# Arabic Pronunciation & Accents

Geo-social Applications of the Natural Phonetics & Tonetics Method

by Luciano Canepari & Marco Cerini, 2<sup>nd</sup> edition (2020, Lincom)

LC wrote the following 3 chapters, using sound file provided by Maurizio Pugliese

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# 13. Arabic 'accents'

13.1. Apart from five 'professionally neutralized *mediatic* accents' (*ie* those of the Levant, Saudi Arabia, the Persian Gulf, Egypt, Algeria, and Morocco), which we might call *geo-neutral* accents (and languages), G 14 will present 32 *regionational* accents, also representing some internal subdivisions, preceded by '&', as for the Levant (*ie* Lebanon & Palestine & western Syria & western Jordan), Saudi Arabia, the Gulf (*ie* Kuwait & Bahrain & Qatar & United Arab Emirates, with coastal Iran), Egypt (*ie* northern & southern), Algeria (*ie* northern & southern Algeria & Kabyle-Berber Arabic), Morocco. Examine the maps in fig 13.1-5 well.

The Levant (ie Lebanon: Beirut, & Palestine: east Jerusalem, & western Syria: Damascus, & western Jordan: Amman)

Arabia (or the 'Arabian Peninsula' ie central Saudi Arabia with eastern Jordan and southwestern Iraq)

North (ie northern Syria with south-eastern Turkey & northern Iraq)

Iraq (with eastern Syria and parts of mid-western Iran)

The Gulf (or 'The Persian Gulf', with eastern Saudi Arabia, southernmost Iraq, coastal Iran, & Kuwait, & Bahrain, & Qatar, & United Arab Emirates) Oman

Yemen (& Djibouti, & northern Somalia)

Red Sea (ie western Saudi Arabia with eastern Sudan and north-eastern Eritrea)

Eastern Egypt (ie coastal, and most of the Sinai and Arabic-speaking Israel)

Egypt (ie northern & southern Egypt)

Nubia (ie northern Sudan and part of southern Egypt)

Sudan (ie east-central Sudan and north-western Eritrea)

Libya

Tunisia

Algeria (ie northern & southern Algeria & Kabyle-Berber Arabic)

Morocco

Mauritania (& West Sahara)

Mali

Chad

South Sudan (& south-western Sudan proper)

Somalia (except its northern area)

The Comoros (ie isles at the northern end of the Mozambique Channel).

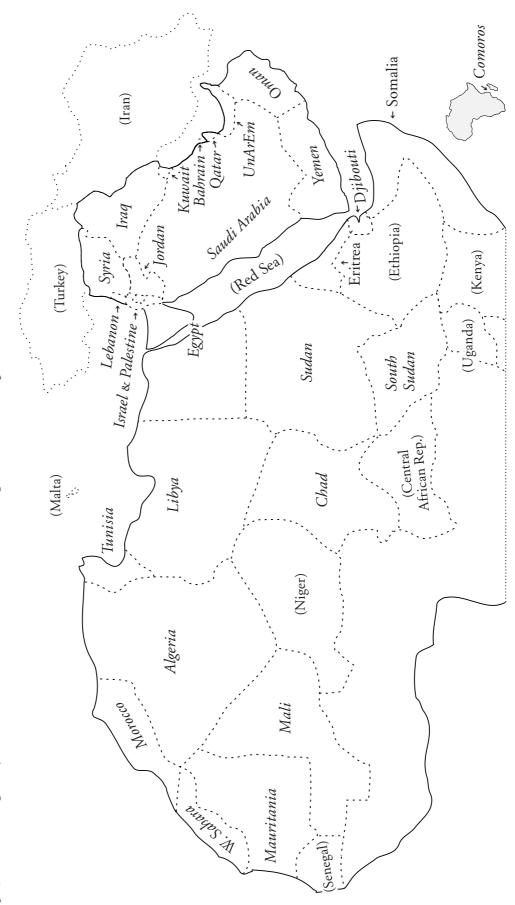
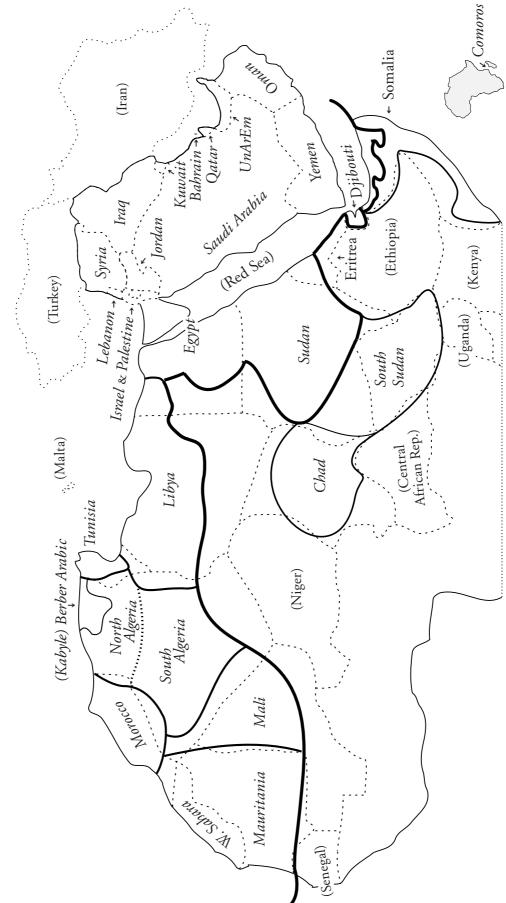


fig 13.1. Areas (expressly dealt with in this book) where Arabic is spoken – excluding nations indicated in brackets.





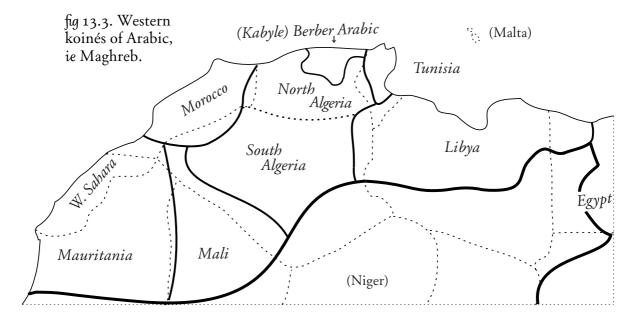
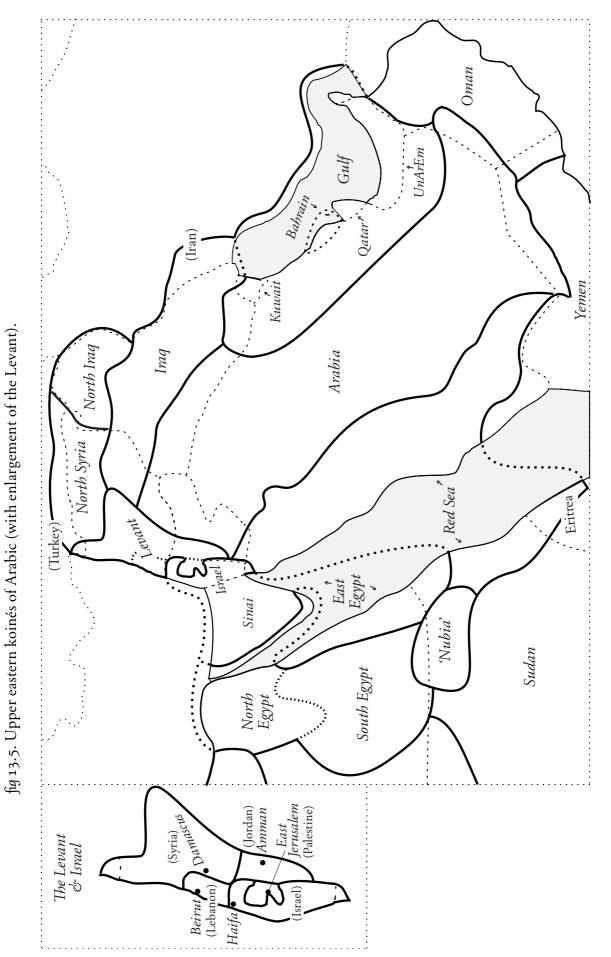


fig 13.4. Eastern koinés of Arabic (including Egypt).





Arguably, our maps and terminology refer to *accents* of Arabic, not to its *dialects*, although both are connected, of course. But it must be clear that accents are less structured or predictably steady. In fact, accents move more freely in different directions drawing from different sources. The influences on accents may also depend on (not fully conscious) subjective choices, including neutral or mediatic ones.

Thus, we will certainly also have to include fluctuations in the use by single speakers. However, mainly other native speakers are generally able to detect different accents of 'their own language'. Arguably, these accents may be more or less 'pure' or 'composite'.

#### General observations

13.2. Arabic native speakers grow up learning some sort of 'colloquial' Arabic that is determined by (usually rather well-defined) home and social environments. Thus, except for the best *voice* (meaning *pronunciation*) professionals, such as properly trained actors or anchor(wo)men, hardly any Arabic speakers can be said to use the neutral pronunciation of their 'common' language.

In fact, the form of Arabic taught at school, based on the written language, when not expressly on that of the Koran, is quite another language in comparison with what contemporary Arabic speakers use in their everyday life. Inevitably, they also use more or less different vocabulary and grammar (often so different that they cannot even understand each others). And, of course, pronunciation differs, as well.

13.3. Obviously, in this book, we are specifically interested in *pronunciation*. In particular, in this chapter, we will deal with the pronunciation differences which are to be found in the Arabic-speaking countries.

By means of appropriate vocograms, we will show the various occurrences of the different vocoids that are more or less frequently used by several speakers belonging to given language groups. We will indicate the more typical ones, but also their less recommendable variants. All in all, their even tiny nuances contribute to identify the different accents of the 'same' language.

This especially happens when such speakers read a prepared text and exhibit differences for the 'same' written words and phrases, and sentences. Of course, when they speak impromptu to people they do not know, but who clearly use 'another Arabic language', as perceptively very soon realized, they are forced to try to use what they should have learned during (inevitably boring) school time.

13.4. Of course, any 'colloquial dialects', meaning any actually 'spoken variants', are inevitably different from the written language of school (or of religion). In fact, apart from even several mutually incomprehensible terms, and syntactical differences, also the grammar used is not actually the same, with changes and simplifications (but also possible complications, in comparison). So, many endings are changed or dropped, also causing possible different stress patterns. This may also happen when reading a text, given the highly 'unscientific' traditional way of writing Arabic 'without vowels'.

Certainly, some consonants may become different, as well, and even oscillate between more or less atypical and risky forms. We will show these possibilities, too, without neglecting intonation, which will be adequately shown in our tonograms. Tonograms are much more objective than acoustical 'images', and certainly are neither occasional nor one-off samples, but obtained by analizing the speech of several speakers for each 'accent'.

The same has been done for four 'less localized accents', which professional people who work in broadcasting, or in special teaching sound files, may use. We also concisely describe these 'geo-neutral(ized) accents/variants' of the Arabic language, which are: *Levantine, Saudi Arabian, Persian-Gulf, Egyptian, Algerian* and *Moroccan Arabic*, respectively.

#### Main pronunciation differences (including loans from languages and dialects)

13.6. Among the *consonants*, q/q/, besides remaining [q, q] (considered to be the best, by Arabic native speakers, even those who do not use it, typical of many urban and rural accents, also of urban Maghreb, and of parts of southern Yemen, of west-central Oman, of Iraq) it can actually become:  $\rightarrow/2/[2]$  (typical of the Levant, urban Jordan, and northern Egypt, of many urban and rural accents also of parts of the Maghreb, Iraq, and the North, cf fig 13.4); or  $\rightarrow/k/[k, k]$  (but also [k, k] or [q, k], rural Palestine and Oman, and northern Algeria); or  $\rightarrow/g/[g, g]$  (typically nomadic, and of parts of Yemen, of Iraq, of rural Jordan, of north-western Libya, of coastal Morocco); or  $\rightarrow/g/[g, B, G, G]$  (eastern Iraq, ie Iranian, Sudan).

13.7. 7/2, besides remaining stably [?] (as generally in Yemen and in the Peninsula), it is usually optional in the other 'Asian' accents, while it is surely dropped in the Maghreb, often causing the loss of a whole syllable like [#?V-], producing [#CC-], or [#CC-], especially with sonants, like, for instance, [# $\pi$ t-].

It is usually dropped in *final* position (except in Yemen):  $\rightarrow/\emptyset^{\#}/(\text{'zero'})$  '[]'. In *me*dial position, it may remain especially as an intentional effort to 'speak well'; otherwise, it is generally dropped, but changing [VPC] into [V·C]; instead, [VPV, CPV] are more frequently changed into [VjV], less frequently, into [VwV], and, mostly only in the Maghreb, into [VhV]. 13.8. h/h/, besides possibly remaining [h, h], mainly as an intentional choice (including certainly with final grammemes containing /h/); it is generally dropped (not only in the Maghreb), becoming  $/\emptyset/$  ('zero') '[]'.

13.9.  $\check{z}/z/$ , besides remaining [3] (especially in Maghreb and Levant accents, although with fluctuations towards [dʒ], especially in Algerian urban accents, as in Algiers and Tlemcen /tlem'sen/, *Tilimsān* /tilim'sa:n/), it can become:  $\rightarrow '/dz/'$  [dʒ] (often judged to be the best and more 'correct' Arabic sound, mostly in 'Asian' Arabic, including Iraqi and rural Levantine accents, although with possible [3], as also in Algeria);  $\rightarrow/g/$  [9, 9] (generally in northern Egypt, with Cairo, and in Yemen and Oman); it can also become  $\rightarrow/J/$  [J, 9Z, 9J, 9J, 9J, 9J] (more typical of nomadic people, mainly in the Levant, Saudi Arabia, Yemen, Oman, southern Egypt, and Sudan),  $\rightarrow/j/$  [J, J] (mainly in Yemen and southern & north-eastern Arabia); or  $\rightarrow/tJ/$  [tJ, tJ] (in parts of Syria).

13.10.  $t, d/\theta, \delta/$ , besides remaining  $[\theta, \delta]$  (as in Yemen and in most nomadic and rural accents), can become:  $\rightarrow/t, d/[t, d]$  (mostly in urban accents, as in the Levant, Egypt, and Maghreb, in addition to Sudan and Chad). They can also become  $\rightarrow/s$ , z/[s, z], as a choice to avoid both  $[\theta, \delta]$  (judged to be too 'rural') and [t, d] (judged to be less 'good'). In addition, we can find  $t, d/\theta, \delta/ \rightarrow '/f, v/'$  (described as [f, v], but generally rather  $[\phi, \beta]$ ) possible in parts of the North (mainly in the Turkish part), and occasionally in parts of western Maghreb.

13.11. Neutral (or 'official', or 'literay', or 'standard') Arabic has four co-articules, |C| ie /t,  $\mathfrak{d}$ , s,  $\mathfrak{z}/[\mathfrak{t}, \mathfrak{d}, \mathfrak{s}, \mathfrak{z}]$ . They are systematically reduced to three, pratically in all regionational accents, including the mediatic variants, which we describe. However, in southern Yemen,  $|\mathfrak{d}, \mathfrak{z}|$  are kept distinct, as  $[\mathfrak{d}, \mathfrak{d}]$ , or as  $[\mathfrak{d}, \mathfrak{H}]$ , in northern Yemen, or as  $|\mathfrak{d}/[\mathfrak{L}, \mathfrak{t}]$ , (pre)uvular lateral, and  $|\mathfrak{z}/[\mathfrak{d}]$ , respectively, in central Yemen).

In fact,  $|\mathbf{z}|$  [ $\mathbf{z}$ ] (or [ $\mathbf{\delta}$ ], which native speakers consider to be its 'best' realization, even if they do not use it) systematically merges with  $|\mathbf{d}|$ , becoming either  $|\mathbf{d}|$  [ $\mathbf{d}$ ] or  $|\mathbf{z}|$  [ $\mathbf{z}$ ] or [ $\mathbf{\delta}$ ]. In mountainous parts of south-western Arabia,  $|\mathbf{d}|$  can be [ $\tau$ ,  $\tau$ ]: (pre)uvular semilateral.

Thus, those four phonemes become three, added to  $\mathfrak{k}$ ,  $\mathfrak{d}/\theta$ ,  $\mathfrak{d}/$  (with their realizations, just seen above), giving:  $\rightarrow [\theta, \mathfrak{d}] \& [\mathfrak{t}, \mathfrak{s}, \mathfrak{d}]$ , or  $\rightarrow [\mathfrak{t}, \mathfrak{d}] \& [\mathfrak{t}, \mathfrak{s}, \mathfrak{d}]$ , or  $\rightarrow [\mathfrak{s}, \mathfrak{z}] \& [\mathfrak{t}, \mathfrak{s}, \mathfrak{z}]$ , or  $\rightarrow [\varphi, \beta] \& [\mathfrak{t}, \mathfrak{s}, \mathfrak{f}]$ . In some, mostly rural, areas of the 'Asian' accents and those of Sudan, South Sudan, and Chad,  $/\mathfrak{C}/$ , generally, become plain  $/\mathfrak{C}/$ , loosing the possibility to distinguish them.

13.12. In addition to the four 'normal' (in neutral speech) |C|, just seen, ie  $|\mathfrak{t}$ ,  $\mathfrak{d}$ ,  $\mathfrak{s}$ ,  $\mathfrak{z}/[\mathfrak{t}, \mathfrak{d}, \mathfrak{s}, \mathfrak{z}]$  (and their reductions and variants), we can also find the following co-articules (with their possible variants shown in (b 12): m, n, b, v, w, r,  $l/\mathfrak{m}$ ,  $\mathfrak{n}$ ,  $\mathfrak{h}$ ,  $\mathfrak{v}$ ,  $\mathfrak{w}$ ,  $\mathfrak{x}$ ,  $\mathfrak{t}/\mathfrak{l}$ .

Let us notice that  $|\mathbf{f}|$  has to be considered rather different from 'normal'  $|\mathbf{f}|$  (of

moderate influence). In fact, being a truly |C| consonant, |f| causes the typical darkening of |C|, while |f| does not do so, even if its usual taxophones, that we use in this book, [f, f], are uvularized, too. But they only work on |a(t)| with a moderate timbre difference, ie [a(t)], as also  $/\hbar$ ,  $\S$ ,  $\kappa$ , R do (in comparison both with normal uninfluenced [a(t)], and [a(t)], darkened by the true co-articules).

Here and there, mostly in urban (sometimes even 'refined') speech, /f can appear as uvular, rather than uvularized: [ $\aleph$ ,  $\aleph$ ,  $\aleph$ ,  $\aleph$ ]; it can also be a non-Muslim peculiarity, even with stronger realizations, up to practically also coincide with /P/[R] and its variants.

13.13. Further minor changes involve: k/k/, which, besides remaining [k, k], can become:  $\rightarrow/t f/[t j, t j]$ , in rural or nomadic accents in parts of Iraq, in nomadic and rural accents of parts of the Levant, Palestine, Saudi Arabia, Iraq, and northern Algeria (or  $\rightarrow/c/[c, k c, k \mu, k c, k c]$ ); they can also become:  $\rightarrow/t s/[t s]$ , in nomadic accents of the Levant and Saudi Arabia.

Also: t/t/, which, besides remaining [t], can become, mainly in Morocco:  $\rightarrow \hat{s}/ts/[ts, ts, ts, t\phi, t\theta, t\theta, th]$ .

13.14. In addition, there are a few consonantal phonemes mostly used in loanwords (often in neutral, or official, Arabic, too): p/p/, g/g/,  $\check{g}/dz/$  (added to the phoneme /z/ [z], as we use, but with  $\check{z}/z/$ , as a xenophoneme, should one choose to use  $\check{g}/dz/$  [dz], instead, as the basic phoneme),  $\check{c}/t\mathfrak{g}/$ , v/v/.

Some examples (whose translations seem to be obvious):  $p\bar{a}k\bar{e}t$  (bakayt)/pa'ke:t, ba'kait/ [pa'ke:t, -'kEit,  $\downarrow$ ba'kait],  $gars\bar{o}n$  (karsawn) /gas'so:n, kas'saun/ [gas'so:n, -'soun,  $\downarrow$ kas'soun],  $\check{c}\bar{a}y$  /'tfaii/ ['tfari, 'f-,  $\downarrow$ 'dz-,  $\downarrow$ 'z-],  $v\bar{i}za$  /'vi:za, 'fi:-/ ['vi:ze,  $\downarrow$ 'fi:za],  $v\bar{i}l\bar{a}\check{z}$ /vi:la:z/ [vi:la:z,  $\downarrow$ fi:la:f],  $\check{g}\bar{o}k$  ( $\check{g}awk$ )/'dzo:k/ ['dzo:k, 'dzook,  $\downarrow$ 'dzauk],  $\check{g}\bar{o}b$  ( $\check{g}awb$ )/'dzo:b/ ['dzo:b, 'dzoob,  $\downarrow$ 'dzaub].

13.15. As anticipated, to the four neutral co-articules  $(|\mathcal{L}|: \underline{t} | \underline{t}|, \underline{d} | \underline{d}|, \underline{s} | \underline{s}|, \underline{x} | \underline{z}|)$ , we will also have to add some further elements (see the corresponding orograms in (b 12, for several partially different realizations, here also shown with their transliterations, by means of the usual dot under them).

They are: m/m/[m, m, m, m], n/n/[n, n], b/b/[b, b, b, b, b, b],  $v/*/[*, v, y, \hat{v}, \hat{v}, y, y, \hat{y}, \hat{y}]$ , w/w/[w, w, w],  $r/r/[r, r, r, r, \hat{r}, \hat{r$ 

13.16. Here are some general examples, using a sort of 'regionational accent', just to show what we are dealing with, without actually providing real and localizable example words. Of course, we will only use one of the various possible taxophones shown above.

Often, these additional co-articlues are used in loans. Also Hebrew tends to do so, by writing marked consonants, like q,  $\varsigma$ ,  $\hbar$  (for traditional /q,  $\varsigma$ ,  $\hbar$ /, more systematically than plain ones), rather than for modern /k, 2,  $\kappa$ /, which, however, are

used in actual pronunciation (instead of the 'expected' /q,  $\mathfrak{s}$ ,  $\hbar$ /).

13.17. Besides, for particular reasons and changes, mostly determined by phonic contexts, we will also have to show the following consonants, which are realized differently in certain areas:  $t \rightarrow \hat{s}/\text{ts}/[\text{ts}, \text{ts}, \text{ts}, \text{t\theta}, \text{t\theta}, \text{t\theta}, \text{th}], k/\text{k}/ \rightarrow \check{c}[\text{tf}, \text{tf}]$  (including  $\hat{z}/\text{dz}/[\text{dz}, \text{dz}, \text{dz}, \text{dq}, \text{dd}, \text{dd}, \text{dd}]$ , for loans from Maltese or Italian).

Although these are felt to be heavily 'dialectal' forms to be avoided, nevertheless, they more or less frequently slip the speakers' attention. The same, often, goes for the possible devoicing of voiced consonants in word-final position.

This may be complete,  $[\mathbb{Q}] \rightarrow [\mathbb{Q}^{\#}]$ , not necessarily before a pause, in the midwestern parts of western Saudi Arabia verging on the Red Sea. Instead, in Saharian accents,  $[\mathbb{Q}] \rightarrow [\mathbb{Q}]$  only before a pause. Besides, in some nomadic accents of the Peninsula, we can have  $[\mathbb{Q}] \rightarrow [\mathbb{Q}]$ .

13.18. Furthermore, it is necessary, for loanwords, to also add at least two long vowels (which, mostly in unstressed syllables, can be shortened, up to the corresponding simple forms, /e, o/ [e, E; o,  $\sigma$ ]):  $\bar{e}$  /e:/ [e:, ee, EI],  $\bar{o}$  /o:/ [o:, oo,  $\sigma \upsilon$ ], and three (usually short ones) both for loans (mainly French):  $\ddot{u}$  /y/ [y],  $\ddot{o}$  / $\phi$ / [ $\phi$ ], and for dialectal words:  $\ddot{e}$  / $\phi$ / [ $\phi$ , 3] (for some perhaps more 'refined' speakers also English loans).

Some examples:  $g\bar{o}l$  (kawl) /'go:l, 'ko:l, 'kaul/ ['go:l, 'goʊl, ‡kaʊl], čuklēt (žuklayt,  $\check{g}$ -,  $\check{s}$ -) /tʃuk'le:t, zuk-, ʃuk-, -'lait/ [tʃʊk'le:t, -'leɪt] ↓[zʊk'laɪt, dʒ-, ʃ-], büfēʔ (bufayʔ) /by'fe:ʔ, bu'faiʔ/ [by'fe:ʔ, -'feɪʔ, ↓bu'faɪʔ],  $k\bar{\imath}lo$  (-law) /'ki:lo/ ['ki:lo, -lou],  $kabin\bar{e}h$  (- $\bar{e}$ ʔ,  $k\bar{a}$ -, -ayʔ) /ka(:)bi'ne:/ [ $_{k}$ abi'ne:, -'neɪ, ↓'nai],  $hot\bar{e}l$  ( $\gamma o$ -, hawtayl,  $\gamma aw$ -) /ho'te:l, ?o-/ [ho'te:l, -'teɪl, -'teɪl, ?o-] ↓[hau-, ?au-].

