vowels + /i, u/ which function as second elements of diphthongs: /əi, ai, ai, oi, ui; au, au/.

The *consonants* given in round brackets represent xenophonemes, /q, ?, f, $\hbar/$, for which the phonemes /k, \emptyset , p, h/ are commonly substituted $(/\emptyset/$, is a 'zero' phoneme, ie absence of any sound). There are four prenasalized taxophones, for the corresponding 'xenophonemes': /nC/, [~d, ~g; ~dz; ~z].

fig 13.5. Pashto phonopsis.







Urdu

13.6. Spoken in Pakistan: Indo-Iranian, IE, has three short and seven long vowels; the latter are narrow diphthongs, all monotimbric except $/\epsilon\epsilon$, $25/[\epsilon\epsilon, \epsilon; 25, \sigma]$. All vowels can be distinctively nasalized. Colloquially, /ih, ah/ often become $[\epsilon h, \epsilon h]$ and $/uh/[5h, \sigma h]$. In quicker speech, we may find /a/[3] (mainly unstressed; sometimes also for $/aI, \sigma J/(a)$). In addition, a number of diphthongs are found, formed by the juxtaposition of some vowels.

Consonant gemination is distinctive. Urdut presents opposition between $/\mathbb{C}$, \mathbb{C} h, \mathbb{C} , \mathbb{C} h, \mathbb{C} , \mathbb{C} h, \mathbb{C} , \mathbb{C} h, \mathbb{C}

fig 13.6. Urdu phonopsis.