13.19. It goes without saying that any Arabic speakers 'seriously committed to speak well', may certainly resort to some mediatic or, perhaps, neutral realizations.

In fact, such speakers (who may have mainly phonemic monophthongs, when they happen to try to extend their use of the diphthongs /ai, au/ to further words, as in neutral pronunciation) may actually use such realizations (even if unsystematically), or at least they may try to follow the principle that governs their realizations.

Moreover, independently from this fact, for the two plain (uninfluenced) diphthongs we often find several (more or less) different realizations, as shown in the respective vocograms for each 'accent' described. All this, of course, in addition to the various actual 'monophthongizations'.

Therefore, besides possible occurrences of neutral-like [ $\alpha$ -,  $\alpha$ -] plus [-i, -1, -4; -u, -v] (cf fig 6.2), or mediatic-like [ $\alpha$ -,  $\alpha$ -,  $\pi$ -] plus [-i, -1, -3; -u, -0] (cf fig 12.2), or

[a-,  $\mathfrak{e}$ -,  $\Lambda$ -] plus [- $\mathfrak{H}$ ; - $\mathfrak{O}$ ] (cf fig 12.1.2, bottom vocogram). In non-urban accents, more typical of rural and nomadic people, we can also have /ai, au/ [ee,  $\mathfrak{E}$ e,  $\mathfrak{H}$ ,  $\mathfrak{H}$ ;  $\sigma \sigma$ ,  $\sigma \sigma$ ,  $\Lambda \sigma$ ,  $\Lambda \mathfrak{F}$ ], in.

13.20. Especially in the Maghreb (not only in its extreme West, ie Morocco and Mauritania), /ai, au/ can also have the realizations of another pair of diphthongs, typical of the phonemic systems of those dialects: /əi, əu/ [3i, əi; 3u, əu] & [9i, ti, ti; xu, vu, ou, ou, ou] (although, realizations with central first elements certainly occur even in other accents, including the Asian ones). Arguably, such possible combinations are not used systematically.

Our regionational accents, but surely also the actual dialects which substantially determine them, together with additional characteristics, whether personal or mediatic and neutral, certainly also have more or less frequent occurrences of the two official diphthongs, /ai, au/.

However, especially for the dialects, most dialectologists and phonemicists have difficulty in admitting such occurrences, or even their actual existence, because both transliterations, like *ay* & *aw* (which are legitimate and much more straightforward than something like *ai* & *au*), and 'phonemic transcriptions', like '/aj, aw/', lead them not to believe that those are *true* diphthongs, and *not* mere sequences like /VC/!

13.21. We do know that our regionational accents systematically drop unstressed short vowels, especially /i, u/. They may be in initial syllables, /#CVC-/, or in medial ones, /-(C)CVC(C)-/, or at the end of words, /-CCV<sup>#</sup>/. In /#CVC-/, /#C/ may also be /?/ (often substituting /q/).

Thus, when /#CVC-/ becomes /#CC-/, our accents may insert a vowel, mostly /i/, producing either /#?iVC-/ or /#CiC-/. If the first /C/ is a sonant, /m, n,  $\mathfrak{s}$ , l/, or a (front) continuous, /f,  $\theta$ ,  $\delta$ , s, z,  $\mathfrak{s}$ , z,  $\mathfrak{f}$ , z/, it can become intense, /C/.

Sometimes, the whole first syllable can be dropped entirely, /#ØC/. This can happen in Maghreb accents; but they may also accept /#CC-/ structures, if the clusters produced are easily pronounceable (for native speakers), even with two stops, /#KK-/.

When (final) /- $CCV^{\#}$ / becomes /- $CC\emptyset^{\#}$ /, the same mechanism produces either /- $CiC^{\#}$ / or /- $CCi^{\#}$ / (always with /i/ [i, I, 1, 9, e, 9, \*I, \*I] &c (notice that here [\*V] refers to darkened timbres), as preferred timbres, but also with /u/ [u,  $\upsilon$ ,  $\omega$ ,  $\sigma$ ,  $\sigma$ , v,  $\vartheta$ ] &c, or, more rarely, /a/ [a, a, v,  $\vartheta$ , \*x, \* $\Lambda$ ] &c).

The different accents may certainly prefer different timbres, often aiming at matching the preceding vowel timbres. Generally, the following consonants favor |a|:  $/\mu$ ,  $\mu$ ;  $\hbar$ ,  $\xi$ ; h/, while  $/\xi$ , d, s, z/ and /q; b, f, m, w/ favor /u/. The Levant and Is-rael prefer /i/ (or /u/ if preceded by /u/).

This works, unless the stressed vowel before it is /a/, giving /-'aCaC#/, more typical of Asian accents, or /-'aCC(a)#/, more rarely, but typical of northern Egypt (Cairo). The same principle of vowel harmony also works with the other vowels, as well, giving /-'iCC(i)#/ and /-'uCC(u)#/ (all three becoming /-VCC#/), unless a word follows immediately after. However, /i/ (with its possible realizations) remains the favorite choice.

13.22. Combining words in phrases, we can produce clusters of three /C/, ie /-VC#CCV-/ or /-VCC#CV-/. In this case, the Asian accents produce /-VCiCCV-/, while Egypt (Cairo) prefers /-VCCiCV-/. Clusters of four consonants, /-VCCCCV-/, become /-VCC#CCV-/. Instead, in the Maghreb, those clusters are quite normal, even as /-VCCC#C-V/ or /V-C#CCC-V/, in addition to /V-CC#CC-V/.

Usually, in the whole Maghreb, words with sequences like /CCVCV/ change into /CVCCV/, while, those with /CCVCCV/ do not change. Words with sequences like /CVCVCV/ generally change into /CCVCV/, which may remain so or change into /CVCCV/. Words with sequences like /CVCVCCV/ or /CCVCCV/ do not change.

In northern Algeria, words with sequences like /CVCCVCV/, where /-CC-/ are different consonants (ie '/-CC-/'), assimilate them into a geminate ([-CC-], or a long consonant, [-C:-]), while words with sequences like /-CC-/, where the second consonant is a sonant, /C//, lengthen the first consonant, producing [-C:/-].

#### **Observations about Arabic vowels**

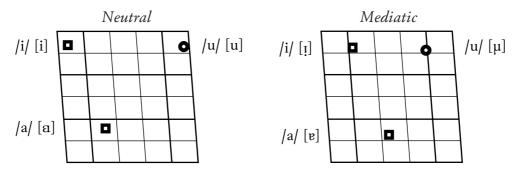
13.23. Having to deal with 'dialect' variants and especially true 'regionational accents', it is not only important, but absolutely necessary, to carefully observe what follows about Arabic vowels.

The first quadrilateral of fig 5.9, although too simple to be really useful, somehow shows what is currently possible to present, following the official principles. It averages out what can be found both auditorily and acoustically for the main realizations of the Arabic vowels. But it does not consider all the facts, as one would legitimally expect, instead.

In fact, fig 13.6 (derived, by simplification, from our fig 6.1, for neutral Arabic pronunciation, and from our fig 12.1.1, for mediatic Arabic pronunciation) shows that there are at least these two realities about Arabic vowels.

It is true that fig 5.9 somehow resembles our (simplified) neutral vocogram. But, of course, things are not so simple if we actually intend to present real facts, both scientifically and honestly. First of all, these figures do not show at all the fundamental taxophones, which must not be ignored, absolutely (and which, in a very small and vague way are 'presented' as in the third quadrilateral, which we added).

fig 13.6. Basic vowel settings.



13.24. Furthermore, as we will see in this chapter, there are so many further things which have to be shown for the accents (obviously also derived from the 'dialects'). Otherwise, it would be a definitely useless task trying to describe such things without accurate vocograms, but simply using the (clearly) insufficient *offIPA* symbols, or, perhaps worse, only relying on even poorer *transliteration* devices.

We will also have to resort to some *paraphonic* structurings and figures, to satisfactorily present the complex reality of the accents which we want to describe. Otherwise, it would be much better... to go fishing. Therefore, let us have an even quick look at the vocograms (already seen) in fig 6.1 and fig 12.1.1, where the necessary taxophones are indicated (in a more reliable way than in the third quadrilateral added in fig 5.9).

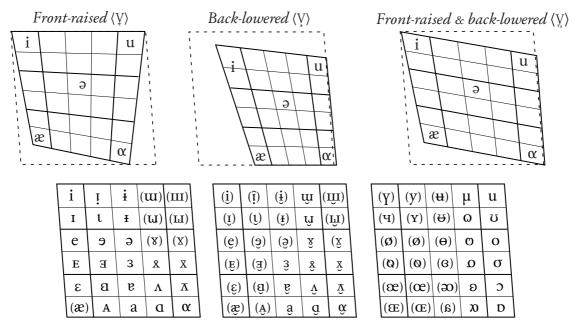
For the time being, and for our purpose here, we will not consider the other vocograms provided in G 6 and G 12 (and, hopefully, already familiar to all of us).

13.25. As far as the vowels are concerned, the ancient grammarians talked about  $\gamma im\bar{a}lah$  (ie '-ah'), a sort of vowel shift towards a front and raised position, regarding /a, a:/, which, exceeding the position of normal [a], tended to be realized even further than that, thus, covering areas in the vocogram, mainly upper ones, which so many other languages have (and had).

In fact, nowadays, in different 'dialects' and accents, we can certainly happen to find  $[\exists, \exists]$ , or also  $[\epsilon, \epsilon, e]$ , or even  $[\iota, \imath, i]$  (also  $[\iota\exists]$ , in Maltese, which has become an independent language, that 'experts' do not consider to be a 'dialect' of Arabic any more).

Those are different progressive stages, which present-day 'dialects' do have in their systems. It is a paraphonic structuring, which we show in fig 13.7.1 *front*-

fig 13.7.1. Two fundamental *imālah* settings governing the treatment of the Arabic vocalic taxophones, especially in Asian Arabic, followed by a milder combined one, and our two *canIPA* actual vocograms (bottom), with the intermediate lip positions, too.



*-raised* setting). The areas affected by this phenomenon are, mostly, the Levant (except its lower part, generally), and Tunisia. In Iraq (including northern Iraq and northern Syria) and generally in Palestine and Israel (with all its African areas in Egypt, see fig 13.5), often the change is mostly caused by the (synchronic or even diachronic) presence of /i, i:, j/ in dialect words or of the grammeme *-ah* (especially in the accents described in (b 14), which appears on our vocograms as  $/_aa^{#}/$ .

13.26. Unfortunately, many 'experts on Arabic dialectology' still consider the very many and different 'variants of Arabic' as if they were really simple internal subdivisions, that do not prevent actual communication.

However, things are quite different. But this may be due to an excessive form of 'respect' for a language, which has many different spoken variants with no writing systems of their own. In case, they are forced in using the traditional Arabic alphabet, which is highly unsatisfactory (even for Arabic itself, to be frank, but, please, do not... lapidate us for this declaration).

In fact, all those 'Arabic dialects' are not simply partially different, but are only partially understandable mainly between bordering areas. Their situation is, in fact, not very different from that of the Romance languages derived from Latin: Italian, Spanish, Catalan, Galician, Portuguese, French, and the Romance languages spoken in southern France, Switzerland and Belgium, not forgetting about Romanian and Moldovan (now isolated, in eastern Europe).

Instead, for English, the situation is less problematic. In fact, even if there are some tiny grammatical (and lexical) differences, native speakers can easily understand each others, whether they happen to be from the States, Canada, Ireland, Wales, Scotland, England, Australia, New Zealand, or South Africa.

13.27. As it is easy to guess from the actual taxophones of /a, a:/ (and /i, i:/), there is an opposite paraphonic setting for the vowels, which produces a number of further taxophones, as already seen in the vocograms of G 6 & G 12. Thus, fig 13.7.1 shows it, so that it may be possible to compare the two opposite situational paraphonic settings (together with the 'normal' situation offered by our real vocograms, shown below them).

Of course, this second setting is generally caused by /q/ and /C/ (ie the co--articules: /t, d, s, z/). Arguably, today, even from a practical scientific point of view, it is more convenient to join all this 'mechanism' as we have already done in G 6 and G 12, accurately placing the taxophones.

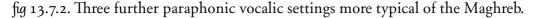
However, the effect of the second paraphonic setting, in addition to neutral and mediatic Arabic pronunciations, is strongest in the uppermost areas of Asian Arabic, *ie* the Levant, Iraq, including the North, and the Gulf area. Also Egypt and Libya have it, as a propagation to Africa.

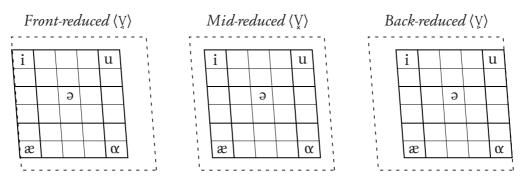
Arguably, contrary to the effect of the first paraphonic (front-raised) setting, this one, the *back-lowered*, causes the use of some of the following vocoids (mainly, but not only, long). Thus, we may find the following sets (from lighter to broader):  $[\alpha; \alpha; q:]$   $[\Lambda; \Lambda; \pi; \pi; \pi; g:]$   $[\mathfrak{d}; \mathfrak{o}; \mathfrak{o$ 

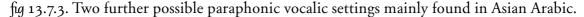
13.28. Concerning the Maghreb, we have to introduce another kind of paraphonic setting, which helps to explain why the Arabic spoken in Algeria (with a *mid-reduced* setting), but even more so the one spoken in Morocco (with a *back-reduced* setting, in addition to the use of /a/), is generally judged to be incomprehensible to other (even if 'native') speakers.

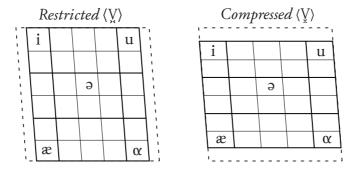
In fact (due to the Berber substratum, also shown in fig 13.7.3), the real space reserved to the vocoids is generally limited to the areas shown in the vocograms. In addition, some speakers in Tunisia may have a further setting, the *front-reduced* one, which can add an effect similar to the *front-raised* one (seen in fig 13.7.1).

Perhaps, in the Levant (at least) a further paraphonic setting (with three partially different structurings) is part of the accent, which other Arabic speakers can (more or less easily) detect, also by the presence of the additional phoneme  $|\bar{\nu}|$ : the *restricted* one (also the *mid-reduced* or *compressed* ones are possible).









13.29. Furthermore, in comparison with official Arabic, its different variants tend to shorten the long vowels, when they occur in checked syllables, even if stressed, especially in Egypt. So, although with fluctuations, our regionational accents may shorten them, more frequently, or keep them long or rather half-long, as oftener in Israel and Palestine.

In addition, unstressed (official) long vowels are currently shortened, especially in word-final position (except in Yemen and southern parts of the Peninsula, where they are half-long). However, if pronominal or negative suffixes are added, their 'original length' is recovered, including consequent possible stress shifts.

Also in syllables occurring before the stressed one, the long vowels are frequently kept (mostly as half-long) in many 'Asian' accents.

As for the diphthongs /ai, au/, most regionational accents usually change them into /e:, o:/, but with fluctuations, often keeping them, also depending on syllable structures and word-formation rules with suffixes. All this, of course, without excluding individual 'choices', which can certainly make 'dialectal rules' unreliable, if not unpredictable.

#### How to call and classify the different pronunciations of Arabic

13.30. We know quite well that different native speakers of Arabic certainly cannot be said to speak exactly 'the same language', because they also have very many grammatical and lexical differences, in addition to partially different phonemic systems.

However, we do *not* intend to describe the Arabic *dialects*, not even for only their exact pronunciation characteristics, because that would also involve several different grammar and lexicon peculiarities. Our clear intention is to merely describe, as best as possible, the real pronunciations, which can be heard when listening to Arabic speakers talking with other Arabic speakers from different nations, including foreign users of Arabic.

Of course, there will be similarities and differences, more or less evident, all of which constitute what we can safly call *accents* of Arabic. Certainly, not as simply as with English accents, but something more like the situation of the Romance languages, which also have many internal phonemic, grammatical, and lexical differences, as well.

Therefore, for the main and more representative pronunciation koinés of Arabic, we do not hesitate to also present their *mediatic accents*, which are not exactly the pronunciation of the various real dialects, but the results that we reached by analizing a rich number of recorded (video)sound files, also found in the Net.

Naturally, almost by definition, the mediatic accents include more or less numerous possibilities, 'choosing' among local (somehow) attenuated characteristics, including some belonging to either neutral or mediatic official (or written, or 'literary') Arabic.

13.31. Thus, we will provide the phonopses of five main Arabic national koinés, for their mediatic accent: the Levant, the Gulf, Egypt, Algeria, and Morocco. Arguably, these mediatic accents are more or less influenced, although unsystematically, by the neutral pronunciation of 'official' Arabic, especially for some consonants and /ai, au/.

Afterwards, 32 of more localizable accents will be shown (cf fig 13.1-5). In addition, in (b 19 we will provide the phonopses of Algerian Kabyle Berber, and of Maltese, for interesting comparisons, and three diachronic phonopses, as well: Ancient Egyptian, Proto-Semitic, Old Arabic.

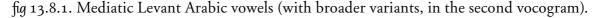
Let us start from the Levant koiné, which results to be one of the less problematic for communication between different (native) speakers.

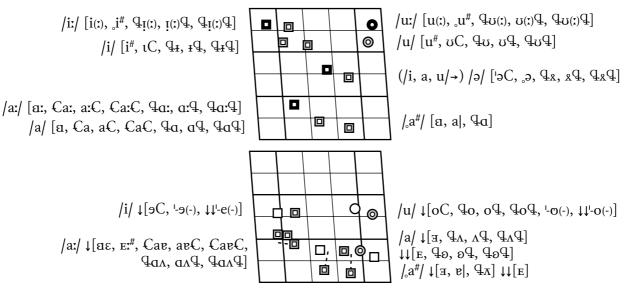
#### Levant mediatic accent

13.32. *Mediatic Levantine Arabic* has a fourth short vowel, ie  $|\partial|$ , in addition to |i, a, u| and the three long ones, |ix, ax, ux|, with the taxophones shown in the first vocogram of fig 13.8.1 (and broader variants, in the second vocogram).

The long vowels are phonetically short when unstressed, but keep their original timbres; however, /i, a, u/ often neutralize, becoming /ə/ even in stressed syllables (either free or checked), furthermore, in final unstressed syllables, they are dropped (occasionally, maintained as an intentional choice). So, more or less frequently, we also have: /i, a, u/  $\rightarrow$  /ə/ [ə] (also in stressed syllables, either free or checked, and with [x] in contact with [4], ie /t, đ, s, z/ including /q/, of course). In contact with [4] ie /ħ,  $\frac{c}{h}$  ([ħ,  $\frac{c}{h}$ ] or [H,  $\frac{c}{h}$ ]), /a(:)/ may also be [a(:)], in addition to [a(:)]:

- |i| [t, i<sup>#</sup>, tC,  $\downarrow$ sC,  $\P$ <sub>H</sub>,  $_{H}$  $\P$ ], |ii'| [i(i),  $_{\circ}i^{#}$ ,  $\P$ <sub>I</sub>(i), i(i) $\P$ ],
- |a|  $[a, \downarrow E; a^{\#}, \downarrow E^{\#}, a|]$   $[Ca, aC, \downarrow \Lambda]$   $[a, aQ, \downarrow B]$   $[a, a^{\ddagger}],$
- |a:| [a:,  $\downarrow$ aɛ,  $\downarrow$ eː<sup>#</sup>] [Ca:, a:C, fa:, a:f, fa:, a:f,  $\downarrow$ aɐ] [4a:, a:4,  $\downarrow$ aʌ] [fa:, a:f],
- |u| [ $\upsilon$ ,  $u^{\#}$ ,  $\upsilon$ C,  $\downarrow$ oC] [ $q\upsilon$ ,  $\upsilon$ q,  $\downarrow$ o], |u:/ [u(:),  ${}_{u}{}^{\#}$ ,  $q\upsilon$ (:),  $\upsilon$ (:)q].





13.33. Usually, neutral Arabic /ai, au/  $\rightarrow$  /ei, ou/ [eI, ov], more systematically in checked syllables, realized as narrow diphthongs mainly in Lebanon. Certainly, also [e:, o:] and the other taxophones shown in fig 13.8.2 occur frequently. However, we also have cases where /ai, au/ remain exactly /ai, au/.

So, also for this variant (and accent), it is necessary not to pretend that /ai, au/ absolutely change systematically into /ei, ou/. Thus, in addition to some other cases of /ai, au/ (as in lofty words), we mostly have: /ai<sup>#</sup>, au<sup>#</sup>/, /ajj, aij, aww, auw/, /aiC-, aiC-/ (*ay*, *aw*, *ayy*, *aww*, *ayC*, *awC*), with /a/ [a-, a-, ɑ] regularly combined with [-i<sup>#</sup>, -u<sup>#</sup>], or [ij, jj; uw, ww], or [-1-, ↓-9-, -t-; -ʊ-, ↓-0-] (as shown above for the taxophones).

It must be added that, in the mediatic accent, some speakers or words may 'pre-

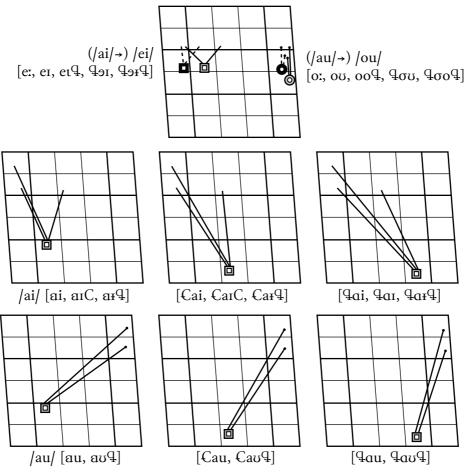


fig 13.8.2. Mediatic Levant Arabic diphthongs:  $(/ai/\rightarrow)/ei/ \& (/au/\rightarrow)/ou/$ , and /ai, au/ (with tax-ophones).

fer' the wider version of the diphthongs, just shown (with lower 1<sup>st</sup> elements and higher 2<sup>nd</sup> ones), also independently from actual contexts.

We can also have /a:i, a:u/ (with the same combinatory taxophones), generally corresponding to official Arabic words with a dropped consonant – as, for instance, /a:?i, a:hu/.

The short vowels in final unstressed position,  $/V^{\#}$ , may be systematically dropped, unless for maintaining possible semantic or useful grammatical distinctions, but –of course– always with (more or less unpredictable) fluctuations, also due to speech rate.

The same usually happens to short vowels in unstressed free syllables. In fact, they are generally dropped, unless this may cause unpronounceable consonant clusters.

13.34. It is important to realize that, also in stressed syllables (either free or checked), /i, a, u/ may be kept distinct with their corresponding taxophones, or they may be merged into  $|\partial|$ .

This can happen to all of them, giving /i, a,  $u/\rightarrow/\partial/$ ; or only to /i,  $u/\rightarrow/\partial/$ , but /a/. They may usually be realized as [9], but [0] generally in contact with /m, b, w; q, t, d|z, s; h, s/ as opposed to /a/ [3] (often [x] in contact with /q, t, d|z, s/).

However, these partially different timbres may also occur for /i, a,  $u/\rightarrow |\partial|$ , not

always clearly distinctly. In fact, the exact realization of  $|\partial|$  may be  $[\partial]$  or  $[\partial, \exists, \exists]$ , or  $[a, v, \Lambda]$  if in contact with  $[\P]$ , ie with  $|q| \& [\mathbb{C}]$  (ie  $|\mathfrak{t}, \mathfrak{d}, \mathfrak{s}, \mathbf{z}|$ ).

Sequences of  $/C \Rightarrow C/$  (where one /C/ is either a sonant,  $[N[, ie /m, n; f; 1/, or a front continuant, ie / f, <math>\theta$ ,  $\delta$ , s, z, s, z,  $\int$ ,  $\frac{1}{3}$ ), it can become [C] (ie intense). Thus, sequences like [#,  $\frac{1}{3}$ V/AC] frequently become [#, MC].

Of course, all these possible realizations undergo social <sup>c/m</sup> individual fluctuations, also depending on words and speech rate. This includes the treatment of /<sup>#</sup>CC, CC<sup>#</sup>, CCC, CCCC/ sequences, as well. Currently, /<sup>#</sup>CVCVCV(C)(V)/ sequences readily become either /CCVCV-/ or /CVCCV-/.

13.35. As for the *consonants* (fig 13.8.3), in addition to homorganic *n*,  $[n \equiv C]$ , and gemination, including /jj, ww, hh/, we find /q/ [?] (but  $\uparrow$ [q, q] in lofty words, or in more careful speech, also northern rural [q, q], central rural [k, k], rural Palestinian [p], nomadic [g, g]); /?/ [?] (also /V?/ [V·], and  $\downarrow$ [h,  $\emptyset$ ]).

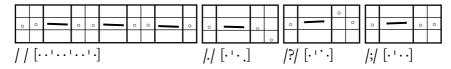
/ʒ/ [ʒ] (but [dʒ] mainly Jordanian, and rural or nomadic); / $\theta$ ,  $\partial$ / [t, d]  $\uparrow$ [s, z] (but, rural or nomadic [ $\theta$ ,  $\partial$ ]); /z/ [d] ([z] currently urban, but [ $\partial$ ] rural or nomadic); / $\kappa$ , p/ [ $\kappa$ , p]; / $\hbar$ ,  $\varsigma$ / [ $\hbar$ ,  $\varsigma$ ] or [ $\mu$ ,  $\varsigma$ ]); /h/ [h,  $\iota^2$ ]; / $\epsilon$ / [ $\epsilon$ , ' $\star$ V, 'V $\epsilon$ <sup>#</sup>, 'V $\epsilon$ <sup>#</sup>] (but also [r, r], respectively, if in contact with /i(:), j/; always [ $\epsilon$ ,  $\epsilon$ ] when in contact with [ $\mathcal{C}$ ]).

In addition:  $/k/ [t_j] & /q/ [d_j]$  (rural; but, followed by /i(x), a(x)/,  $'/k/' \rightarrow [t_j, \downarrow t_s] & '/q/' \rightarrow [d_j, \downarrow d_z]$  nomadic). More co-articules than in neutral Arabic are used, especially /m, b, w, r,  $\frac{1}{2}$ . The *intonation* patterns are shown in fig 13.8.4.

fig 13.8.3. General consonant chart, including taxophones and xenophones (sociophonic, too).

m [ŋ]	[n]	[#] n [#	[ŋ] [	[ɲ]	[ŋ] [ŋ] [ː	ы] [и]		
[p] b	t d	ŧđ	[tʃd	-1	[k g] k [g][q	] [q]		5
f [v]	[θð] s z	<del>s</del> z [ð]	$\int 3$	5] 5			ħ	[h] h
		[r r]f	<b>¥</b> ]	J	W	ΚŖ	Ŧ	[11] 11
	[1]	1 1						

fig 13.8.4. Fundamental intonation patterns.



# Saudi Arabia mediatic accent

13.36. fig 13.9.1-3 show the typical vowels and diphthongs, while fig 13.9.4 gives the consonants, and fig 13.9.5 shows the intonation patterns.

Such figures should be attentively inspected, with no hurry, and compared with others, especially with fig 14.14.

fig 13.9.1. Mediatic Saudi Arabic vowels (with broader variants, in the second vocogram).

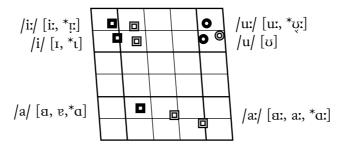


fig 13.9.2. Mediatic Saudi Arabic diphthongs:  $(|ai| \rightarrow) |ei| \ll (|au| \rightarrow) |ou|$ .

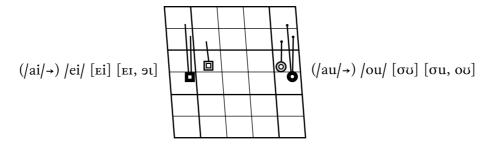
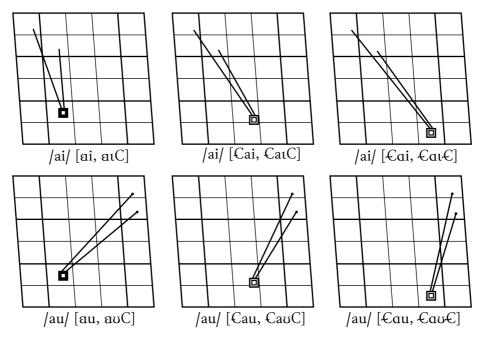


fig 13.9.3. Mediatic Saudi Arabic diphthongs: /ai, au/



m [m] (p) b	[n] t d	[#] n ŧđ	[ʉ] [ť	[ҟ]	$ \begin{bmatrix} [\eta] & [\aleph] & [\aleph] \\ k & (q) & (q) \end{bmatrix} $	5
f (v)	$\thetas\deltaz$	ક ð		σz ∫ i	W	ե ⊊[հ]ն
	[1]	1	f[f]	J	к к К	1 [11] 11

fig 13.9.4. General consonant chart, including taxophones and xenophones (sociophonic, too).

fig 13.9.5. Fundamental *intonation* patterns.

												٦			0					
0			0	0		0	0	0	0				0			0	0		0	0
											0	,								
11	[•	• • • •	•••		]				<i> </i> .	′ [· ']			?	· [	]		;	/ [· · · ·	]	

# Gulf mediatic accent

fig 13.10.1. Mediatic Gulf Arabic vowels (with broader wariants, in the second vocogram).

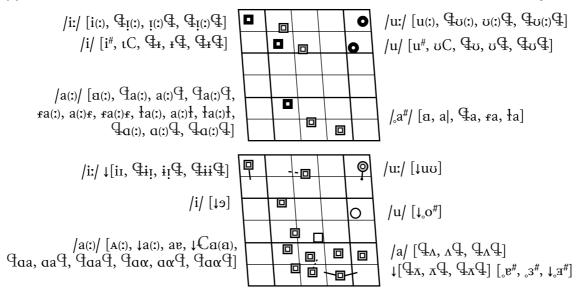
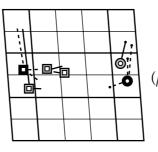


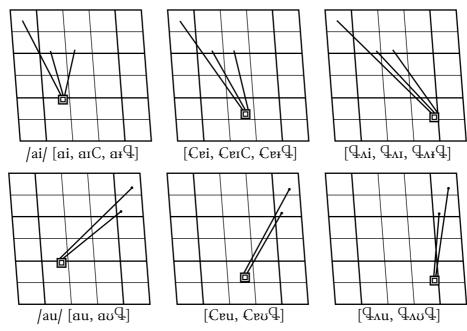
fig 13.10.2. Mediatic Gulf Arabic diphthongs: (/ai/ $\rightarrow$ ) /ei/ & (/au/ $\rightarrow$ ) /ou/.

(/ai/→) /ei/ [ee] [eэ, ез, ез, еі<sup>#</sup>, Çei, eiÇ, ÇeiÇ, दәэ, эәद]



 $(/au/ {\scriptstyle \rightarrow}) \ /ou/ \ [\sigma\sigma] \ [\sigma {\scriptstyle 0}, \ \sigma {\scriptstyle 0}, \ \sigma {\scriptstyle 0}, \ o {\scriptstyle 0}]$ 

fig 13.10.3. Mediatic Gulf Arabic diphthongs: /ai, au/



13.36. *Gulf Arabic* has three short and three long vowels (cf fig 13.10.1), with the following conventions for their taxophones: [ $\P$ ] in contact with uvular, uvularized, or pharyngeal consonants (ie /q,  $\kappa$ ,  $\kappa$ ;  $\mathfrak{t}$ ,  $\mathfrak{s}$ ,  $\mathfrak{z}$ ;  $\hbar$ ,  $\mathfrak{s}/$ ); [ $\mathfrak{C}$ ] in contact with uvularized consonants (ie / $\mathfrak{t}$ ,  $\mathfrak{s}$ ,  $\mathfrak{z}/$ ).

And: [4] in contact with either uvular or pharyngeal consonants (ie /q,  $\kappa$ ,  $\kappa$ ;  $\hbar$ ,  $\mathfrak{s}$ /, including /\mathfrak{s}/[\mathfrak{s}, \mathfrak{k}] and [ $\mathfrak{t}$ ]); [-C] only before uvularized consonants (ie /- $\mathfrak{t}$ , - $\mathfrak{d}$ , - $\mathfrak{s}$ , - $\mathfrak{z}$ /); [C-] only after uvularized consonants (ie / $\mathfrak{t}$ -,  $\mathfrak{d}$ -,  $\mathfrak{s}$ -,  $\mathfrak{z}$ -/); [C] in contact with postalveopalatal consonants (ie / $\mathfrak{f}$ ,  $\mathfrak{z}$ ,  $\mathfrak{t}$ /[ $\mathfrak{f}$ ,  $\mathfrak{t}$ ]).

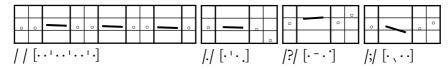
This is also true of |a| + |j, jj; w, ww| + |V|, or of |a| + |i, u| (ie the diphthongs |ai, au| + |#, C|, when they are kept, as in lofty words, cf fig 13.10.3). Otherwise, more often, they have become |ei, ou| (more 'colloquial' diphthongs, cf fig 13.10.2). Broader variants of |i(:), a(:), u(:)|, are given in the second vocogram of fig 13.10.1.

13.37. As for the *consonants* (cf fig 13.10.3), we notice:  $[n \equiv C]$ ; / $\S$ / is generally [ $\S$ ]; /g/ [g, g] may substitute /q/, eg gahwah ['gafiwa, -afi] 'coffee', except in lofty words, or in more careful speech, where /q/ [q, q] are preserved (contrary to more local accents, cf § 14.8-11, for Kuwait, Bahrain, Qatar, and the Emirates, or the 'general local dialect', § 17.3), and /z/ [dz]. In addition, in contact with 'front' vowels or in final position, /k/ is /t// [t/g], eg čalb ['tfalb] 'dog' (corresponding to neutral kalb ['kalb]), or min fadlič, -ač [mun'fadlutf, -atf] 'please' (said, respectively, to a woman or a man). The main *intonation* patterns are shown in fig 13.10.4.

fig 13.10.4. General consonant chart, including taxophones and xenophones (sociophonic, too).

m [m] [n] [n] [n] [n] [p] b t d ŧ đ	[ҟq]	$      \begin{bmatrix} \eta \end{bmatrix}       \begin{bmatrix} \aleph \end{bmatrix} \begin{bmatrix} \aleph \end{bmatrix} \\ k g       \begin{bmatrix} q \end{bmatrix} (q) $	5
f[v] Øðsz sð	t∫ dʒ ∫		ħ
[æ]æ[rı] 4 [1]	J	w K B	⊊ [h] h

fig 13.10.5. Fundamental *intonation* patterns.



## Egypt mediatic accent

13.38. Egyptian Arabic has eight vowels, both short, /i, a, a, u/, and long, /i:, a:, a:, u:/ (cf fig 13.11.1). In fact, in words with *uvularized* consonants, we find /a/ [a] (and /a:/, with the appropriate taxophones) instead of /a/ [a] and /a:/ [aa]. In addition, with *uvular* consonants, there is phonemic opposition between a /a/ and a /a/ while with *pharyngeal* consonants, we only find /a/.

Nonetheless, although less frequent, they *are* two different phonemes, as shown by a good many minimal pairs, where it is /ɑ/ which 'colors' the syllable, independently from [ $\mathcal{C}$ ]. Thus, with /K, K/, we can find: *kad* /ˈkɑd/ [ˈkɑd] '(he) surprised' and *kad* /ˈkɑd/ [ˈkɑd] 'cheeks', *rāsi* /ˈfɑːsi/ [ˈfɑʌsi] '(my) head', *rāsi* /ˈfɑːsi/

## fig 13.11.1. Mediatic Egypt vowels (including /a, a:/).

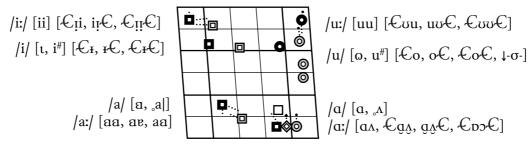
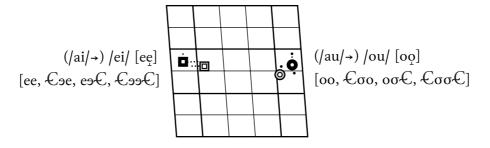
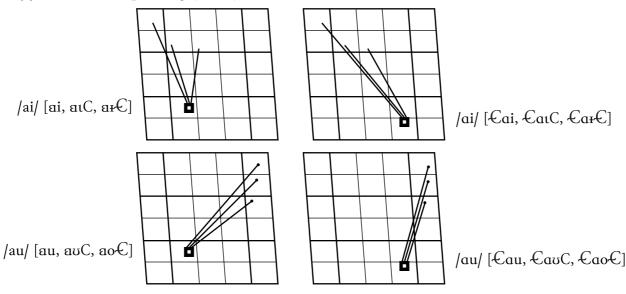


fig 13.11.2. The 'newer' diphthongs /ei, ou/, from /ai, au/.



## fig 13.11.3. The diphthongs /ai, au/.



['raasi] 'balanced'. However, in contact with  $[\mathbb{C}]$ , we often have  $[\mathfrak{g}_{\Lambda}]$  (and  $[\mathfrak{D}_{2}]$  between  $[\mathbb{C}]$ ).

The distribution of the *vowel taxophones* is (with an *asterisk* signaling contact with uvularized, uvular, or pharyngeal consonants;  $# = syllable-final, _= unstressed, _...| = utterance-final unstressed before a pause). Here, we also include /ei, ou/ (mostly monotimbric diphthongs) coming from /ai, au/, shown in fig 13.11.2 /i/ [ı, i#, #*, *#], /ii/ [ii, i#, *#!, 'ei/ [ee, e9*, *9e, *99*], /a/ [a, _a]], /ar/ [aa, aa, aa] (freely), /a/ [a, _A], /a:/ [aa, *a, aa, *\sigma], /a:/ [uu, uu*, *\sigma, *\sigma]. For$ *ay, aw*, mainly occurring in lofty words, we can certainly have /jV, wV/ [jV, wV], but also /ai, au/ when followed by /#, #, C/, of course in addition to 'new' /ei, ou/ in many words.

13.39. As for the *consonants*, besides  $[n \equiv C]$ , we notice what follows (cf fig 13.11.4). Generally,  $|\theta, \delta, \delta, z, q|$  become |t, s; d, z; z, d; g; 2| (though |q| is preserved in lofty words, or in more careful speech; southern Egypt has  $[g\underline{i}]$  for |g|); the rare xenophonemes |p, v, z| occur in loanwords; as in the other Arabic varieties, we find geminates, as well as |hh, hC, Ch|;  $[\kappa, R]$ , but  $|\hbar|$  [H]. Very frequently,  $|\mathfrak{f}^{\sharp}|$  is partially devoiced  $[\mathfrak{g}]$ . In addition, let us notice that it is *velarized*, rather than uvularized, and certainly not pharyngealized (although some speakers may use, quite unsystematically different types of darkening).

The Egyptian mediatic accent presents a peculiar characteristics, opposite to darkening, although more limited. But it is something used, epecially by newsreaders, and felt to be a prestigious (and educated) distinctive Egyptian feature (Cairene, indeed).

In fact, /t, d,  $\mathfrak{t}$ ,  $\mathfrak{d}$ / are somewhat 'palatalized' when followed by /j, i:, i/ (including epenthetic /i/, and, more rarely, also depending on speakers and words, when followed by final /i<sup>#</sup>/, or /ei/, even if monophthongized). Thus, /t, d/ become [tş, dʒ] (prepalatal), while / $\mathfrak{t}$ ,  $\mathfrak{d}$ / become [t, d] (dental), remaining, however, different and still in phonemic opposition.

It must be added that, if  $[t_s, d_z]$  may be considered as being prestigious and more educated, there is another possibility, which, on the contrary, is stigmatized, because it is felt to be rather uneducated and more typical of women, who go too far, by 'palatalizing' too much and using  $[t_s, d_z]$  (still against / $t_s$ ,  $d_r$ / [t, d]).

Let us also add that  $/\hbar$ ,  $\frac{1}{2}$  [h,  $\frac{1}{2}$ ] (prepharyngeal), passing to a vowel or from a vowel, most frequently, instead of using more retacted vocalic taxophones, gener-

$\hat{\mathbf{C}}$	1 . 1 .	· 1 1·	. 1	1 1	/ • 1	•
$\frac{1}{10}$	tal conconant chart	· including	r tovonhones on	d vononhonoc	(cocion)	honic tool
	ral consonant chart	, meiuum	2 Land Diffuncts and		13001001	10110, 1007
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	m	[ŋ]	[n]	[#] n	[Ħ]	[ŋ]	[ɲ] [ŋ	j] [	ŋ] [1	N] [N]	
(p	) b		t d	ŧđ	Γь	. 1.1	[k ç	]] k	g (q	) (q)	5
					נפ	ş dz]					
	f	(v)	$(\theta) s (\delta) z$	(ð) s z			∫( <u>3</u> )				հ
							j	[պ]	W		ና [h] հ
				r [r]	] £ [¥]					ΚŖ	
			[1]	1	[1]						

ally, insert a provelar semiapproximant, as shown in fig 13.11.5. The main *intonation* patterns are shown in fig 13.11.6.

fig 13.11.5. The provelar semiapproximant, [ $\mu$ ], and combinations with /s,  $\hbar$ / [s,  $\mu$ ].

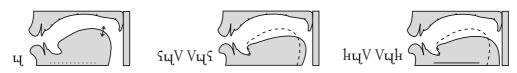
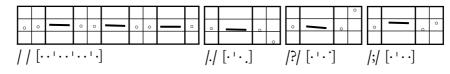


fig 13.11.6. Fundamental *intonation* patterns.



# Algeria mediatic accent

fig 13.12.1. The vowels, including  $|\bar{\nu}|$ .

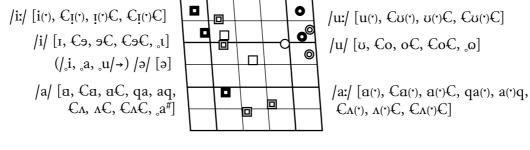
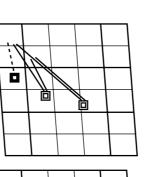
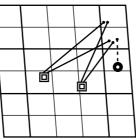


fig 13.12.2 The diphthongs /ei, ou/.

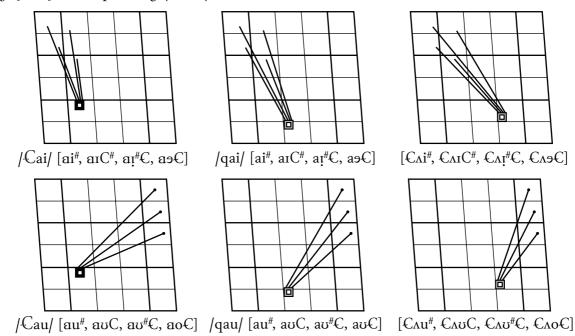
(/ai/→) /ei/ [ee, ei, эi, эι€, €xi, €xi€]





(/au/→) /ou/ [оо, оυ, ви, во€, €хи, €хо€]

fig 13.11.3. The diphthongs /ai, au/.



13.40. *Algerian Arabic*, in addition to /i, a, u/ and /i:, a:, u:/ (generally realized as half-long, instead of fully long, in the expected contexts, cf fig 13.12.1), also has  $|\partial/[\partial]$ , which is derived from the neutralization of many unstressed /i, a, u/.

fig 13.12.2 shows /ei, ou/ derived from /ai, au/ (which, when kept unaltered, are given in fig 13.12.3).

As for the *consonants*, besides  $[n \equiv C]$  (cf fig 13.12.4), let us notice that, instead of uvularized consonants, [C], we mostly have velarized ones, [C]: mainly [t, s] (for /t, s/, /d, z/ [d]) and [t, t; t]. The main *intonation* patterns are shown in fig 13.12.5.

fig 13.12.4. General consonant chart, including taxophones and xenophones (sociophonic, too).

<b>H</b> [m] [n] [m]	] n [ɲ] [ŋ] [ŋ] [N] [N]	
[p] b t d ŧ đ	- 5- 5 - 1- 1	5
	[tʃ] ʤ	
f[v] szs	∑ [2] [X ℝ] X ℝ [μ]	1.0
	j w [kb]	ı] h
<b>c</b> h	$\mathbf{r} \begin{bmatrix} \mathbf{r} \end{bmatrix} \mathbf{t} \begin{bmatrix} \mathbf{r} \end{bmatrix}$	

fig 13.12.5. Fundamental *intonation* patterns.

								I٢							0		Γ				0
0	0		0	0	0	0	0	IΓ	0				0			0	(	>		0	
											0	0									
//	[•	••••	•••	<b>!</b>				1	1./	[.'.]			?	' [· ' · ·	]		<i> </i> ;	/	[]	]	

#### Morocco mediatic accent

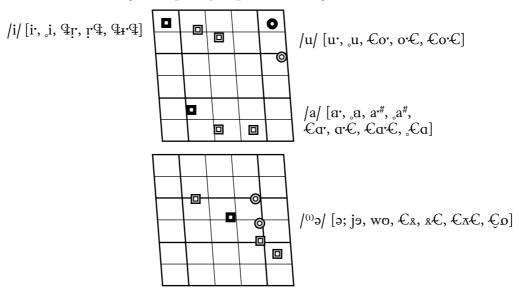
13.41. *Moroccan Arabic* is described in different ways by different scholars (and is actually pronounced in different ways by various speakers); however, by normalizing things, it can be said to have *four* vowel phonemes, in its mediatic version.

They are half-long when stressed. The variants occurring in contact with darkening consonants are also shown. These are: the uvulars, [9], ie /q;  $\kappa$ ,  $\kappa$ /, and the co-articules, which are *velarized*, [C], ie [ $\mathfrak{t}$ ,  $\mathfrak{d}$ ;  $\mathfrak{s}$ ,  $\mathfrak{z}$ ;  $\mathfrak{s}$ ,  $\mathfrak{z}$ ;  $\mathfrak{s}$ ,  $\mathfrak{z}$ ;  $\mathfrak{t}$ ] (usually, or really uvularized, [C], only by intentional choices). Besides, as far as /i/ is concerned, they also include the prepharyngeal consonants, [C], ie [ $\mathfrak{h}$ ,  $\mathfrak{s}$ ](more typical than true pharyngeal ones, [C], [ $\mathfrak{h}$ ,  $\mathfrak{s}$ ]), ie [ $\mathfrak{P}$ ].

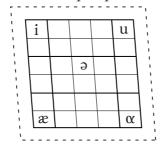
Therefore, we also have the additional 'unstable' phoneme,  $|\partial|$  (generally, occurring in word-internal position). It is used for morphonologic variations; and it is always short, even when stressed.

Let us notice that, when unstressed,  $|\partial|$  is short, or even extra-short:  $[\partial, \partial]$ , or  $[\partial, \partial]$ , in contact with /j/;  $[\partial, \partial]$  in contact with /w/; [a, a] in contact with uvular ([9], ie /q;  $\kappa$ ,  $\kappa/$ ) or [C], actually [C], ie [t, d; s, z; t, t] (or [ $\uparrow$ C]). Lastly, we have

fig 13.13.1. The vowels, including the typical paraphonic setting.



*Morocco mid-reduced paraphonic setting*  $\langle V \rangle$ 



[ $\mathfrak{o}$ ] in contact with /qw,  $\chi$ w,  $\mathfrak{w}$ w/ [ $\hat{q}$ ,  $\hat{\kappa}$ ,  $\hat{\kappa}$ ], and [ $\pi$ ] *between* darkening consonants.

But, for stressed /ə/, we can also have realizations corresponding to those of the other three phonemes, though always short: [i, i; a, a, a; u, o]. So, we could even think of establishing a complete series with three 'unstable' vowels, ['V,  $_{\circ}$ V], in addition to the one with three 'stable' vowels, ['V,  $_{\circ}$ V]. Word-initial vowels are preceded by /?/.

At the bottom of fig 13.13.1, we show the typical Moroccan paraphonic vowel setting, which is *reduced*, as can easily be seen. It certainly contibutes to render the Moroccan accent more 'obscure', in addition to the use of /ə/.

The Moroccan dialects generally have /ai, au/  $\rightarrow$  /əi, əu/ ie /əi/ [əi] & [əi, ui, 1i] (& [ii, i:], also coinciding with /i:/ & [i']), and /əu/ [ou] [ou, ou, ou] (& [uu, u:], also coinciding with /u:/ & [u']), cf § 17.5. Thus, sometimes, the Moroccan *accents* can also have some of these realizations, in addition to both 'legitimate' diphthongs /ai, au/ (of high usage, fig 13.13.3) and the two 'newer' mediatic ones, /ei, ou/ (fig 13.13.2), typical of most colloquial variants (but also depending on words and speakers).

As for the consonants, (fig 13.13.3) there is phonemic opposition between sim-

fig 13.13.2. The diphthongs /ei, ou/.

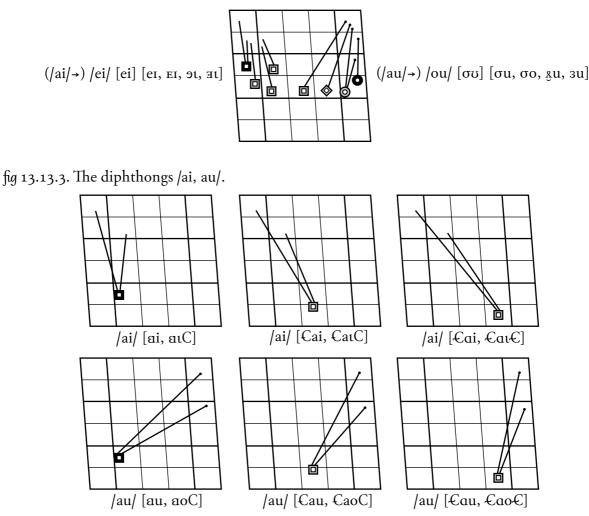
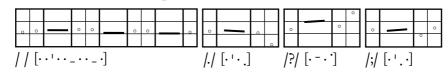


fig 13.13.4. General consonant chart, including taxophones and xenophones (sociophonic, too).

m # [#] [ŋ]	[f] n [f] [n]	ղ] [դ]	.] [ŋ] [ŋ]	[n] [n]	
[p]b b [b]	tdŧđ	[ţ]	[kg] kg [kĝ]	$[q]$ $(q)$ $[\hat{q}]$	5
	$[t_{\Theta}]$				
f [v] f [f]	SZ SZ	<u>ا</u> ع		Х в [Ӽ ӄ]	h [ħ]
	<b>Г</b> 1 <b>Г</b> 1	j	W	[ĸ ĸ][ĸ̂ ŝ]	ና [⊊] [h] h
	r[r] f[] [1] 1 1 [1] 1 1				

fig 13.13.5. Fundamental *intonation* patterns.



# 14.1. 'Regionational' accents: in general

14.1.1. This chapter is dedicated to the description of 32 'regionational' accents, basically derived from the typical usage found in different nations, when people do not use the habitual 'native' pronunciations of their variant of Arabic, generally used in family and with other people from the same areas.

These variants, actually, are usually called 'dialects' of Arabic. In fact, they do not differ only in pronunciation, but also (and, sometimes, even more) in their grammars and mostly in their lexicons. More often than not, for those 'dialects' it is difficult, if not impossible, to guarantee normal linguistic interaction between 'native speakers' from other nations, or even parts of nations (cf fig 13.1-5). Mainly, only speakers from neighboring areas have less difficulty.

14.1.2. As already said, then, we do not even try to describe actual *dialects*, but the *accents* heard from 'native speakers' when they communicate with 'other' Arabs (not to speak about real 'foreigners').

These accents, may also vary with different speakers, depending on how much they actually 'handle' official Arabic. Of course, they are continuously subject to choose and use (mostly unsystematically) sounds and structures from other dialects that they happen to 'know' somewhat better.

Certainly, most speakers may be more or less familiar with the 'Egyptian accent' (mainly that of Cairo), due to the imposing Egyptian cinema and television industries.

However, in addition to Egyptian forms (and from further nations, subjectively believed to be prestigious), even hypercorrections, or wrongly deduced forms, may often appear mainly in the speech of people from rural areas, or smaller towns, or of poorer education.

Let us add that –contrary to neutral Arabic– the article al- (or [-V] l-, often also realized as el- or il- in the dialects and accents), can have its /l/ assimilated even to a following *dorsal non-continuous* contoid, [d<sub>3</sub>, g, g, k, k], because the grammatical function prevails against the articulatory one, by analogy.

14.1.3. Thus, not only stress, but also vowels and consonants, may 'vary' in imitation of both 'correct' and 'wrong' realizations. Let us keep in mind that  $G_{0}$ ,  $G_{0}$ 8, &  $G_{12}$  should be taken into careful consideration, constantly, by completing them with the figures provided in this chapter. We also refer to the phenomenon of 'darkening', typical of most dialects, but not of neutral pronunciation. Therefore, the five mediatic accents (dealt with in Go 13) may be less subject to strong influences. In fact, we did not even touch on the mediatic accent, although they are certainly not fully free from dialectal influences, also depending on speakers and situations and subjects. Here, we cannot possibly evade from dealing with *darkening*.

This section is clearly against the traditional unscientific terminology and concepts about colloquial practice on darkening of consonants and vowels.

It is a fact that in neutral Arabic pronunciation we only find marked vowel taxophones, as shown in fig 6.1, used when in contact with the co-articules, |C| ie  $|\mathfrak{t}$ ,  $\mathfrak{d}$ ,  $\mathfrak{s}$ ,  $\mathfrak{z}/(\mathfrak{and}/\mathfrak{q}/\mathfrak{q})$ , and less intensively with  $/\hbar$ ,  $\mathfrak{s}$ ,  $\mathfrak{s}/(\mathfrak{and}/\mathfrak{s},\mathfrak{t})$ , as explained in § 6.2.

In fact, the really neutral accent of Arabic can only be found among the few true neutral speakers (after adequate training) who do not exceed 1% of the whole population of 'native speakers'. Even in pronunciation recordings, it is not rare to find oscillations between the neutral ( $(G_{12})$  and mediatic ( $(G_{12})$ ) accents, including many an instances of 'regionational' accents ( $(G_{13}-14)$ ).

14.1.4. We cannot possibly accept the highly unsatisfactory (and unscientific) term 'emphasis' applied to the co-articules (cf § 1.3.5). In addition, talking of 'emphasis spread' for different 'dialects' is even more absurd, especially because it is tactlessly described using queer and inadequate expressions like 'leftward/right-ward spread' for a language which is written from right to left.

And when some languages were written vertically, from top to bottom, or boustrophedonly, with alternate lines written from right to left and from left to right?

Of course, expressions like *regressive* and *progressive assimilation* (or, at least, *backward* and *forward assimilation*) are certainly more scientific and even clearer and logical.

14.1.5. A number of studies have been published on this *darkening phenomenon* about different more or less (un)important 'dialects', by different authors and with different results. However, the point is that the various colloquial Arabics (contrary to actual neutral Arabic) do present some kind of this phenomenon.

Thus, both (mainly) coronal contoids and vowels (mostly /a, a:/) are darkened, when in contact with (or near to) the official co-articules ( $|\mathcal{L}|$  ie / $\mathfrak{t}$ ,  $\mathfrak{d}$ ,  $\mathfrak{s}$ ,  $\mathfrak{z}$ /), or non-nasal sonants ([ $\mathfrak{s}$ ,  $\mathfrak{s}$ ;  $\mathfrak{t}$ ]), including, at least, /q/.

In addition, the different 'dialects' can have further 'co-articules', such as /m, b, f/, ie /m, b,  $\frac{1}{2}$ , sometimes, including /k, w/, ie /k, w/ (and even /a, a:/). In current publications, they are vaguely transliterated as m, b, f; k, w, (including a and  $\bar{a}$ ), respectively, with the only aim of motivating the authors' findings, based on more or less limited experiments, also with different results.

It is worthwhile noticing that we also happen to find underdotted (more or less) *offIPA* symbols even between [] or / /.

14.1.6. The problem is that those publications rarely provide accurate phonetic transcriptions, usually with generic *offIPA* symbols, used very vaguely. In fact, such authors are openly interested only in phonemic lucubrations. Let us underline that phonemics is just the functional part of phonetics, certainly not the other way round, as if phonetics (especially articulatory phonetics) were something not scientific and almost of no importance, nor dignity.

What actually this *darkening phenomenon* (alias 'emphasis spread', alas!) tries to demonstrate is that different (experiments on different) 'dialects' present more or less complicated ways of displaying their 'Arabicness' by obscuring the qualities of vocoids and contoids in syllables, words (sometimes including affixes), or whole phrases (prosodically under a given stress pattern).

14.1.7. Obviously, it is not satisfying to simply use of m, b, f; k, w ( $a \approx \bar{a}$ ), also adding other consonants and vowels, or even mixing them into [C, Y], or [C<sup>G</sup>, V<sup>G</sup>] (too often as /C, Y/, or /C<sup>G</sup>, V<sup>G</sup>/, between phonemic slants, instead of []). Such a way of showing things might perhaps be enough for plain phonemic aims. But the whole 'problem' remains still there, with no real (nor definitive) answers.

In fact, as the different publications may show (apart from their partial and insufficient results), there are different usages of darkening in different areas and social environments. They can also change depending on speed or precision of utterance. As already pointed out, such 'deviations' may even appear –unjustly– in specific recordings expressly made for illustrating (neutral) pronunciation.

Although it does not clearly appear from the publications seen, the darkening phenomenon presents several different possibilities, more or less evident. First of all, those authors, who simply insist on speaking of 'pharyngealization' and 'pharyngealized segments', present unreal 'facts', because there are several nuances, both in the intensity and extension of the darkening phenomenon.

14.1.8. In addition, the results hitherto presented might make people think that there are no further possibilities. Instead, by expanding research more extensively, and expecially in a more precise way as far as actual phonetic results are (not merely phonemically), any descriptions will become more useful.

Some authors use even terms as 'epiglottal(ization)', by uselessly and deceivenly referring to the epiglottis, whose only function is to cover the trachea, preventing food from entering it.

They say so as if the epiglottis were a true active organ of speech, instead of simply using (and misusing and abusing) the term *pharynx* (which is one possible real part of the upper and rear articulatory apparatus, rightly matching the epiglottis).

14.1.9. It is true that too many authors (probably hanging on some prophet's words) consider only 'pharyngealization' as the unique possible co-articulation for the darkening effect. But, arguably, there is not only pharyngealization, but several other (even more realistic) possibilities.

First of all, uvularization (cf fig 14.1.1) is certainly much more appropriate, in-

cluding *velarization*, and *labialization*. These last two produce rather 'weaker' results, while *pre-pharyngealization* and actual *pharyngealization* produce 'stronger' effects (the latter more than the former, cf fig 14.1.1).

14.1.10. Furthermore, *labialization* can certainly occur in combination with any of the other possible coarticulations (cf fig 14.1.1). Of course, such combinations produce 'stronger' darkening effects.

On the contrary, in addition to current *labialization* or *velarization*, we can also find simple *semi-velarization* (cf fig 14.1.1 and fig 14.1.2), while even *uvulo-pharyngealization* is also possible (cf fig 14.1.1 and fig 14.1.3), with intermediate darkening effects between the two individual components of its name.

Also *sulcation* may occur (again cf fig 14.1.1 and fig 14.1.4), by which the upper surface of the tongue has lowered front (or mid-dorsum), but raised post-dorsum and lamina (or corona). In addition, we can also find sulcation and uvulo-pharyn-gealization combined (cf fig 14.1.1 and fig 14.1.5).

We can also find *larynx raising* (cf fig 14.1.6.1) <sup>%</sup>*r tense voice* (cf fig 3.4, with other types), both of which add some nuances of darkness.

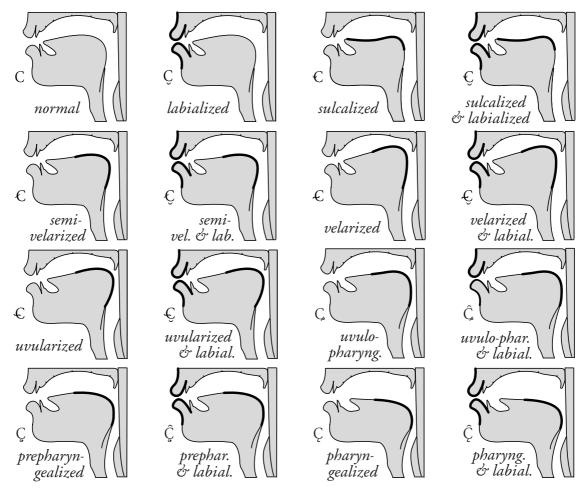


fig 14.1.1. 'Regionational' Arabic accents: different darkening settings (somewhat more intensified than in actual situations, just to show their peculiarities better).

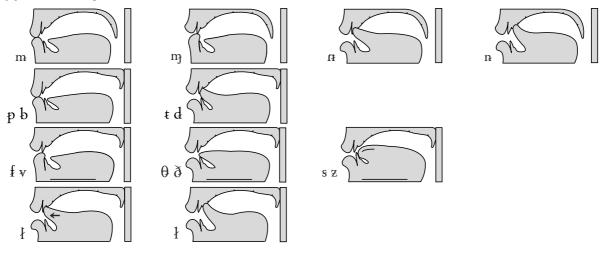


fig 14.1.2. 'Regionational' Arabic accents: semi-velarization.

fig 14.1.3. 'Regionational' Arabic accents: uvulo-pharyngealization.

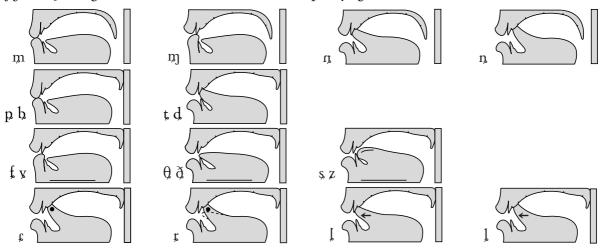
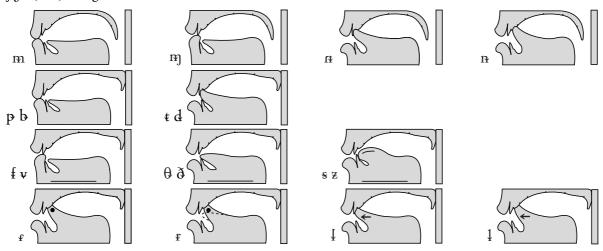


fig 14.1.4. 'Regionational' Arabic accents: sulcation.



14.1.11. However, that is not all. In fact, also *vocoids* can usually present some co-articulations. In addition to simple *retraction* in the vocogram space (as in neu-

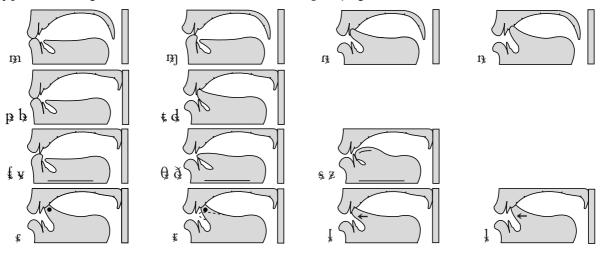


fig 14.1.5. 'Regionational' Arabic accents: uvulo-pharyngealization combined with sulcation.

fig 14.1.6.1. 'Regionational' Arabic accents: larynx raising.

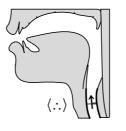
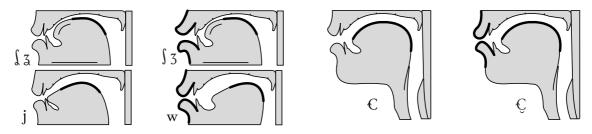


fig 14.1.6.2. 'Regionational' Arabic accents: general indications of anti-darkening elements.



tral pronunciation, cf fig 6.1), and frequent *labialization* (cf fig 14.3), alone or combined together.

Let us carefully compare it with fig 14.1.8, that shows normal, unrounded vocoids occurring in Arabic accents and dialects (and fig 14.1.9, that gives the rounded vocoids slightly fewer in number. We can often also find *uvulopharyngealization* (indeed, more often than expected). Notice that fig 14.1.11 provides such frequent Arabic vocoids, corresponding to the 'normal' ones.

A possible smaller degree of darkening for the front vocoid, [i, 1, e, E,  $\varepsilon$ ] consists in having *normal* (or *neutral*) lip positions, ie [i, 1, e, E,  $\varepsilon$ ], instead of the *spread* one, ie [i, 1, e, E,  $\varepsilon$ ] (cf fig 14.1.10, first and second columns). Let us notice that this figure also shows a full inventory of lip positions, not all necessarily occurring in Arabic accents, but rather interesting for comparisons with possible vocoids occurring in other languages.

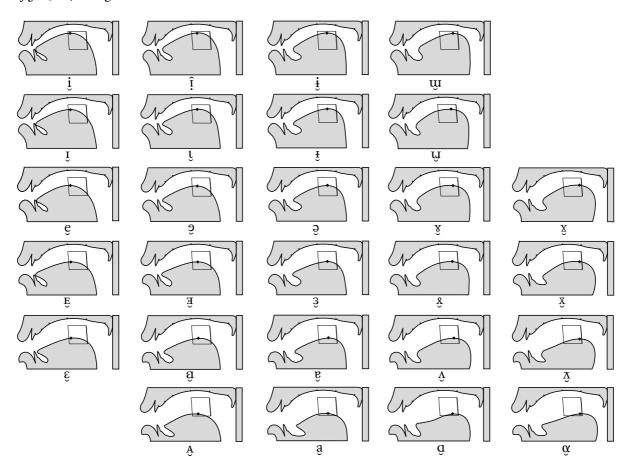


fig 14.1.7. 'Regionational' Arabic accents: half-rounded vocoids.

Arguably, in this set of labial positions, we also include [x], so often used in too many publications, not only by English-speaking authors, who should actually and easily realize that [x] is rather different from Arabic [a]. This does not belong only to neutral pronunciation, but also to many *colloquial* variants. In fact, no native Arabic accent has [x] (in spite of the lamentable, and well-known, *offIPA* limits). For a useful and necessary comparison, fig 14.1.8 shows [x], too, as (x).

14.1.12. Furthermore, speakers m 'dialects' can certainly vary in their use of all these gradations of darkening. This implies their frequency, or intensity, but also their changing extensions to syllables, words and phrases (not to *sentences*, which might become a serious problematic speech hindrance for native speakers, although part of 'enthusiastic' but unprepared foreigners, who happen to exaggerate, both in using or not using darkening).

Arguably, we will not analyze directly the behavior of specific real dialects, not even those already treated by others. In fact, our main aim is to describe *accents* (not *dialects*, which have different grammars and lexicons, too, as already said).

14.1.13. However, the various dialects (differently from real neutral Arabic pronunciation) certainly also present some blocking segments, which attenuate or

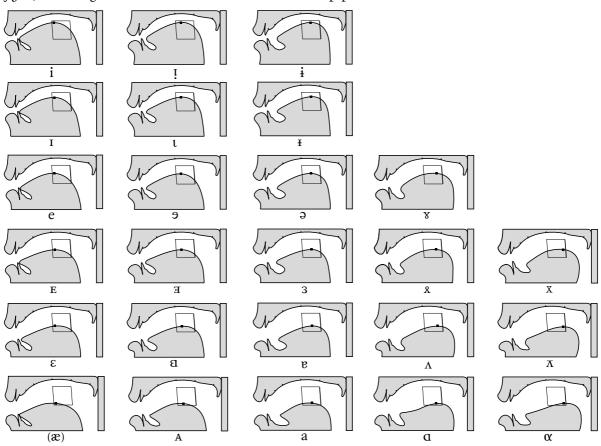


fig 14.1.8. 'Regionational' Arabic accents: normal lip positions.

even prevent the application of darkening. And they do so in similar or different ways.

The most widely used anti-darkening elements are, in particular,  $/\int$ , z, dz, j; i, i:/, followed, at a distance, by /ei/ and /w; u, u:/ (cf fig 14.1.6.2). In fact, the articulatory reason is that these segments present the opposite dorsum situation, which is *convex*, by bunching, for *curvation*, in comparison with the *concave* position of *sulcation*, by hollowing.

fig 14.1.6.2 also gives, generically, the difference between the darkening positions shown in fig 14.1.1 and this 'brightening' position, including the actual ones for  $[\int, \int, 3, 3; j, w]$ .

To be true, for  $/\int$ , z, dz/and /j; i, i:, ei/, we have a *mid-dorsal curvation*, while, for /w; u, u:/, there is a *post-dorsal curvation*. It is clear that the mid-dorsal curvation is exactly the opposite of *sulcation* (cf fig 14.1.1), given that for this latter the mid-dorsum is hollowed.

Besides, it might seem that the post-dorsal curvation were more akin to the various darkening settings (cf fig 14.1.1), which, in fact, are backer than the mid-dorsal one, but more similar to the post-dorsal.

However, independently from the real position in the mouth, the nature of /u, u:/ is clearly vocoidal. This implies an actual difference between contoids and vocoids, which is undeniably significant. Of course, /w/, and /j/, have an evident con-

nection with /u, u:/, and /i, i:/, although being contoids (with an intrinsic movement, even if limited, in comparison with the more static nature of the vocoids).

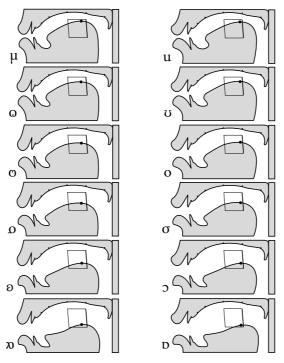
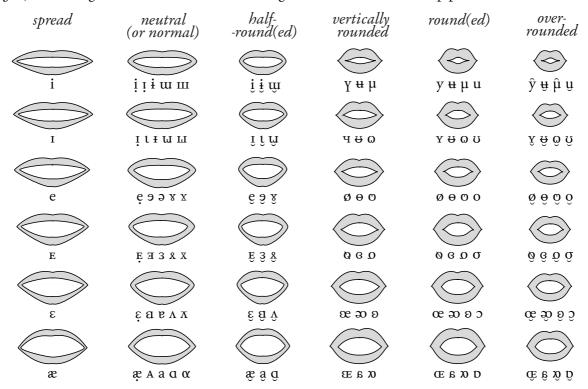


fig 14.1.9. 'Regionational' Arabic accents: rounded vocoids.

fig 14.1.10. 'Regionational' Arabic accents: a general view of different lip positions.



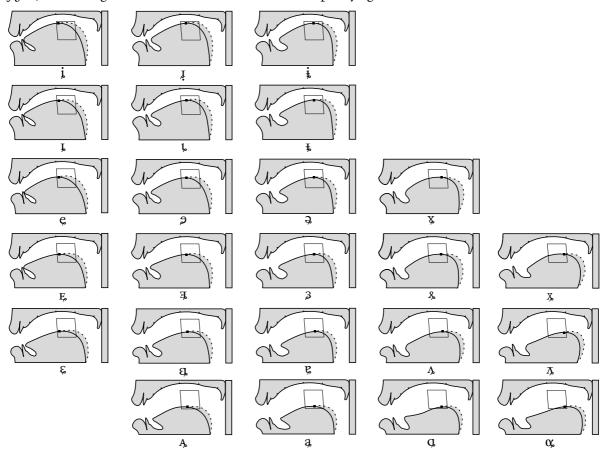


fig 14.1.11. 'Regionational' Arabic accents: uvulo-pharyngealized vocoids.

14.1.14. But, in the scale of syllabicity both [i] and [u] are quite near [j] and [w], respectively. And many phonemicians (or phonologists) call all of them 'vocoids', providing phonemic transcriptions with '/aj, aw/' and even *phonetic* transcriptions like '[aj, aw]' (instead of legitimate /ai, au/ and [ai, au]). On the other hand, as seen in § 8.4.1, final /-Cw<sup>#</sup>, -Cj<sup>#</sup>/ sequences may often be realized as [-Cu<sup>#</sup>, -Ci<sup>#</sup>], especially in the accents of this chapter.

Therefore, it must not be surprising if, in some dialects, in addition to [i:, i, j], also [u:, u, w] can prevent and block the darkening effect. This is due to the contribution of the dorsum, which is active for  $[\int, 2, d_2]$ , too (and for  $[t_j]$ , possible in a number of dialects, mostly for /k/).

14.1.15. The most evasive and changing fact about *darkening* is its application (or 'spreading'). In fact, as already said, not only dialects, but also speakers present several oscillations, also depending on words and rate and accuracy of speech. In addition, there are even differences concerning where exactly and how strongly darkening is applied.

Besides, there are dialects that are practically exempt from its application, as generally the dialects still found in the areas where Arabic developed (mainly in the Peninsula), before expanding both eastwards and, especially, westwards.

It occurs when the darkening phonemes are present in a word or syllable. As

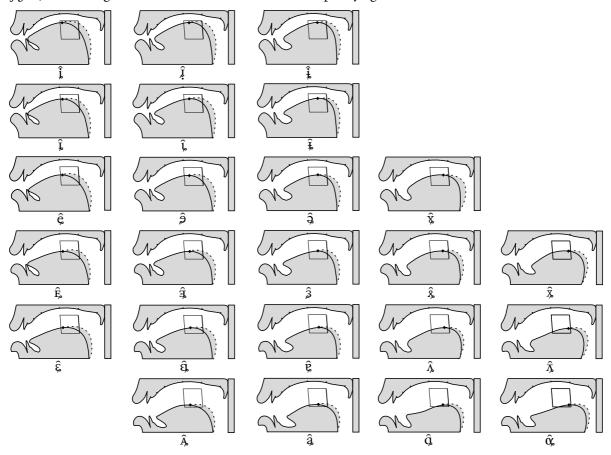
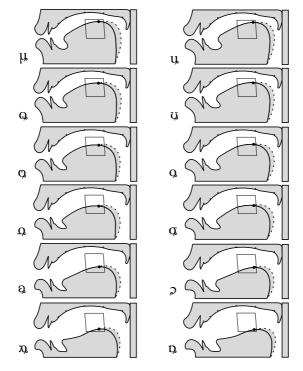


fig 14.1.12. 'Regionational' Arabic accents: uvulo-pharyngealized half-rounded vocoids.

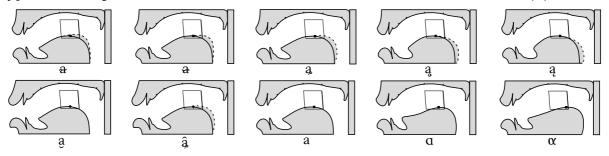
fig 14.1.13. 'Regionational' Arabic accents: uvulo-pharyngealized rounded vocoids.



already seen, they are the official co-articules (/C/, ie /t,  $\mathfrak{K}$ ,  $\mathfrak{F}$ /), including, at least, /q/, and –less intensively– the non-nasal sonants ([ $\mathfrak{F}$ ,  $\mathfrak{F}$ ;  $\mathfrak{F}$ ]). In addition, there are further co-articules, ie the 'labial' / $\mathfrak{M}$ ,  $\mathfrak{H}$ ,  $\mathfrak{F}$ ,  $\mathfrak{F}$ /, sometimes, including / $\mathfrak{W}$ /, and more rarely even / $\mathfrak{k}$ /.

14.1.16. Furthermore, we must add even / $\alpha$ ,  $\alpha$ :/ (appropriate symbols for triggering elements, although often represented by plain *offIPA* / $\alpha$ ,  $\alpha$ :/), which also cause the darkening of consonants and vowels. Their realizations are multiple, as those of the other segments are, too (cf fig 14.1.14).

fig 14.1.14. 'Regionational' Arabic accents: some different darkened realizations of /a/.



Therefore, in addition to *uvularized* [a], we also have *velarized* [a], *prepharyngealized* [a], *pharyngealized* [a], and *uvulo-pharyngealized* [a, a,  $\alpha$ ] (including their half-rounded versions, [ $\hat{a}$ ,  $\hat{a}$ ,  $\hat{\alpha}$ ]) &c, and true [a, a,  $\alpha$ ] &c (also half-rounded [a, g,  $\alpha$ ] &c).

However, more frequently, darkening spreads regressively, ie toward the beginning of words, rather than progressively, ie toward the end of words. But, it must not be a surprise if this is only a tendency, which further studies on more dialects and with more speakers may change.

Thus, *regressive* darkening is found when a triggering segment is present in the first part of a word (or syllable), while *progressive* darkening is found when a triggering segment is present in the last syllable (or part of a word). When the triggering element is in the middle, usually, the darkening effect follows both directions.

14.1.17. The consonants that undergo darkening in a more evident way (and more easily perceptible), are the front ones, labial ([m, b]), labiodental ([m, f]), dental ([n; t, d, s, z,  $\theta$ ,  $\delta$ ; I]), alveolar ([n, l, r, r]), becoming [ $\mathfrak{m}$ ,  $\mathfrak{h}$ ,  $\mathfrak{f}$ ;  $\mathfrak{n}$ ,  $\mathfrak{t}$ ,  $\mathfrak{s}$ , z,  $\theta$ ,  $\delta$ ;  $\mathfrak{f}$ ;  $\mathfrak{n}$ ,  $\mathfrak{t}$ ,  $\mathfrak{s}$ , z,  $\mathfrak{h}$ ,  $\delta$ ;  $\mathfrak{f}$ ;  $\mathfrak{n}$ ,  $\mathfrak{t}$ ,  $\mathfrak{s}$ ,  $\mathfrak{$ 

To better show what we are saying, here we used the generic symbols of the rhotics, those which tend to be used in contact with /i:, i/). More rarely, also /w, k/ are darkened, as they can also have their co-articule correspondents (/w, k/).

But that is not all, yet. In fact, in this kind of pronunciation, as /iː, i; uː, u/ have their darkened taxophones (not necessarily corresponding to those of the neutral Arabic accent), as shown in (b 8, also other consonants, in addition to those just seen, can be darkened (although not for all dialects, and consequently for their derived accents).

14.1.18. In broader dialects (and accents), in addition to the darkened contoids seen above, including [w, k], we can also have [w, k, ĝ, g,  $\hat{\beta}$ ,  $\hat{\beta}$ ,

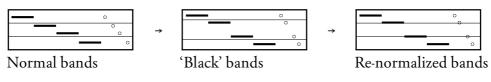
On the contrary, /q/, when it is kept unchanged (ie without becoming laryngeal, [?], velar, [k, g], or something else), is clearly a triggering element. The best ancient grammarians already testified this fact, so that /q/ forms a set with /C/ ie /t, d, s, z/, becoming /4/, in spite of those (even contemporary) 'authors' who deny this obvious fact, because they go as far as declaring that it is wrong to consider the co-articules as uvularized, excessively and uncritically insisting that they are pharyngealized (which is just one of the various possibilities, and certainly not the favorite one).

14.1.19. As already said, in addition to differences in the choice of both the segments that trigger darkening and those that can be darkened, there is a number of possible gradations and nuances either toward an intensification or an attenuation of the recognition of every darkened segment.

This depends, as we know, on the intrinsic qualities of the segments, which are also determined by the kind of darkening used either by speakers or language variants. It is certainly worthwhile to look again (and better than the first time) at the various figures expressly prepared (cf fig 14.1.1-14).

14.1.20. There is a typical 'Black voice', which has peculiar tonetic movements, as can be seen in fig 14.1.15. This is or may be typical of Black bilingual speakers in Mauritania and Western Sahara, Mali, Chad, South Sudan, Somalia, and Comoros.

fig 14.1.15. The paraphonic tonality structure of the 'Black voice'  $\langle \diamond \rangle$ .



# 14.2. 'Regionational' accents: in detail

14.2.0. As anticipated, in this chapter, we will present, concisely, 32 'regionational' accents, more or less different. Arguably, it will be very useful to observe the maps (of (5, 13)) well.

Let us also notice that, instead of indicating all 'darkening' contexts, as in G 13, we will simply put an *asterisk* before the symbols of some vocalic taxophones. Furthermore, the actual taxophones indicated are the most frequent ones, which we found listening to several speakers. Of course, this does not mean that further variants are not possible.

In fact, also depending on single speakers, their pronunciation can be more or less typical and broad. But, as already said, the speakers can also happen to use even some neutral realizations (cf  $(G_{0}, 6 \otimes G_{0}, 8-11)$ ), or mediatic (G 12), or 'local mediatic' ones (G 13).

The asterisk is not shown for the *diphthongs*, because they are much more changeable, due to their two different elements and motivations, in the *accents* (even more than in the *dialects*). However, the backer or lower variants shown, more usually, occur in 'darkening' situations.

Let us recall that the accents, which will be presented below, form the more real 'sound effect' when Arabs are speaking to 'others'. Thus, they do not use their everyday 'language' (or 'dialect'), which, on the contrary, is their more personal and real way of speaking. In fact, in this case, they also (try to) attenuate their grammatical and –mostly– lexical peculiarities, in order to be understood more easily.

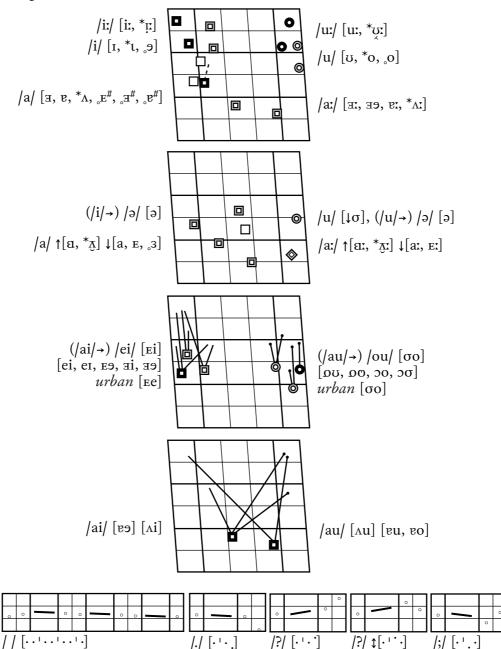
Of course, the *vocograms* and *tonograms* should be carefully examined, although we rarely deal explicitly with them, because they are rather clear.

For the *consonants* of the Arabic 'regionational' accents, we will only (and concisely) indicate the differences between the 'normal' ones of neutral Arabic ( $\oint \oplus$  8). Also the mediatic accents ( $\bigoplus$  13) should be considered: Levant (\$ 13.32-35), Saudi Arabia (13.36), Gulf (13.37-38), Egypt (13.39-40), Algeria (13.41), Morocco (13.42). When necessary, we will use the following indications: <sup>*r*</sup> rural, <sup>*n*</sup> nomadic, <sup>*u*</sup> urban, <sup>*d*</sup> Druse.

#### Lebanon (Beirut)

14.2.1. See the maps in fig 13.4-5. The first vocogram in fig 14.2.1 shows the main vocalic realizations of this accent, including /a:/ [I:, II], which may be rather surprising. The second vocogram shows both milder and broader variants, including the possibility of /ə/ from /i, u/, either stressed or unstressed. The third and fourth vocograms give the main realizations of /ei, ou/ and /ai, au/, respectively. Short unstressed final vowels are generally dropped,  $/N^{#}/\rightarrow [\emptyset]$ . Final unstressed short vowels are usually dropped,  $/N^{#}/\rightarrow [\emptyset]$  (although unsystematically), while -ah (cf § 13.25) is very strong. In broader accents, the compressed paraphonic vowel setting ( $\langle V \rangle$ , fig 13.7.3) may be typical.

fig 14.2.1. 'Regionational' Arabic accents: Lebanon.



Consonants: /ŧ, đ, s/ [ŧ, đ, s], /z/ [đ; z,  $r/n\delta$ ], /θ/ [t; s,  $r/n\theta$ ], /ð/ [d; z,  $r/n\delta$ ]; /q/ [?, †q, dq], /ʔ/ [h, Ø, †ʔ], /ʔV/ [V:, †ʔV], /ħ/ [ħ, h], /≨/ [氧, ʕ] r[‑, ʕ], /ħ/ [h, ĥ], /ʒ/ [ʒ, rdʒ], /ɬ/ [r, r] (but [ɬ, ¥] in contact with back vowels or /€/). Initial /#CaC/ clusters commonly become [#CC], and /#, ?V/IC/ often become [#, ?µC] (with intense sonants, /N/=/N, R, L/).

*Darkening* is very strong, but generally blocked by /i, i:,  $\int ($ unsystematically by /j/), and spreading to whole words, also caused by / $\mathbf{m}$ ,  $\mathbf{b}$ ,  $\mathbf{t}$ /.

The fundamental *intonation* patterns are also given, at the end.

#### Palestine (East Jerusalem)

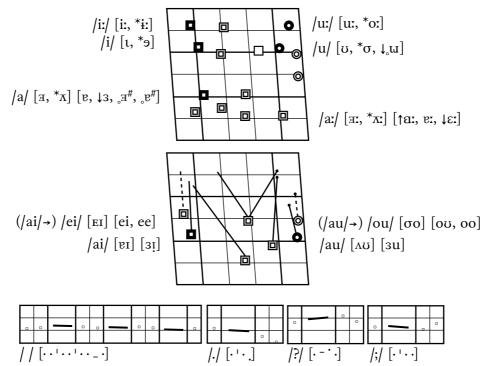
14.2.2. See the maps in fig 13.4-5. The realizations of the vowels and four diphthongs are shown in the two vocograms of fig 14.2.2, with variants (also milder and broader). Final unstressed short vowels are usually dropped,  $/_{\circ}V^{\#}/\rightarrow [\emptyset]$  (although unsystematically), while *-ah* (cf § 13.25) is not very strong or even absent. In broader accents, the back-reduced paraphonic vowel setting (( $\langle V \rangle$ ), fig 13.7.2) may be typical.

Consonants:  $|\mathfrak{t}, \mathfrak{s}|$   $[\mathfrak{t}, \mathfrak{s}], /\mathfrak{z}, \mathfrak{d}'$   $[\mathfrak{d}; \mathfrak{z}, r/n\mathfrak{d}], /\theta/$   $[\mathfrak{t}; \mathfrak{s}, r\theta], /\mathfrak{d}'$   $[\mathfrak{d}; \mathfrak{z}, r\mathfrak{d}]; /\mathfrak{k}'$   $[\mathfrak{k}, \mathfrak{\chi}], /\mathfrak{k}/[\mathfrak{k}, \mathfrak{k}]; /\mathfrak{q}/[\mathfrak{q}, u^2, u/d\mathfrak{q}, \mathfrak{k}, r\mathfrak{k}, r\mathfrak{k}, n\mathfrak{q}], /\mathfrak{l}' [\mathfrak{h}, \emptyset, \mathfrak{f}^2], /\mathfrak{l}'/[\mathfrak{V}, \mathfrak{f}^2\mathfrak{V}], /\mathfrak{h}, \mathfrak{f}' [\mathfrak{h}, \mathfrak{h}, \mathfrak{f}, \mathfrak{f}, \mathfrak{f}], /\mathfrak{f}' [\mathfrak{h}, \mathfrak{h}], /\mathfrak{z}' [\mathfrak{z}, r\mathfrak{d}\mathfrak{z}], /\mathfrak{f}' [\mathfrak{r}, \mathfrak{r}]$  (but  $[\mathfrak{s}, \mathfrak{s}]$  in contact with / $\mathfrak{C}$ /). Initial / $^{\#}$ CaC/ clusters commonly become [ $^{\#}CC$ ], and / $^{\#}_{\circ}$ 2V//C/ often become [ $^{\#}_{\circ}\mathfrak{2}$ //C] (with intense sonants, ///=/N, R, L/).

*Darkening* may be rather strong, and spreading to whole words, also caused by truly pharyngealized co-articules /m, b,  $\frac{1}{4}$  (although / $\frac{1}{4}$  may also be [ $\frac{1}{4}$ ,  $\frac{1}{2}$ ). The blocking effect is generally caused in southern areas by /j,  $\frac{1}{5}$ ,  $\frac{1}{5}$ ,

The fundamental *intonation* patterns are also given, at the end.

fig 14.2.2. 'Regionational' Arabic accents: Palestine.

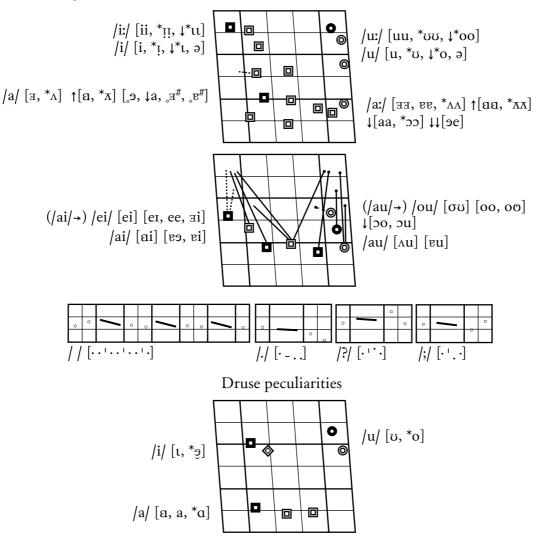


#### Syria (or West Syria: Damascus)

14.2.3.1. Western Syria, actually (see the maps in fig 13.4-5). The realizations of the vowels and four diphthongs are shown in the two vocograms of fig 14.2.3, with variants (also milder and broader), including the possible neutralization of /i, u/ into /ə/. The four diphthongs are shown in the second vocogram. Final unstressed short vowels are usually dropped,  $/_{\circ}V^{\#}/\rightarrow[\emptyset]$  (although unsystematically), while *-ah* (cf § 13.25) is very strong. In broader accents, the back-reduced paraphonic vowel setting ( $\langle V \rangle$ , fig 13.7.2) may be typical in addition to /i, u/ $\rightarrow$ [ə], even in stressed syllables (but [ $_{\circ}^{\Rightarrow}^{\#}$ ] $\rightarrow$ [ $\emptyset$ ]).

Consonants: |t| [th],  $|\mathfrak{t}, \mathfrak{s}|$  [ $\mathfrak{t}, \mathfrak{th}; \mathfrak{s}$ ], both  $/\mathfrak{d}, \mathfrak{z}/$  [ $\mathfrak{d}; \mathfrak{z}, r/n\mathfrak{d}$ ] (also [ $\mathfrak{t}, \mathfrak{s}, \mathfrak{d}$ ] and [ $\mathfrak{z}, \mathfrak{d}, \mathfrak{d}$ ]),  $/\theta/$  [ $\mathfrak{t}; \mathfrak{s}, r/n\theta$ ],  $/\mathfrak{d}/$  [ $\mathfrak{d}; \mathfrak{z}, r/n\mathfrak{d}$ ]; /q/ [ $\mathfrak{l}, \mathfrak{q}, nq$ ], /k/ [ $k, r\mathfrak{t}$ ] ( $[n\mathfrak{t}\mathfrak{f}]$  only with  $/\mathfrak{i}, \mathfrak{i}:/$ ),  $/\mathfrak{l}/$  [ $h, \mathfrak{g}, \mathfrak{f}$ ],  $/\mathfrak{l}/$  [ $\mathfrak{l}, \mathfrak{r}, \mathfrak{r}$ ] ( $[\mathfrak{l}, \mathfrak{k}, \mathfrak{r}, \mathfrak{f}]$  ( $[n\mathfrak{t}\mathfrak{f}]$  only with  $/\mathfrak{i}, \mathfrak{i}:/$ ),  $/\mathfrak{l}/$  [ $h, \mathfrak{g}, \mathfrak{f}$ ],  $/\mathfrak{r}/$  [ $\mathfrak{l}, \mathfrak{r}, \mathfrak{r}$ ]V/ [ $\mathfrak{l}, \mathfrak{r}, \mathfrak{r}$ ] ( $\mathfrak{l}, \mathfrak{r}, \mathfrak{r}, \mathfrak{r}$ ] ( $[\mathfrak{l}, \mathfrak{r}, \mathfrak{r}, \mathfrak{r}]$ ), /h/ [ $h, \mathfrak{h}, \mathfrak{r}, \mathfrak{r}, \mathfrak{r}$ ] ( $\mathfrak{l}, \mathfrak{r}, \mathfrak{r}$ ] in contact with  $/\mathfrak{C}/$ ). Initial /#CaC/ clusters commonly become [#CC], and /# $_{o}$ ?V/C/ often become [# $_{o}$ ? $\mu$ C] (with intense sonants,  $/\mu/=/N, R, L/$ ).

fig 14.2.3. 'Regionational' Arabic accents: Syria.



*Darkening* is very strong, blocked or not by /j/ (depending on speakers), and spreading to whole words, often including affixes), also caused by /m, b, n, l/. Stress tends to be rather regular.

The fundamental *intonation* patterns are also given, at the end.

*Darkening* (which is blocked by coronal and palatal /C/, and by /i, i:/) spreads to the end of words (but rarely to their initial parts), including suffixes, also caused by / $\mathbf{m}$ ,  $\mathbf{b}$ ,  $\mathbf{f}$ ,  $\mathbf{h}$ ,  $\mathbf{f}$ , w, k, g,  $\mathbf{k}$ ,  $\mathbf{g}$ / $\mathbf{k}$ .

#### Jordan (or West Jordan: Amman)

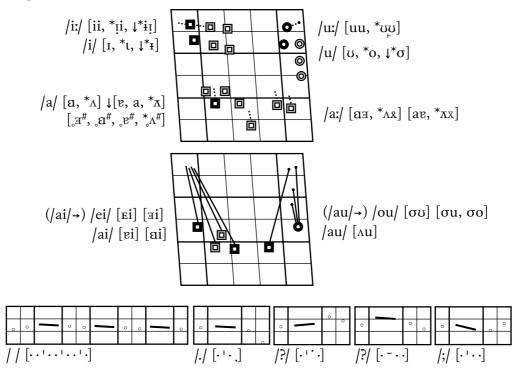
14.2.4. Western Jordan, actually (see the maps in fig 13.4-5). The realizations of the vowels and four diphthongs are shown in the two vocograms of fig 14.2.4, also with broader variants. Final unstressed short vowels are usually dropped,  $|_{\circ}V^{\#}/\rightarrow [\emptyset]$  (although unsystematically), while *-ah* (cf § 13.25) is very strong. In contact with /w,  $\hbar$ ,  $\frac{\varsigma}{[w, \hbar, \varsigma]}$ , /a/ may be either [a] or [x], according to speakers. In broader accents, the compressed paraphonic vowel setting ( $\langle V \rangle$ , fig 13.7.3) may be typical.

Consonants:  $|\mathfrak{t}, \mathfrak{d}, \mathfrak{s}/[\mathfrak{t}, \mathfrak{t}, \mathfrak{d}, \mathfrak{s}, \mathfrak{s}], |\mathbf{z}| [\mathfrak{d}, \mathfrak{d}; \mathbf{z}, \mathbf{z}, r\mathfrak{d}], |\theta| [\mathfrak{t}; \mathfrak{s}, r\theta], |\mathfrak{d}| [\mathfrak{d}; \mathfrak{z}, r\mathfrak{d}]; |q| [u?, \uparrow q, dq, rk] n[g, \downarrow dz V], \downarrow \downarrow dz V], |k| [\mathfrak{k}] n[\mathfrak{t}, \downarrow \mathfrak{ts} V], |2/ [h, \emptyset, \uparrow 2], |2V/ [V, \uparrow 2V], |\hbar, \mathfrak{f}, \mathfrak{f}, [\hbar, \mathfrak{h}, \mathfrak{s}, \mathfrak{s}], |h| [h, \hbar], |z| [z, r/ndz], |\mathfrak{f}| [\mathfrak{r}, \mathfrak{r}] (but [\mathfrak{s}, \mathfrak{x}] in contact with back vowels or <math>|\mathcal{C}|$ ). Initial /#CaC/ clusters commonly become [#CC], and /#\_2V/IC/ often become [#20] (with intense sonants,  $|\mathcal{N}|=/N, R, L/$ ).

*Darkening* is very strong, also with affixes, but generally blocked by /j,  $\int$ /, less systematically by /i, i:, u, u:/ (especially in Amman, where they have no blocking effect); in southern areas there is no block, usually), and spreading to whole words, including affixes, also caused by /q,  $\kappa$ ,  $\kappa$ / and /ħ,  $\varsigma$ , m, b,  $\epsilon$ , t/, especially in rural speech (for some speakers, also by /ħ,  $\varsigma$ /). Stress adds some Egyptian-like patterns to the more common ones.

The fundamental *intonation* patterns are also given, at the end.

fig 14.2.4. 'Regionational' Arabic accents: Jordan.



## North Syria

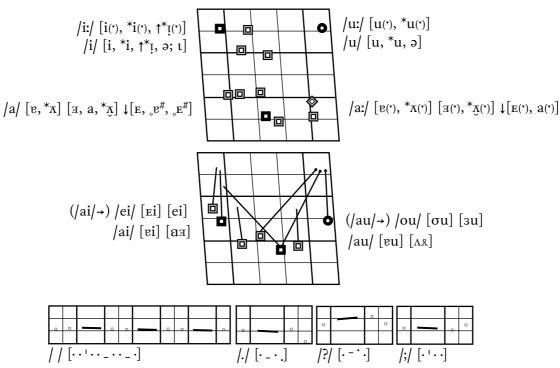
14.2.5. Northern Syria & south-eastern Turkey, actually (see the maps in fig 13.4-5). The realizations of the vowels and four diphthongs are shown in the two vocograms of fig 14.2.5, also with broader and milder variants. Let us notice well some particular timbres of the vowels and diphthongs, less 'Arabic' than usual. Long vowels are half-long, [V·]. In broader accents, the back-reduced paraphonic vowel setting ( $\langle V \rangle$ , fig 13.7.2) may be typical and /ai, au/ may even become [i', u']. Often, /i, u/ $\rightarrow$ [ $\rightarrow$ ] (for some speakers only /i/ $\rightarrow$ [ $\iota$ ]); -ah (cf § 13.25) is rather strong, but it does not occur with / $\in$ ,  $\in$ , K/ (including /h, ?/, for some speakers).

Consonants:  $|\mathfrak{t}, \mathfrak{s}| [\mathfrak{t}, \mathfrak{s}] / \mathfrak{d}, \mathfrak{z}/ [\mathfrak{d}], /\theta, \mathfrak{d}/ [\mathfrak{t}, \theta; \mathfrak{d}, \mathfrak{d}], /q/ [q, ?, \emptyset] (including possible ejective [q']), /k/ in contact with /i, i:/<math>\rightarrow$ [c, kç] (especially in Turkey, in addition to more 'normal' [tʃ, tʃ]) as /j/ [j, gj] often does; /?/ [?, ?], /k, R/ [k, X; R, B], /ħ,  $\mathfrak{L}/ [\mathfrak{h}, \mathfrak{L}]$  (often /V $\mathfrak{L}/ [\mathfrak{L}, \mathfrak{L}]$ ), /h/ [ħ, ħ], /ʒ/ [ʒ, ʒ, †dʒ], /ʃ/ [ʃ, ʃ], /ɬ/ [ɬ, ɬ] (but also [ʁ, ৸, z], often considered as a speech defect).

Darkening is quite irregular (and not spreading to affixes), and also caused by /m, b, n, 1/, but blocked especially by /i, i:, ai $\rightarrow$ ei/. In the Turkey areas: / $\theta$ ,  $\partial$ / [s, z], /t, s/ [s], /d, z/ [z], and /f, v/ [ $\phi$ ,  $\beta$ ]; /q/ [q, 2,  $\theta$ ], /qC/ [qC,  $\kappa$ C,  $\chi$ C,  $\kappa$ C,  $\kappa$ C].

The fundamental *intonation* patterns are also given, at the end.





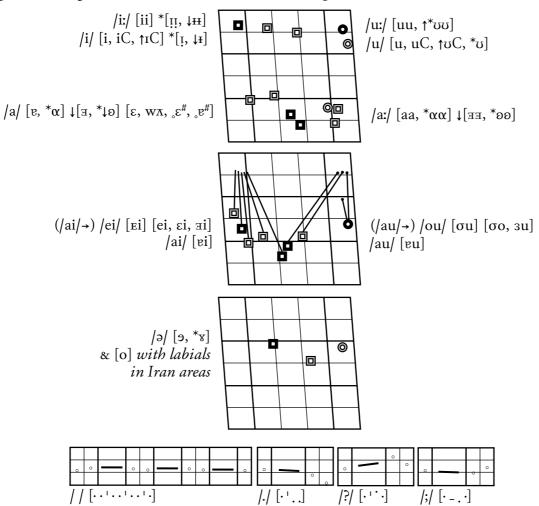
#### North Iraq

14.2.6. See the maps in fig 13.4-5. The realizations of the vowels and four diphthongs are shown in the two vocograms of fig 14.2.6, also with broader variants. Let us notice well some particular timbres of the vowels and diphthongs, less 'Arabic' than usual. In broader accents, the back-reduced paraphonic vowel setting  $(\langle V \rangle)$ , fig 13.7.2) may be typical; *-ah* (cf § 13.25) is very strong.

Consonants:  $|\theta, \delta|$  [s, z]  $\uparrow [\theta, \delta]$ ,  $|\mathfrak{t}, \mathfrak{s}|$  [ $\mathfrak{t}, \mathfrak{s}]$ ,  $|\mathfrak{d}, \mathfrak{z}|$  [ $\mathfrak{z}, \uparrow \delta$ ], and, frequently,  $|\mathfrak{f}, v|$  [ $\varphi, \beta$ ];  $|\hbar, \mathfrak{s}|$ ,  $|\kappa, \kappa|$ ,  $|\kappa, \kappa|$ ,  $|\kappa, \kappa|$ ,  $|\eta|$ ,  $|\eta|$ ,  $|\kappa|$ ,  $|\kappa|$  ([ $\mathfrak{t}$ ] in palatal environments). Darkening is quite irregular (and not spreading to affixes), blocked especially by  $|\mathfrak{i}, \mathfrak{i}, \mathfrak{a} \rightarrow \mathfrak{e} \mathfrak{i}|$ .

The fundamental *intonation* patterns are also given, at the end.

fig 14.2.6. 'Regionational' Arabic accents: North Iraq.



#### Iraq (Baghdad)

14.2.7.1. Baghdad, including mid-eastern Syria, and Khuzestân, in mid-western Iran (in Persian Xuzestan [Xuzes'thorn], see the maps in fig 13.4-5). The realizations of the vowels and four diphthongs are shown in the two vocograms of fig 14.2.7, also with milder and broader variants. In broader accents, the back-reduced paraphonic vowel setting ( $\langle V \rangle$ , fig 13.7.2) may be typical. /ai, au/ may be rather stable, although they often become /ei, ou/; /i, u/ in certain contexts become [ə] (but generally [u] in contact with labials, velars, and co-articules). There can also be minimal pairs with /a, a:/ opposed to /a, a:/.

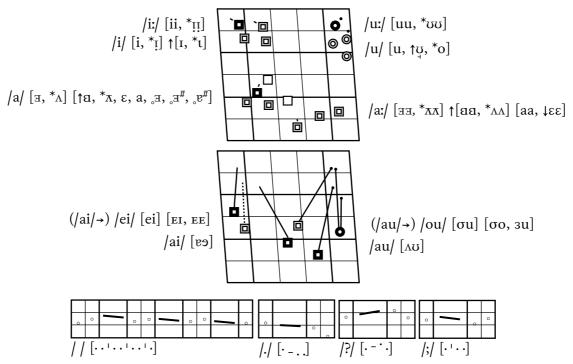
Consonants:  $|\theta, \delta|$   $[\theta, \delta] \downarrow [t, s; d, z], /t, s/ [t, s], /d, z/ [\delta, <math>\downarrow d$ ] (also [z]), /t/ [th], /K, R/ [K, X; F, B] (also [K, R], uvulo-pharyngeal constrictive trills, cf fig 12.8), /s/ [?, ?] (/VsV/ [VsV], also [?], prepharyngeal voiceless stop, and [?], pharyngeal voiceless stop, cf fig 12.4.1.2 in word-initial or word-final position), /q/ [g] (certain words have [q], others [dz], or less frequently [k]), /k/ [k] ([tʃ] in palatal environments), /?/ [ $\emptyset$ , ?], /z/ [dz], /s/ [s], /f, v/ [f, v]  $\downarrow [\phi, \beta]$ . There can be minimal pairs with /t/ opposed to /l/.

*Darkening* is rather strong, also caused by / $\mathfrak{m}$ ,  $\mathfrak{b}$ ,  $\mathfrak{n}$ ,  $\mathfrak{t}$ ,  $\mathfrak{s}$ /, and spreading to syllables, or even whole to words, and often to suffixes, more typically also using partially rounded vowel, [V], blocked by /i, i:, j,  $\mathfrak{f}$ / and [dz]. Stress adds some Egyptian-like patterns to the more common ones.

The fundamental *intonation* patterns are also given, at the end.

Khuzestân has: / $\theta$ ,  $\delta$ /, /z/ [ $\delta$ ], /t, d, s/; / $\kappa$ ,  $\kappa$ / [ $\chi$ ,  $\chi$ ;  $\kappa$ , w]; /q/ [g, g] (but often also [ $\kappa$ , w], as / $\kappa$ /); /z/ [dz]; /k/ [tJ]

fig 14.2.7. 'Regionational' Arabic accents: Iraq.



14.2.7.2. *Iran areas*: lighter accents have vocograms as in fig 14.2.7 (corresponding to Iraq), while broader accents have those of fig 14.2.6 (corresponding to North Iraq), with the addition of possible  $|\partial|$  [ $\partial, \otimes$ ,  $\partial$ ] (as shown in the third vocogram of fig 14.2.6), |q| [B, R] (some speakers have [g], few [k]), |k| [kh] (or [tJ] in palatal environments), |K, R| [ $\chi, K; B, R$ ] (including preuvular constrictives [ $\chi, B$ ]),  $/\hbar/$  [ $H, \hbar$ ],  $/\xi/$  [ $\varsigma, \varsigma$ ] (including [ $\varsigma \varsigma$ ], pharyngeal voiced stop, if geminate),  $/\varsigma\hbar/$  [ $\hbar\hbar$ ] (also other /CC/ sequences readily become [CC]), /h/ [ $\hbar$ ], /z/ [dz; tj],  $/\theta$ ,  $\partial/$  [ $\theta, \partial$ ], /t, s/ [t, s], /d, z/ [ $\partial$ ], /j, w/ [ $J, \omega$ ], /s/ [r, cr], /l/ [I, t].

Darkening is milder, also caused by velarized /m, b, r/, and uvularized [k], and sometimes by /κ, κ/, but irregularly blocked by /d, θ, z, n, j, ∫, l/ and /ʒ/ [dʒ], /k/ [tʃ]. *Jewish*: /κ, κ/ [χ, κ], /r/ [u, κ], /k/ [k] not [tʃ], and usually rather regular /q, ħ, \$, ?, h/.

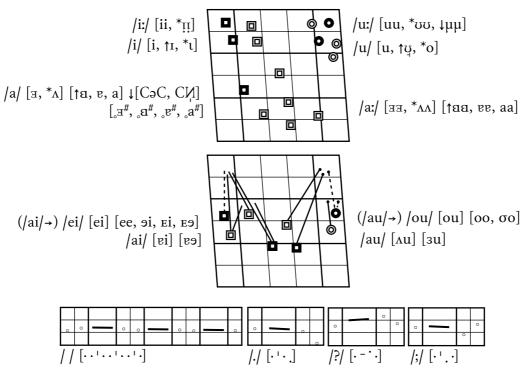
#### Kuwait

14.2.8. See the maps in fig 13.4-5. The realizations of the vowels and four diphthongs are shown in the two vocograms of fig 14.2.8, also with some milder and broader variants, to be seen accurately. In broader accents, the back-reduced paraphonic vowel setting ( $\langle V \rangle$ , fig 13.7.2) may be typical. Some vowels are more typical than others, as shown on the vocograms, which better helps in distinguishing between Gulf accents. Unstressed long vowels are generally [V].

Consonants:  $|\mathfrak{t}, \mathfrak{s}|$   $[\mathfrak{t}, \mathfrak{s}]$ ,  $/\mathfrak{d}, \mathfrak{z}/[\mathfrak{d}]$ ,  $/\mathfrak{q}/[\mathfrak{g}, \mathfrak{q}]$  (rarely  $[\mathfrak{d}_{\mathfrak{z}}, \mathfrak{z}]$  in palatal environments),  $/\mathfrak{k}/[\mathfrak{k}]$  (possible  $[\mathfrak{t}_{\mathfrak{f}}]$  in palatal environments),  $/\mathfrak{k}/[\mathfrak{k}, \mathfrak{r}]$ ,  $/\mathfrak{k}, \mathfrak{k}/[\mathfrak{k}, \mathfrak{s}]$ ,  $/\mathfrak{h}/[\mathfrak{h}, \mathfrak{h}]$ ,  $/\mathfrak{h}, \mathfrak{d}/[\mathfrak{h}, \mathfrak{d}]$ ,  $/\mathfrak{z}/[\mathfrak{l}, \mathfrak{d}_{\mathfrak{z}}, \mathfrak{z}, \mathfrak{g}]$ ,  $/\mathfrak{k}, \mathfrak{k}/[\mathfrak{k}, \mathfrak{s}]$  (possible  $/\mathfrak{k}/[\mathfrak{q}]$ ),  $/\mathfrak{h}, \mathfrak{k}/[\mathfrak{h}, \mathfrak{k}]$ ,  $/\mathfrak{h}/[\mathfrak{h}, \mathfrak{h}]$ ,  $/\mathfrak{h}, \mathfrak{d}/[\mathfrak{h}, \mathfrak{d}]$ ,  $/\mathfrak{z}/[\mathfrak{l}, \mathfrak{d}_{\mathfrak{z}}, \mathfrak{z}, \mathfrak{g}]$ ,  $/\mathfrak{k}, \mathfrak{g}/[\mathfrak{k}, \mathfrak{g}]$  generally fully voiced even in contact with voiceless consonants,  $/\mathfrak{k}/[\mathfrak{k}]$ . Darkening is rather strong, but limited in extension, also caused by  $/\mathfrak{m}$ ,  $\mathfrak{h}, \mathfrak{k}, \mathfrak{m}, \mathfrak{h}, \mathfrak{n}, \mathfrak{k}, \mathfrak{k}/(\mathfrak{but not by }/\mathfrak{k}, \mathfrak{k}, \mathfrak{w}/)$  when in contact with co-articules or back vowels, especially  $/\mathfrak{a}'$ .

The fundamental *intonation* patterns are also given, at the end.

fig 14.2.8. 'Regionational' Arabic accents: Kuwait.



## Bahrain

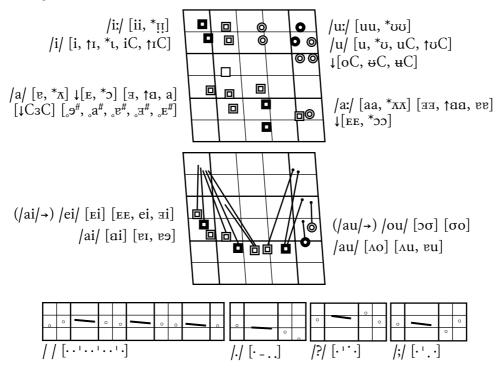
14.2.9. Bahrain & some coastal areas of mid-eastern Saudi Arabia (see the maps in fig 13.4-5). The realizations of the vowels and four diphthongs are shown in the two vocograms of fig 14.2.9, also with milder and broader variants, to be seen very accurately. In broader accents, the compressed paraphonic vowel setting ( $\langle \underline{Y} \rangle$ , fig 13.7.3) may be typical. Some vowels are more typical than others, as shown on the vocograms, which better helps in distinguishing between Gulf accents; *-ah* may be rather strong. Unstressed long vowels are generally [V<sup>-</sup>]. There can be minimal pairs with /a, a:/ opposed to /a, a:/.

Consonants:  $|\mathfrak{t}, \mathfrak{s}|$   $[\mathfrak{t}, \mathfrak{s}]$ ,  $|\mathfrak{d}, \mathfrak{z}|$   $[\mathfrak{d}]$ , |q|  $[g, \uparrow q]$  (rarely  $[\mathfrak{d}_{3}, \mathfrak{z}]$  in palatal environments), |k| [k] (possible  $[\mathfrak{t}_{3}, \mathfrak{t}_{3}]$  in palatal environments), |2| [2, 2] (frequently |2V| [V]; also possible  $\downarrow [\sharp j, \sharp w]$ ), |K, R|  $[\chi, B]$  (possible |R| [q]),  $|\hbar, \mathfrak{s}|$   $[\hbar, h; \mathfrak{s}]$ , |h|  $[h, \hbar]$ ,  $|\theta, \vartheta|$   $[\theta, \vartheta]$ ,  $|\mathfrak{z}|$   $[\mathfrak{t}_{3}, \mathfrak{t}_{3}, \mathfrak{z}, \mathfrak{z}]$ , [b, d, g] generally fully voiced even in contact with voiceless consonants,  $|\mathfrak{s}|$   $[\mathfrak{s}]$ .

*Darkening* is rather strong, also caused by /m, b, f, m, b, n, t, t, when in contact with co-articules or back vowels, especially /at/.

The fundamental *intonation* patterns are also given, at the end.

fig 14.2.9. 'Regionational' Arabic accents: Bahrain.



# Qatar

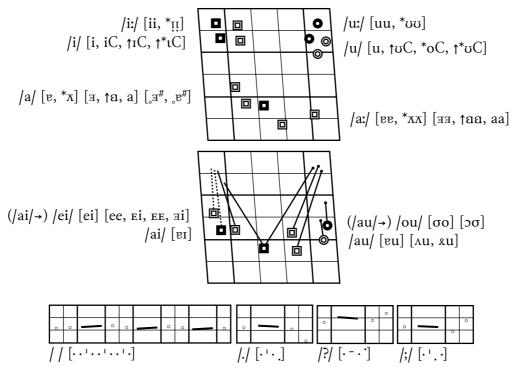
14.2.10. See the maps in fig 13.4-5. The realizations of the vowels and four diphthongs are shown in the two vocograms of fig 14.2.10, also with milder variants. In broader accents, the compressed paraphonic vowel setting ( $\langle V \rangle$ , fig 13.7.3) may be typical. Some vowels are more typical than others, as shown on the vocograms, which better helps in distinguishing between Gulf accents. Unstressed long vowels are generally [V-]. There can be minimal pairs with /a, a:/ opposed to /a, a:/.

Consonants:  $|\mathfrak{t}, \mathfrak{s}|$   $[\mathfrak{t}, \mathfrak{s}], /\mathfrak{d}, \mathfrak{z}/[\mathfrak{d}], /\mathfrak{q}/[\mathfrak{g}, \mathfrak{z}, \uparrow \mathfrak{q}]$  (rarely  $[\mathfrak{d}_{3}, \mathfrak{z}]$  in palatal environments), /k/[k] (possible  $[\mathfrak{t}_{3}]$  in palatal environments),  $/2/[2, ?], /\kappa, \kappa/[\kappa, \chi; \kappa, \kappa], /\hbar, \mathfrak{f}/[\hbar, \mathfrak{f}], /h/[h, \hbar], /\theta, \mathfrak{d}/[\theta, \mathfrak{d}], /z/[\mathfrak{z}, \mathfrak{z}, \mathfrak{z}], [b, \mathfrak{d}, \mathfrak{g}]$  generally fully voiced even in contact with voiceless consonants,  $/\mathfrak{f}/[\mathfrak{f}]$ .

Darkening is rather strong, also caused by /m, b, f, m, b, n, f, t (but not by  $/\kappa$ ,  $\beta$ , w/) when in contact with co-articules or back vowels, especially /a:/, generally with no blocking, and also spreading to a preceding word.

The fundamental *intonation* patterns are also given, at the end.

fig 14.2.10. 'Regionational' Arabic accents: Qatar.



#### **Emirates (or United Arab Emirates)**

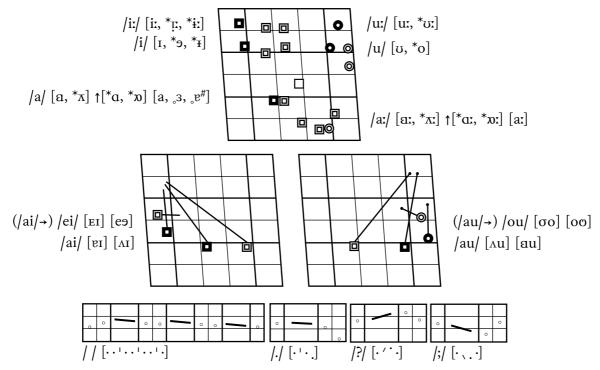
14.2.11. Or United Arab Emirates (see the maps in fig 13.4-5). The realizations of the vowels and four diphthongs are shown in the two vocograms of fig 14.2.11, also with milder variants. In broader accents, the back-reduced paraphonic vowel setting ( $\langle V \rangle$ , fig 13.7.2) may be typical. Some vowels are more typical than others, as shown on the vocograms, which better helps in distinguishing between Gulf accents. Unstressed long vowels are generally [V].

Consonants:  $|\mathfrak{t}, \mathfrak{s}|$   $[\mathfrak{t}, \mathfrak{s}], /\mathfrak{d}, \mathfrak{z}/[\mathfrak{d}], /\mathfrak{q}/[\mathfrak{g}, \mathfrak{f}\mathfrak{q}]$  (rarely  $[\mathfrak{d}_{3}, \mathfrak{z}]$  in palatal environments), /k/[k] (possible  $[\mathfrak{t}_{3}]$  in palatal environments),  $/k/[\mathfrak{k}, \mathfrak{s}], /k, \mathfrak{g}/[\mathfrak{k}, \mathfrak{k}], \mathfrak{g}/[\mathfrak{h}, \mathfrak{f}], /\mathfrak{h}/[\mathfrak{h}, \mathfrak{h}], /\mathfrak{h}, \mathfrak{g}/[\mathfrak{h}, \mathfrak{f}], /\mathfrak{h}/[\mathfrak{h}, \mathfrak{h}], /\mathfrak{h}, \mathfrak{g}/[\mathfrak{h}, \mathfrak{f}], /\mathfrak{g}, \mathfrak{g}, \mathfrak{g}]$ ,  $[\mathfrak{h}, \mathfrak{g}, \mathfrak{g}]$  generally fully voiced even in contact with voiceless consonants,  $/\mathfrak{f}/[\mathfrak{f}]$ .

*Darkening* is rather strong, also caused by /m, b, f, m, b, n, t, t (but not by /K, R, W) when in contact with co-articules or back vowels, especially /a.

The fundamental *intonation* patterns are also given, at the end.

fig 14.2.11. 'Regionational' Arabic accents: Emirates.



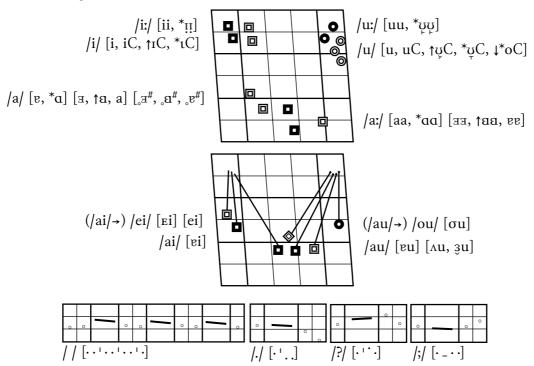
#### Oman

14.2.12. See the maps in fig 13.4-5. The realizations of the vowels and four diphthongs are shown in the two vocograms of fig 14.2.12, also with broader and milder variants. In broader accents, the back-reduced paraphonic vowel setting  $(\langle V \rangle)$ , fig 13.7.2) may be typical. Some vowels are more typical than others, as shown on the vocograms, which better helps in distinguishing between Peninsular accents. Unstressed long vowels are generally [V].

Consonants:  $|q| [q], |2| [2, 2], |K, R| [\chi, K; B, R], /\hbar, <math>\xi$  [ $\hbar$ , h;  $\xi$ ,  $\xi$ ], /h/ [ $\hbar$ , h],  $/\xi$ , s/ [ $\xi$ , s], /d, z/ [ $\delta$ ], /z/ [dz], /f/ [f]. Stress may add some Egyptian-like patterns to the more common ones.

The fundamental *intonation* patterns are also given, at the end.

fig 14.2.12. 'Regionational' Arabic accents: Oman.



## Yemen

14.2.13. Including Djibouti & northern Somalia (see the map in fig 13.4). The realizations of the vowels and four diphthongs are shown in the two vocograms of fig 14.2.13, also with milder and broader variants. In broader accents, the back-reduced paraphonic vowel setting ( $\langle V \rangle$ , fig 13.7.2) may be typical. Some vowels are more typical than others, as shown on the vocograms, which better helps in distinguishing between Peninsular accents. Unstressed long vowels are generally [V].

Consonants: /VjV, VwV/ [VijV, VuwV], /q/ [g,  $\uparrow$ q, R], /R/ [R,  $\downarrow$ q], /ħ,  $\S$ / [ħ,  $\S$ ] (but also /§/ [Ģ], in southern areas), /?/ [?, Ø], /k/ [kh], /t/ [th], /ŧ, \$/ [ŧ, \$], /đ,  $\varkappa$ / [ð,  $\downarrow$ đ], /θ, ð/ [ð, δ]  $\downarrow$ [t, d], /ʒ/ [dʒ, ʒC, ɟ, g, j], /ŧ/ [ŧ]. /CjV/ sequences with /C/ = /n, t, d, k/ may become [n; tş,  $\downarrow$ tʃ; dẓ,  $\downarrow$ dʒ; kç] (including /i:k<sup>#</sup>/ [iikç<sup>#</sup>]). Word-final voiced consonants before a pause, generally become voiceless, with the following possible differences: stops  $\rightarrow$  [Ç], constrictives  $\rightarrow$  ['C], sonants  $\rightarrow$  ['C, C?] (or creaky voiced [Ç]); /CC/ sequences become [ÇC], but not if with /h, ?, ħ/. /#CC/ are possible, but not /CC<sup>#</sup>/.

*Darkening* is rather strong and with consonant rounding (especially in contact with rounded vowels) in addition to further peculiarities, cf fig 12.3.0. Let us notice: *?april* ['?eph#rel].

The fundamental *intonation* patterns are also given, at the end.

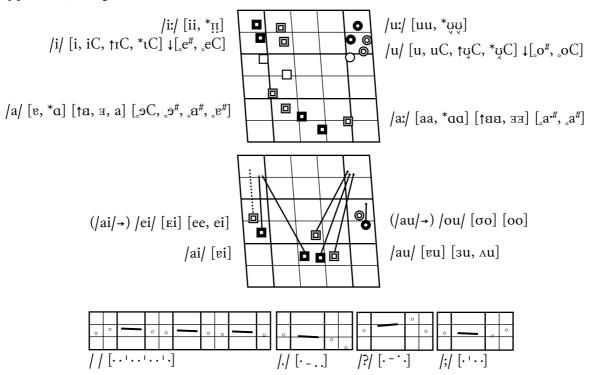


fig 14.2.13. 'Regionational' Arabic accents: Yemen.

#### Arabia (or central Saudi Arabia)

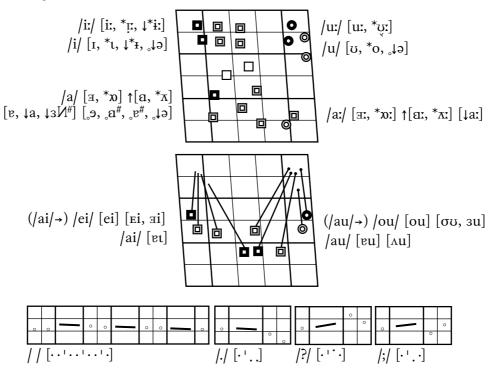
14.2.14. That is: central Saudi Arabia & eastern Syria & south-western Iraq & some northern areas of Yemen and Oman (see the maps in fig 13.4-5). The realizations of the vowels and four diphthongs are shown in the two vocograms of fig 14.2.14, also with broader variants. Let us notice particularly the great difference between  $[\exists(:)]$  and [\*n(:)]. In broader accents, the back-reduced paraphonic vowel setting ( $\langle V \rangle$ , fig 13.7.2) may be typical. Some vowels are more typical than others, as shown on the vocograms, which better helps in distinguishing between Peninsular accents, for instance, /a, a:/, in non-darkening contexts, oscillate a lot between  $[\exists(:)]$  and (more frequently)  $[\upsilon(:), a(:)]$ . Unstressed long vowels are [V]. In central Saudi Arabia, the short unstressed vowels can be  $[\downarrow \eth]$ .

Consonants: /VjV, VwV/ [VijV, VuwV], / $\theta$ ,  $\delta$ / [ $\vartheta$ ,  $\delta$ ], / $\mathfrak{t}$ ,  $\mathfrak{s}$ / [ $\mathfrak{t}$ ,  $\mathfrak{s}$ ], / $\mathfrak{d}$ ,  $\mathfrak{z}$ / [ $\mathfrak{d}$ ], /h/ [h, h], / $\mathfrak{f}$ / [ $\mathfrak{f}$ ], / $\mathfrak{q}$ / [ $\mathfrak{q}$ ], /k/ [k] (frequently [ $\mathfrak{t}$ ] in palatal environments), / $\kappa$ / [ $\kappa$ ] (or [ $\kappa$ ], constrictive trill), / $\mathfrak{g}$ / [ $\mathfrak{g}$ ], / $\mathfrak{h}$ / [ $\mathfrak{h}$ ] (or [ $\mathfrak{h}$ ] uvularized constrictive), / $\mathfrak{s}$ / [ $\mathfrak{s}$ ] (and /V $\mathfrak{s}$ V/ [VV]), / $\mathfrak{z}$ / [ $\mathfrak{d}$ z], / $\mathfrak{s}$ / [ $\mathfrak{s}$ ], frequent [ $\mathfrak{t}$ ,  $\mathfrak{t}$ ].

*Darkening* may be rather strong, especially in northern areas, where |C| can also be labialized [C], but blocked by /i, i:, u, u:/, and it may be absent in other areas.

The fundamental *intonation* patterns are also given, at the end.

fig 14.2.14. 'Regionational' Arabic accents: Arabia.



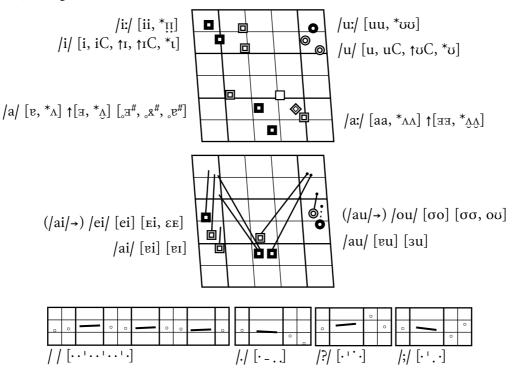
# Red Sea (areas around it, mostly in western Saudi Arabia)

14.2.15. That is: western Saudi Arabia & coastal eastern Sudan & coastal northeastern Eritrea (see the maps in fig 13.4-5). The realizations of the vowels and four diphthongs are shown in the two vocograms of fig 14.2.15, also with milder variants. In broader accents, the back-reduced paraphonic vowel setting ( $\langle V \rangle$ , fig 13.7.2) may be typical. Some vowels are more typical than others, as shown on the vocograms, which better helps in distinguishing between Peninsular accents. Unstressed long vowels are generally [V].

Consonants:  $|q| [g, \uparrow q], |\hat{z}| [\hat{z}], |K, R| [K, R], |\hbar, \hat{s}| [H, \hat{s}], |\theta| [t, s, t\theta, \uparrow\theta], |\tilde{\partial}| [d, z, \uparrow\tilde{\partial}], both / d, z/ [d, z, \uparrow\tilde{\partial}] (u/d/ [d], u/z/ [\tilde{\partial}]), /z/ [dz, dz; z], /f/ [f, f; r; r, r]. Broader accents may even have: <math>|q| [dz, dz], /k/ [tJ, ts, J, s], /\hat{z}/ [\hat{s}], /z/ [j].$ 

The fundamental *intonation* patterns are also given, at the end.

fig 14.2.15. 'Regionational' Arabic accents: Red Sea.



## East Egypt (with the Sinai and Israel)

14.2.16. This accent is found in parts of the eastern coasts of mid-southern Egypt and north-eastern Sudan, on the Sinai (except its narrow western & southern coasts), and in Israel (by Arabic-speaking people), as shown in the maps of fig 13.4-5.

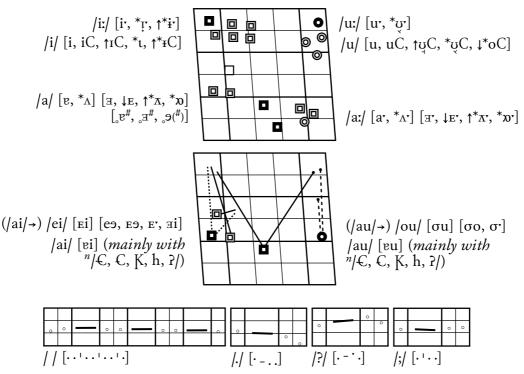
The realizations of the vowels and four diphthongs are shown in the two vocograms of fig 14.2.16, also with milder and broader variants. In broader accents, the front-raised & back-lowered paraphonic vowel setting ( $\langle V \rangle$ , fig 13.7.1) may be typical thus, both *-ah* and *darkening* may be very strong, the last one also with affixes and /b, fm, ft, ft, ft, K, R/ and [h, w], but blocked by /i, i:, j,  $\int$ , J and n/t, d, z/, but in northern areas *-ah* may be completely absent.

Some vowels are more typical than others, as shown on the vocograms, which better helps in distinguishing between Egyptian accents. Long vowels are [V-], as also  $/VC^{\#}/$  are [ $V\cdotC^{\#}$ ].

Consonants:  $|\mathfrak{t}|$  [t,  $\uparrow\mathfrak{t}$ ,  $\downarrow\mathfrak{t}'$ ],  $|\mathfrak{s}|$  [s,  $\uparrow\mathfrak{s}$ ],  $|\mathfrak{d}|$  [d,  $\uparrow\mathfrak{d}$ ]  $|\mathfrak{z}|$  [z]  $\uparrow[\mathfrak{d}, \mathfrak{z}]$ , |q| [q,  $\mathfrak{k}, ng, u_{2}$ ], /k/ [k,  $\downarrow\mathfrak{k}$ ] ([tʃ] in palatal environments),  $|\theta|$  [t],  $|\mathfrak{d}, \mathfrak{d}'$  [d], |t| [th], |2/ [2, ?], |K, R|[K; R, B] (and n[K, R]),  $|\hbar|$  [H,  $\hbar, n\mathfrak{h}$ ],  $|\mathfrak{L}|$  [ $\mathfrak{s}, \mathfrak{s}, \uparrow\mathfrak{s}, 2, \emptyset$ ],  $|\hbar|$  [h,  $\hbar$ ],  $|\theta, \mathfrak{d}'|$  [ $\theta, \mathfrak{d}$ ],  $|\mathfrak{z}'|$ [d $\mathfrak{z}, \mathfrak{z}, d\mathfrak{z}, d\mathfrak{z}, d\mathfrak{z}$ ],  $|\mathfrak{f}'|$  [ $\mathfrak{s}, \mathfrak{s}$ ]  $\downarrow$  [r,  $\mathfrak{z}, \mathfrak{s}, n$ ] (also  $|V\mathfrak{s}''|$  [ $\downarrow V\mathfrak{x}''$ ] is possible).

The fundamental *intonation* patterns are also given, at the end.

fig 14.2.16. 'Regionational' Arabic accents: East Egypt & Israel.



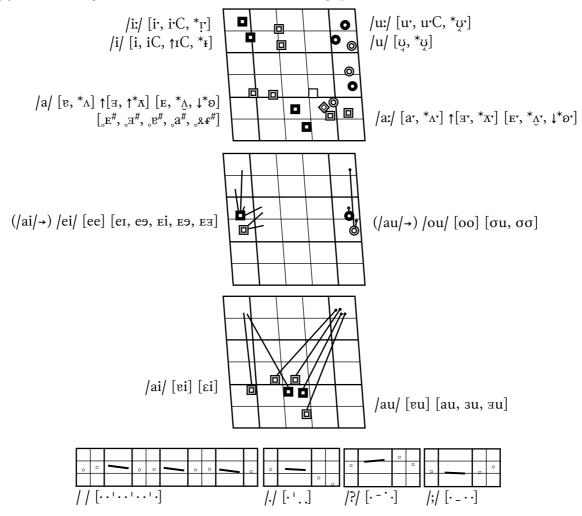
#### North Egypt (Cairo)

14.2.17. See the maps in fig 13.4-5. The realizations of the vowels and four diphthongs are shown in the two vocograms of fig 14.2.17, also with milder and broader variants. In broader accents, the front-raised & back-lowered paraphonic vowel setting ( $\langle V \rangle$ , fig 13.7.1) may be typical thus, both *-ah* and *darkening* may be very strong and spreading over whole words and affixes but not across words (also with [a, a], respectively velarized or uvularized, cf fig 14.1.14), which can form minimal pairs with /a, a:/ opposed to /a, a:/. Some vowels are more typical than others, as shown on the vocograms, which better helps in distinguishing between Egyptian accents. Stressed long vowels are ['V<sup>#</sup>, 'V<sup>#</sup>, 'V·C].

Consonants:  $|\mathfrak{t}, \mathfrak{s}|$  [ $\mathfrak{t}, \mathfrak{s}$ ], both  $/\mathfrak{d}, \mathfrak{z}/[\mathfrak{z}; \uparrow \mathfrak{d}], /\theta, \mathfrak{d}/[\mathfrak{s}, \uparrow \theta; \mathfrak{z}, \uparrow \mathfrak{d}], /q/[?, \uparrow q], /?/[?, <math>\uparrow ?, \downarrow \emptyset$ ],  $/h/[h, h], /K/[\chi, K], /R/[\mathfrak{k}, \mathfrak{k}, R, R], /h, <math>\mathfrak{s}/[h, \mathfrak{s}], /\mathfrak{z}/[g], /\mathfrak{s}/[\mathfrak{s}, \mathfrak{x}]$ . Before a pause, the voiced consonants and sonants, frequently become devoiced, partially or even fully. / CiN<sup>#</sup>/[ CN<sup>#</sup>]. The stress patterns are the typical Egyptian ones. Some oscillation towards mediatic Egyptian is possible, too (cf § 13.38-39). The article  $\gamma al/\gamma el$  also assimilates to  $\downarrow [k, g]$ .

The fundamental *intonation* patterns are also given, at the end.

fig 14.2.17. 'Regionational' Arabic accents: North Egypt.



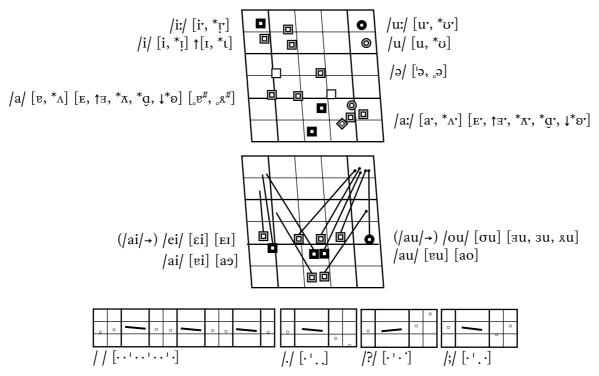
# South Egypt

14.2.18. See the maps in fig 13.4-5. The realizations of the vowels and four diphthongs are shown in the two vocograms of fig 14.2.18, also with broader and milder variants. Let us notice some peculiar realizations, including stressed or unstressed /ə/ [ə]. In broader accents, the front-raised & back-lowered paraphonic vowel setting ( $\langle V \rangle$ , fig 13.7.1) may be typical thus, both *-ah* and *darkening* may be very strong. Some vowels are more typical than others, as shown on the vocograms, which better helps in distinguishing between Egyptian accents. Stressed long vowels are  $[V^{\#}, V^{\#}, VC]$ .

Consonants:  $|\mathfrak{t}, \mathfrak{s}|$   $[\mathfrak{t}, \mathfrak{s}]$ , both  $/\mathfrak{d}, \mathfrak{z}/[\mathfrak{z}; \uparrow \mathfrak{d}], /q/[2, g], /2/[2, \uparrow \mathfrak{d}], /\kappa, \kappa/[\chi, \kappa; \mathfrak{w}], /\hbar, \mathfrak{f}, [\hbar; \mathfrak{s}, \mathfrak{s}], /h/ [\hbar, h], /J/ [J], /2/[g], dg], /\mathfrak{s}/[r, r, r^{\#}, r^{\#}], /nj/[nj, nj, n]. The stress patterns are the typical Egyptian ones. Some oscillation towards mediatic Egyptian is possible, too (cf § 13.38-39).$ 

The fundamental *intonation* patterns are also given, at the end.

fig 14.2.18. 'Regionational' Arabic accents: South Egypt.



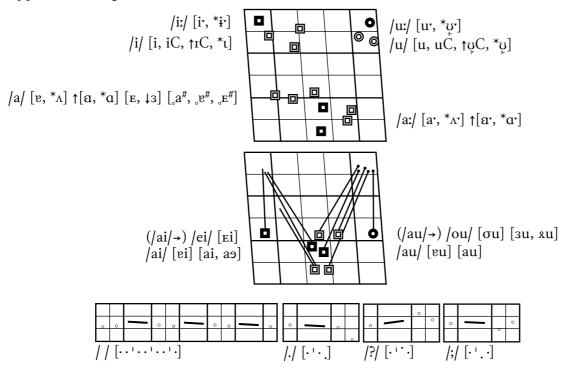
#### 'Nubia'

14.2.19. See the maps in fig 13.4-5. The realizations of the vowels and four diphthongs are shown in the two vocograms of fig 14.2.19, also with broader variants. Let us notice some peculiar realizations. In broader accents, the front-raised & back-lowered paraphonic vowel setting ( $\langle V \rangle$ , fig 13.7.1) may be typical thus, both *-ah* and *darkening* may be very strong. Some vowels are more typical than others, as shown on the vocograms, which better helps in distinguishing this accent from the Egyptian ones. Stressed long vowels tend to be ['V<sup>#</sup>, 'V<sup>#</sup>, 'V·C].

Consonants: /ŧ, ₅/ [ŧ, s], both /đ, z/ [ð, đ, z], /q/ [q, ?, k'], /k/ [k, k'] ([tʃ] in platalal contexts), /ʔ/ [ʔ, ?, ↓Ø], /ĸ, Ŗ/ [κ, χ; в], /ħ, ♀/ [ħ, h; ♀, ໑], /ʔ/ [ʔ], /h/ [ħ, h], /θ, ð/ [ð, δ], /f/ [f], /ʒ/ [dʒ, dʒ, J], /ɬ/ [ɬ, ŧ, r, r], /nj/ [ŋ], /CiN#/ [CN#, CaN#].

The fundamental *intonation* patterns are also given, at the end.

fig 14.2.19. 'Regionational' Arabic accents: 'Nubia'.

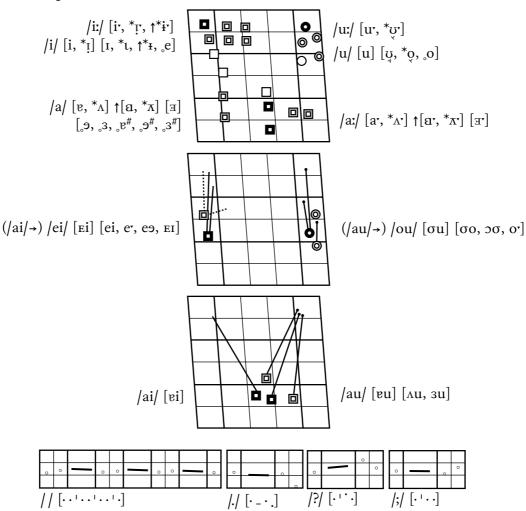


# Sudan

14.2.20. See the maps in fig 13.2 & 13.4. The realizations of the vowels and four diphthongs are shown in the two vocograms of fig 14.2.20, also with broader variants. Let us notice some possible realizations of /i, u/ and of unstressed /a/ [9, 3] and /u/ [0]. In broader accents, the compressed paraphonic vowel setting ( $\langle V \rangle$ ), fig 13.7.3) may be typical; word-internal /a/ may become /i/ or /u/ in contact with front or back consonants, respectively.

Consonants:  $|\mathfrak{t}, \mathfrak{s}/[\mathfrak{t}, \uparrow\mathfrak{t}; \mathfrak{s}, \uparrow\mathfrak{s}]$ , both  $/\mathfrak{d}, \mathfrak{z}/[\mathfrak{d}, \mathfrak{z}, \mathfrak{d}; \uparrow\mathfrak{d}]$ ,  $/\theta, \mathfrak{d}/[\mathfrak{t}, \mathfrak{s}; \mathfrak{d}, \mathfrak{z}] \uparrow [\mathfrak{d}, \mathfrak{d}]$ ,  $/q/[\mathfrak{g}, \mathfrak{k}, \uparrow\mathfrak{q}, \iota\mathfrak{d}]$  (or, hypercorrectly, like  $/P/[\mathfrak{B}]$ ),  $/h/[\mathfrak{d}] \uparrow [\mathfrak{h}, \mathfrak{h}]$ ,  $/2/[\mathfrak{d}, \uparrow^2]$ ,  $/F/[\mathfrak{X}]$ ,  $/P/[\mathfrak{k}, \iota\chi]$ ,  $/\mathfrak{h}, \mathfrak{s}/[\mathfrak{h}, \mathfrak{f}] \uparrow [\mathfrak{h}, \mathfrak{s}]$ ,  $/2/[\mathfrak{d}, \mathfrak{d}, \mathfrak{d}, \mathfrak{g}]$ ,  $/\mathfrak{f}/[\mathfrak{r}, \mathfrak{s}, \mathfrak{r}^{\#}, \mathfrak{s}^{\#}]$ ,  $/l/[\mathfrak{l}, \mathfrak{t}, \mathfrak{t}]$ ,  $/nj/[\mathfrak{p}^{\#}]$ . The fundamental *intonation* patterns are also given, at the end.

fig 14.2.20. 'Regionational' Arabic accents: Sudan.



# Lybia

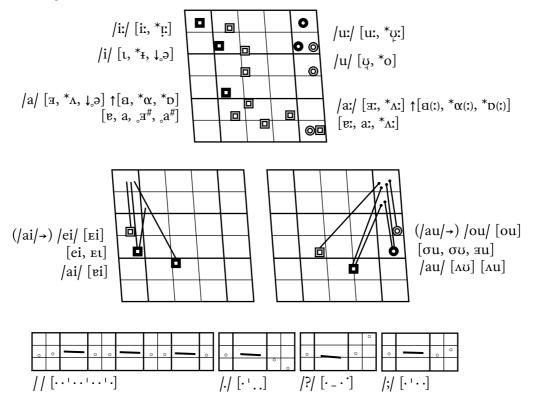
14.2.21. Including parts of north-western Egypt and eastern Tunisia and Algeria (see the maps in fig 13.2-3. The realizations of the vowels and four diphthongs are shown in the two vocograms of fig 14.2.21, also with some milder variants. In broader accents, the compressed paraphonic vowel setting ( $\langle Y \rangle$ , fig 13.7.3) may be typical. As in Northern Egypt (Cairo), there may be minimal pairs with /a, a:/ opposed to /a, a:/; word-internal /a/ may become /i/ or /u/ in contact with front or back consonants, respectively. Stressed short vowels are often ['V-].

Consonants:  $|\mathfrak{t}, \mathfrak{s}|$  [ $\mathfrak{t}, \mathfrak{s}$ ], both  $/\mathfrak{d}, \mathfrak{z}/[\mathfrak{z}, \mathfrak{u}\mathfrak{d}], /\theta, \mathfrak{d}/[\mathfrak{t}, \mathfrak{d}] \mathfrak{u}[\theta, \mathfrak{d}], /q/[q] \mathfrak{n}[\mathfrak{g}, \mathfrak{u}\mathfrak{d}_{\mathfrak{f}}], /\mathfrak{l}/[\mathfrak{f}, \mathfrak{o}], /\mathfrak{k}/[\mathfrak{g}, \mathfrak{u}], /\mathfrak{k}/[\mathfrak{g}, \mathfrak{u}], /\mathfrak{k}/[\mathfrak{g}], /\mathfrak{g}/[\mathfrak{g}, \mathfrak{u}\mathfrak{d}_{\mathfrak{f}}], /\mathfrak{g}/[\mathfrak{g}, \mathfrak{u}\mathfrak{d}_{\mathfrak{f}}], /\mathfrak{g}/[\mathfrak{f}, \mathfrak{f}, \mathfrak{f}, \mathfrak{f}], /\mathfrak{h}/[\mathfrak{h}, \mathfrak{h}, \mathfrak{o}], /\mathfrak{g}, w/[\mathfrak{f}, \mathfrak{g}], w/[\mathfrak{f}, \mathfrak{g}], /\mathfrak{g}/[\mathfrak{f}].$ 

*Darkening* is fairly strong (also with affixes, but restricted in extension to single words, and blocked by /i, i:, ei, j,  $\int$ ), also with /m, b, f,  $\frac{1}{2}$ , and labialized consonants, and /j, w/ (cf fig 12.6.1), which may form minimal pairs with /j, w/.

The fundamental *intonation* patterns are also given, at the end.

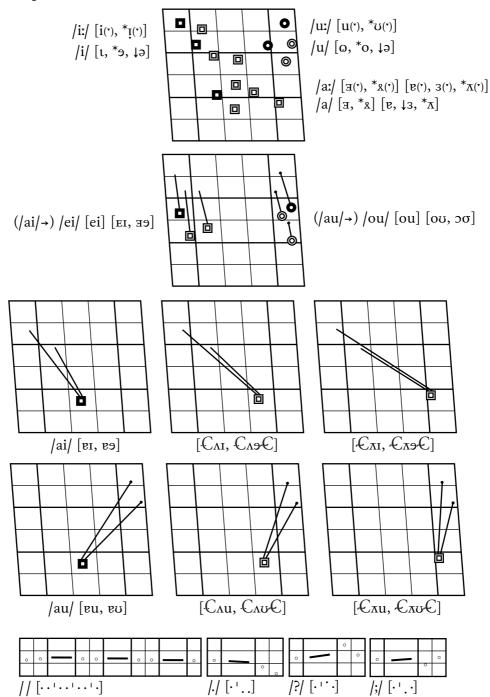
fig 14.2.21. 'Regionational' Arabic accents: Lybia.



## Tunisia

14.2.22. A smaller area than the its actual surface. See the maps in fig 13.2-3. The realizations of the vowels, with some peculiarities, are shown in the first vocogram of fig 14.2.22. The four diphthongs are given in the remaining seven vocograms. Let us notice that, for /ai, au/, we clearly show their contextual variants. In broader accents, the compressed ( $\langle V \rangle$ , fig 13.7.3) and back-reduced paraphonic vowel settings ( $\langle V \rangle$ , fig 13.7.2) may be typical; word-internal /a/ may be-

fig 14.2.22. 'Regionational' Arabic accents: Tunisia.



come /i/ or /u/ in contact with front or back consonants, respectively, while unstressed /i, u/ and /a/ may become [ $\downarrow$ ə] and [ $\downarrow$ 3]. Unstressed final long vowels are shortened, while the short ones are dropped (often even in word-internal free syllables).

Consonants:  $|\mathfrak{t}, \mathfrak{s}|$   $[\mathfrak{t}, \mathfrak{s}]$ , both  $/\mathfrak{d}, \mathfrak{z}/[\mathfrak{z}, \mathfrak{d}], /\theta, \mathfrak{d}/[\theta, \mathfrak{d}], /q/[q, \downarrow ?] n[g, \downarrow \mathfrak{d}], /?/[?, ?], /k<sup>#</sup>/[c, c] (in contact with front vowels), /ħ, <math>\mathfrak{s}/[\hbar, \mathfrak{h}; \mathfrak{s}, \mathfrak{s}], /z/[z], /\mathfrak{s}/[\mathfrak{s}, \mathfrak{r}].$ Frequent /#CC, CCC<sup>#</sup>/ clusters. For *darkening*, also [m, ħ, ħ] are generally active.

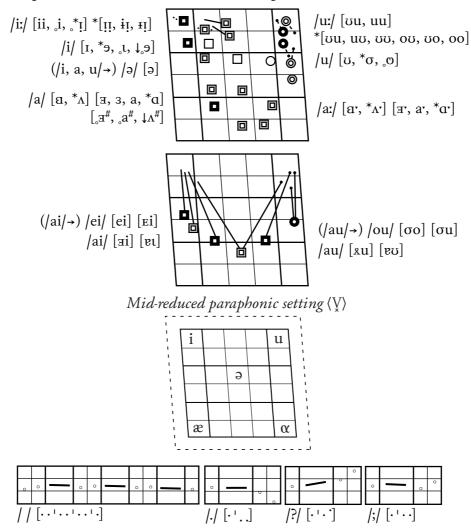
The fundamental *intonation* patterns are also given, at the end.

## North Algeria

14.2.23. See the maps in fig 13.2-3. The realizations of the vowels and four diphthongs are shown in the two vocograms of fig 14.2.23, also with broader variants, and several 'darkened' taxophones by |C| [C] (velarized), and the possible neutralization of unstressed /i, a,  $u \to |\bar{v}|$  [ $\bar{v}$ ]. In addition, the typical mid-reduced paraphonic vowel setting is shown after the first two vocograms. In broader accents, the compressed ( $\langle V \rangle$ , fig 13.7.3) and back-reduced paraphonic vowel settings ( $\langle V \rangle$ , fig 13.7.2) may be typical; word-internal /a/ may become /i/ or /u/ in contact with front or back consonants, respectively, while unstressed /i, u/ and /a/ may become [ $\bar{v}$ ] and [ $\bar{v}$ ]. Unstressed final long vowels are shortened, while the short ones are dropped (often even in word-internal free syllables).

Consonants: /ŧ, \$/ [ŧ, \$], both /đ, z/ [z, ð], /θ, ð/ [θ, ð], /q/ [q, ↓?] <sup>n</sup>[g, ↓dz], /?/ [?, ?], /k<sup>#</sup>/ [c, c] (in contact with front vowels), /ħ, \$/ [ħ, h; \$, \$], /ʒ/ [ʒ], /ŧ/ [ŧ, r]. Frequent /#CC, CCC<sup>#</sup>/ clusters. For *darkening*, also [m, ħ, ħ] are generally active. The fundamental *intonation* patterns are also given, at the end.

fig 14.2.23. 'Regionational' Arabic accents: North Algeria.



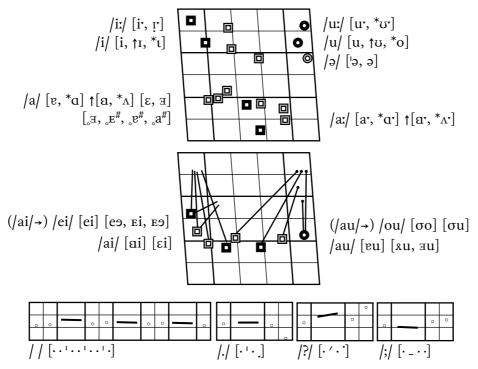
### South Algeria

14.2.24. See the maps in fig 13.2-3. The realizations of the vowels and four diphthongs are shown in the two vocograms of fig 14.2.24, also with milder variants. Let us notice that there is also stressed or unstressed  $|\partial|$  [ $\partial$ ]. Some vowels are more typical than others, as shown on the vocograms, which better helps in distinguishing between Algerian accents; word-internal /a/ may become /i/ or /u/ in contact with front or back consonants, respectively, while unstressed /i, u/ and /a/ may become [ $i\partial$ ] and [ $i\partial$ ].

Consonants:  $|\mathfrak{t}, \mathfrak{s}|$  [ $\mathfrak{t}, \mathfrak{s}$ ], both  $/\mathfrak{d}, \mathfrak{z}/[\mathfrak{d}]$ , and  $/\mathfrak{m}/[\mathfrak{m}]$ ,  $/\mathfrak{q}/[\mathfrak{q}, \mathfrak{l}^2] {}^n[\mathfrak{g}, \mathfrak{t}\mathfrak{d}_3]$ ,  $/\mathfrak{l}/[\mathfrak{r}, \mathfrak{r}]$ ,  $/\mathfrak{k}/[\mathfrak{k}, \mathfrak{X}]$ ,  $/\mathfrak{k}/[\mathfrak{k}, \mathfrak{s}]$ ,  $/\mathfrak{h}/[\mathfrak{h}, \mathfrak{h}]$ ,  $/\mathfrak{l}/[\mathfrak{h}]$ ,  $/\mathfrak{k}/[\mathfrak{k}]$  ([ $\mathfrak{n}\mathfrak{t}\mathfrak{t}\mathfrak{f}$ ] in palatal contexts),  $/\mathfrak{H}/[\mathfrak{H}, \mathfrak{ts}]$ ,  $/\mathfrak{H}/[\mathfrak{H}, \mathfrak{ts}]$ ,  $/\mathfrak{h}/[\mathfrak{h}, \mathfrak{h}]$ ,  $/\mathfrak{t}/[\mathfrak{th}]$ ,  $/\mathfrak{k}/[\mathfrak{k}]$  ([ $\mathfrak{n}\mathfrak{t}\mathfrak{t}\mathfrak{f}$ ] in palatal contexts),  $/\mathfrak{H}/[\mathfrak{H}, \mathfrak{ts}]$ ,  $/\mathfrak{H}/[\mathfrak{H}, \mathfrak{d}\mathfrak{h}]$ ,  $/\mathfrak{z}/[\mathfrak{z}, \mathfrak{z}]$  (also possible [ $\mathfrak{d}\mathfrak{z}, \mathfrak{d}\mathfrak{z}$ ]),  $/\mathfrak{f}/[\mathfrak{f}, \mathfrak{f}]$ ,  $/\mathfrak{k}/[\mathfrak{k}, \mathfrak{k}]$ . Oscillations towards the mediatic Algerian accent (§ 13.40) are possible.

The fundamental *intonation* patterns are also given, at the end.

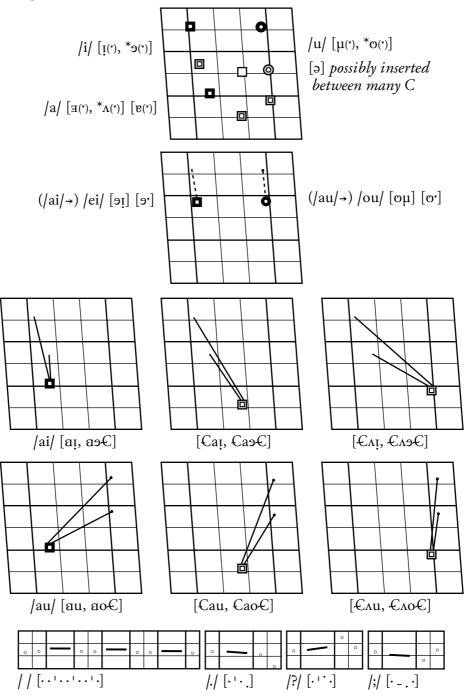
fig 14.2.24. 'Regionational' Arabic accents: South Algeria.



## Kabyle-Berber Arabic

14.2.25. See the maps in fig 13.2-3. The realizations of the vowels are shown in the first vocogram of fig 14.2.25, with their current taxophones, while those of the four diphthongs are given extensively in the other vocograms. In the first vocogram, also shows [ə], which is generally inserted into clusters of many consonants. In broader accents, the mid-reduced paraphonic vowel setting ( $\langle V_{x} \rangle$ , fig 13.7.2) may be typical.

fig 14.2.25. 'Regionational' Arabic accents: Kabyle-Berber Arabic.



Consonants: /ŧ, \$/ [ŧ, \$], both /đ, z/ [z, ð], /θ, ð/ [θ, ð], /v/ [v, β], /q/ [q], /ʔ/ [Ø, ?], /κ, κ/ [κ, κ], /ħ, \$/ [ħ, \$], /h/ [ħ, h], /ʒ/ [ʒ], /ɬ/ [ŧ, ŧ, r, r], and [ѭ, ₺]. The fundamental *intonation* patterns are also given, at the end.

#### Morocco

14.2.26. See the maps in fig 13.2-3. The back-reduced paraphonic vowel setting  $(\langle V \rangle)$ , fig 13.7.2) is very typical, as shown; word-internal /a/ may become /i/ or /u/ in contact with front or back consonants, respectively.

The first vocogram of fig 14.2.26.1 shows the realizations of the vowels /i(:), a(:), u(:)/, which may generally be distinguished as short or long only as an intentional choice. In fact, in stressed syllables, they are usually half-long, ['V<sup>-</sup>], instead of ['V:], both in free and checked syllables, although with oscillations.

The second vocogram shows a fourth phoneme,  $|\partial|$ , which occurs either as stressed or unstressed, with the taxophones indicated in the vocogram, which are four, as those for |a(x)| are as well. The typical back-reduced vocalic paraphonic setting is shown afterwards.

fig 14.2.26.2 shows six diphthongs. The first two vocograms give the typical local /əi, əu/ diphthongs, which can appear in given words for certain speakers, in addition to /ei, ou/ (third vocogram), and /ai, au/ (in the remaining six vocograms).

Consonants:  $|\mathfrak{t}, \mathfrak{s}|$   $[\mathfrak{t}, \mathfrak{s}]$ , both  $/\mathfrak{d}, \mathfrak{z}/[\mathfrak{d}], /\theta, \mathfrak{d}/[\mathfrak{t}, \mathfrak{d}], /q/[q, ng] \downarrow [2, q', ndz] ([2] in northern areas), <math>/k/[kh] ([n\downarrow\mathfrak{t}]]$  in palatal contexts),  $/2/[2], /k/[\kappa], /R/[\kappa, n\downarrow q], /\hbar, \mathfrak{f}/[\hbar, h; \mathfrak{f}, \mathfrak{g}], /h/[\hbar, h], /z/[z], /\mathfrak{f}/[\mathfrak{f}]$  different from  $/r/[r]; /^{\#}C \mathfrak{a}C, C \mathfrak{a}C^{\#}/[CC]$ 

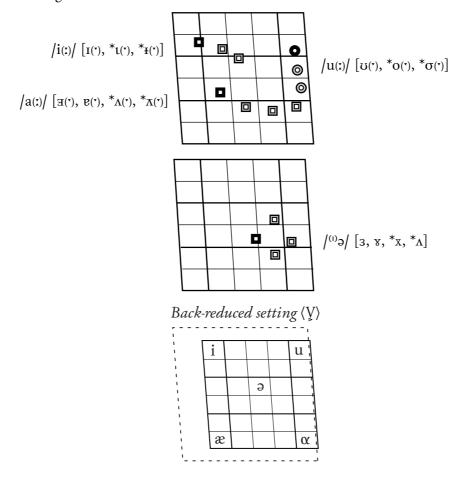


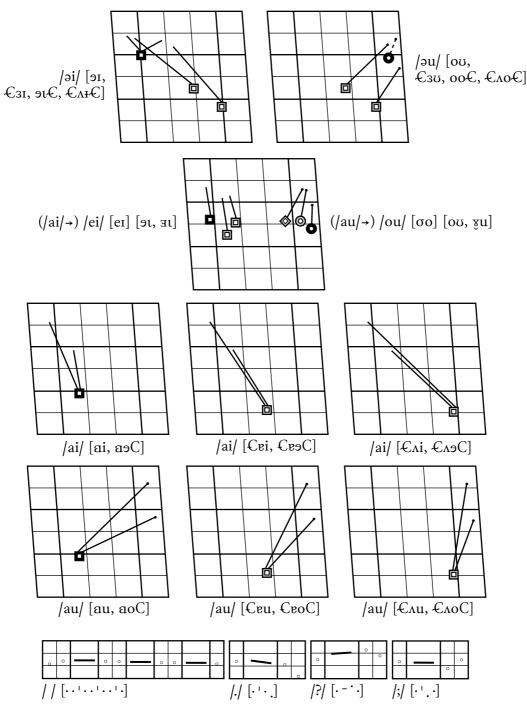
fig 14.2.26.1. 'Regionational' Arabic accents: Morocco vowels	fig 14.2.26.1.	'Regionational'	Arabic accents:	Morocco	vowels.
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(never reduced to [C]). Oscillations towards the mediatic Moroccan accent (§ 13.40) are possible.

*Darkening* is rather strong, especially on vowels and sonants, mainly at the beginning of words (including prefixes), also with [m, b, f, f, f], but it generally does not apply with /t/ [th, t $\theta$ , ts].

The fundamental *intonation* patterns are also given, at the end.

fig 14.2.26.2. 'Regionational' Arabic accents: Morocco diphthongs & intonation.



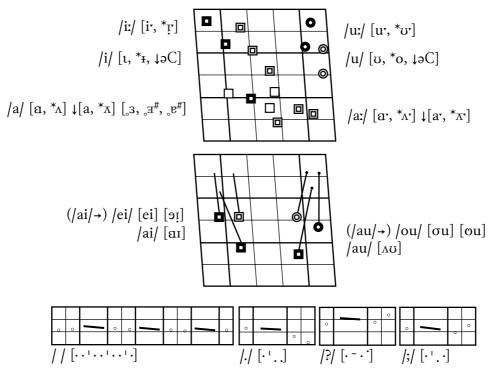
### Mauritania (& Western Sahara)

14.2.27. Including Western Sahara (see the maps in fig 13.2-3). The realizations of the vowels and four diphthongs are shown in the two vocograms of fig 14.2.27, also with some broader variants. In broader accents, the back-reduced paraphonic vowel setting ( $\langle V \rangle$ , fig 13.7.2) may be typical. In addition, final unstressed short vowels are dropped (not so for *-ah*). In checked syllables, /i, u/ $\rightarrow$ [ $\Rightarrow$ C].

Consonants:  $|\mathfrak{t}, \mathfrak{s}/[\mathfrak{t}, \mathfrak{t}; \mathfrak{s}, \mathfrak{s}], /\mathfrak{d}/[\mathfrak{d}, \mathfrak{t}\mathfrak{d}], /\mathfrak{z}/[\mathfrak{d}, \mathfrak{t}\mathfrak{d}], /\mathfrak{t}, \mathfrak{d}/[\mathfrak{t}, \mathfrak{d}]$  (dentalveolar),  $|\theta, \mathfrak{d}/[\theta, \mathfrak{d}], /\mathfrak{q}/[\mathfrak{g}, \mathfrak{f}\mathfrak{q}], /\mathfrak{l}/[\theta, \mathfrak{j}, \mathfrak{w}, \mathfrak{f}\mathfrak{r}], /\mathfrak{k}/[\hbar, \hbar], /\mathfrak{k}/[\mathfrak{p}, \mathfrak{q}], /\mathfrak{k}\mathfrak{k}/[\mathfrak{q}\mathfrak{q}], /\hbar, \mathfrak{s}/[\hbar, \mathfrak{s}]$ (and [ $\mathfrak{s}$ ] (glottalized), /f,  $\theta$ / [f,  $\mathfrak{v}; \theta, \mathfrak{d}$ ], /z/ [z], / $\mathfrak{s}$ /[ $\mathfrak{s}, \mathfrak{r}$ ], also [ $\mathfrak{m}, \mathfrak{b}, \mathfrak{n}, \mathfrak{s}, \mathfrak{s}, \mathfrak{s}$ ], /nj/ [n]. The 'Black voice' is typical (cf fig 14.1.15).

The fundamental *intonation* patterns are also given, at the end.

fig 14.2.27. 'Regionational' Arabic accents: Mauritania.



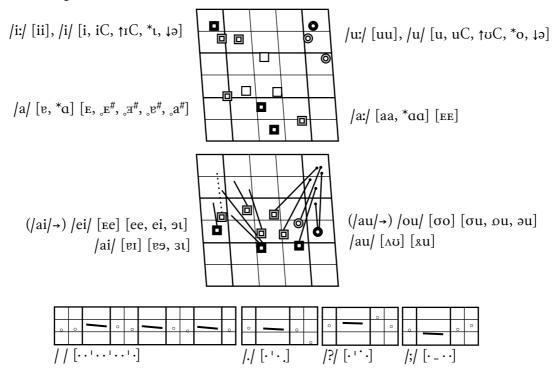
# Mali

14.2.28. See the maps in fig 13.2-3. The realizations of the vowels and four diphthongs are shown in the two vocograms of fig 14.2.28, also with variants. In broader accents, the compressed paraphonic vowel setting ( $\langle \underline{V} \rangle$ , fig 13.7.3) may be typical.

Consonants:  $|\mathfrak{t}, \mathfrak{s}/[\mathfrak{t}, \mathfrak{t}; \mathfrak{s}, \mathfrak{s}], /\mathfrak{d}/[\mathfrak{d}, \mathfrak{t}\mathfrak{d}], /\mathfrak{z}/[\mathfrak{d}, \mathfrak{t}\mathfrak{d}], /\mathfrak{t}, \mathfrak{d}/[\mathfrak{t}, \mathfrak{d}]$  (dentalveolar),  $|\theta, \vartheta| [\theta, \vartheta], /\mathfrak{q}/[\mathfrak{g}, \mathfrak{t}\mathfrak{q}], /\mathfrak{l}/[\mathfrak{g}, \mathfrak{t}\mathfrak{c}], /\mathfrak{k}, \mathfrak{R}/\mathfrak{t}[\mathfrak{k}, \mathfrak{R}], /\mathfrak{h}, \mathfrak{s}/\mathfrak{t}[\mathfrak{h}, \mathfrak{s}], /\mathfrak{h}/[\mathfrak{h}], /\mathfrak{z}/[\mathfrak{z}], /\mathfrak{k}/[\mathfrak{r}, \mathfrak{s}]$ . The 'Black voice' is typical (cf fig 14.1.15).

The fundamental *intonation* patterns are also given, at the end.

fig 14.2.28. 'Regionational' Arabic accents: Mali.



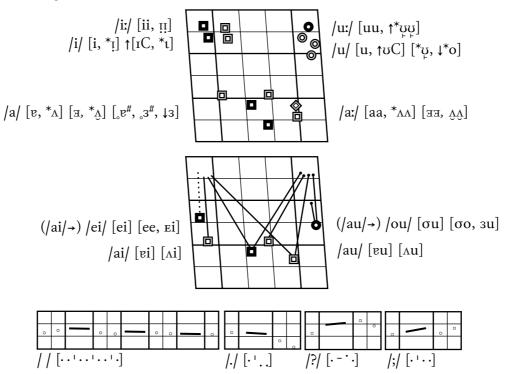
# Chad

14.2.29. See the map in fig 13.3. The realizations of the vowels and four diphthongs are shown in the two vocograms of fig 14.2.29, also with some variants. In broader accents, the compressed paraphonic vowel setting ( $\langle V_{2} \rangle$ , fig 13.7.3) may be typical; word-internal /a/ may become /i/ or /u/ in contact with front or back consonants, respectively.

Consonants:  $|\mathfrak{t}, \mathfrak{s}/[\mathfrak{t}, \uparrow\mathfrak{t}; \mathfrak{s}, \uparrow\mathfrak{s}]$ , both  $/\mathfrak{d}, \mathfrak{z}/[\mathfrak{z}, \uparrow\mathfrak{z}]$ ,  $/q/[q, \downarrow q', \downarrow \mathfrak{d}\mathfrak{z}]$  (or, hypercorrectly, like  $/\mathfrak{P}/[\mathfrak{k}]$ ),  $/\mathfrak{l}/[\mathfrak{r}, \mathfrak{z}]$ ,  $/\mathfrak{K}/[\chi]$ ,  $/\mathfrak{R}/[\mathfrak{k}, \downarrow\chi]$ ,  $/\mathfrak{h}, \mathfrak{s}/[\mathfrak{h}, \mathfrak{h}; \mathfrak{s}, \mathfrak{s}]$  ([V] in contact with  $/\mathfrak{s}/$ ),  $/\mathfrak{h}/[\mathfrak{h}]$ ,  $/\mathfrak{z}/[\mathfrak{d}\mathfrak{z}, \mathfrak{g}\mathfrak{j}]$ ,  $/\mathfrak{f}/[\mathfrak{f}]$ ,  $/\mathfrak{s}/[\mathfrak{s}, \mathfrak{r}]$ ,  $[\mathfrak{l}, \mathfrak{l}, \mathfrak{t}]$ , and  $[\mathfrak{b}]$ ,  $/\mathfrak{n}/[\mathfrak{p}^{\#}\mathfrak{j}]$ , and, of course,  $/\mathfrak{k}/[\mathfrak{t}]$  in palatal contexts (also in  $\check{C}ad$ ). The 'Black voice' is possible (cf fig 14.1.15).

The fundamental *intonation* patterns are also given, at the end.

fig 14.2.29. 'Regionational' Arabic accents: Chad.



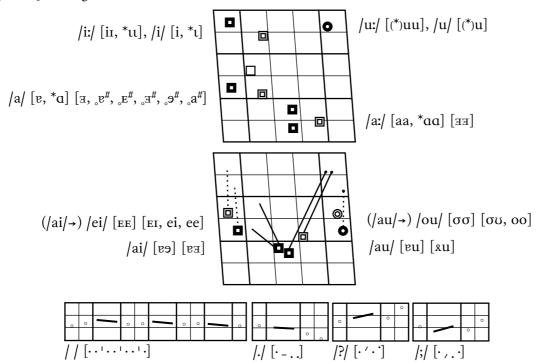
### South Sudan

14.2.30. See the map in fig 13.3. The realizations of the vowels and four diphthongs are shown in the two vocograms of fig 14.2.30, also with variants. In broader accents, the compressed paraphonic vowel setting ( $\langle \underline{V} \rangle$ , fig 13.7.3) may be typical. Long vowels are generally shortened, as also geminate consonants are.

Consonants:  $|\mathfrak{t}, \mathfrak{s}|$  [t, s], both  $|\mathfrak{d}, \mathfrak{z}|$  [d, z],  $|\theta, \mathfrak{d}|$  [t, s; d, z], |q| [g, k,  $\mathfrak{k}', \mathfrak{q}$ ], |2| [?,  $\emptyset$ ],  $|\mathsf{K}, \mathsf{R}|$  [k, g]  $\uparrow$  [ $\mathsf{K}, \chi; \mathsf{R}, \mathfrak{s}$ ],  $|\hbar, \mathfrak{f}|$  [?,  $\emptyset$ ]  $\uparrow$  [ $\hbar, \mathfrak{h}; \mathfrak{s}, \mathfrak{s}$ ],  $|\hbar|$  [ $\hbar, \emptyset$ ], |3| [ $\mathfrak{d}_{\mathfrak{z}}, \mathfrak{d}_{\mathfrak{z}}$ ],  $|\mathfrak{f}|$  [ $\mathfrak{f}, \mathfrak{f}$ ],  $|\mathfrak{f}|$  [r, r] ([ $\mathfrak{f}$ ] is possible in contact with back consonants). Stress can have some unpredictable patterns. The 'Black voice' is typical (cf fig 14.1.15).

The fundamental *intonation* patterns are also given, at the end.

fig 14.2.30. 'Regionational' Arabic accents: South Sudan.



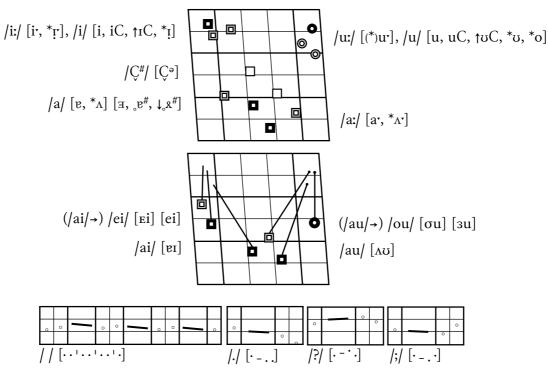
## Somalia (south of its northern areas)

14.2.31. Excluding its northern areas, which belong to the Yemen koiné (see the maps in fig 13.2 & 13.4). The realizations of the vowels and four diphthongs are shown in the two vocograms of fig 14.2.31, also with variants. The first vocogram also shows that word-final voiced consonants (and sonants) are usually followed by a weak [ə]. In broader accents, the compressed paraphonic vowel setting ( $\langle \underline{Y} \rangle$ , fig 13.7.3) may be typical.

Consonants:  $|\mathfrak{t}, \mathfrak{s}|$  [t, s], both  $|\mathfrak{d}, \mathfrak{z}|$  [z,  $\uparrow \delta$ ],  $/\theta$ ,  $\delta/$  [t $\theta$ ;  $\delta$ ,  $\uparrow \delta$ ], /b/ [b,  $\beta$ ], /q/ [q,  $\downarrow G$ ], /?/ [?], /K, R/ [ $\chi$ ,  $\kappa$ ,  $\kappa$ ;  $\mathfrak{s}$ , R],  $/\hbar$ ,  $\mathfrak{L}/$  [ $\mathfrak{H}$ ;  $\mathfrak{L}, \mathfrak{L}$ ] ([ $\mathcal{V}$ ] in contact with  $/\mathfrak{L}/$ ), /h/ [ $\mathfrak{h}$ ,  $\mathfrak{h}$ ], /3/ [3,  $\mathfrak{d}_3$ ],  $/\mathfrak{t}/$  [ $\mathfrak{r}, \mathfrak{r}, \mathfrak{s}, \mathfrak{s}$ ], /l/ [ $\mathfrak{l}, \mathfrak{l}$ ] (velar), /j,  $\mathfrak{w}/$  [ $\mathfrak{J}, \omega$ ];  $/C^{\sharp}/$  [ $C^{\mathfrak{s}\sharp}$ ]. The 'Black voice' is possible (cf fig 14.1.15).

The fundamental *intonation* patterns are also given, at the end.

fig 14.2.31. 'Regionational' Arabic accents: Somalia.



## The Comoros

14.2.32. An archipelago at the northern end of the Mozambique Channel (see the map in fig 13.2). The realizations of the vowels and four diphthongs are shown in the two vocograms of fig 14.2.32, also with variants. In broader accents, the compressed paraphonic vowel setting ( $\langle Y \rangle$ , fig 13.7.3) may be typical.

Consonants:  $|\mathfrak{t}, \mathfrak{s}|$  [t, s], both  $|\mathfrak{d}, \mathfrak{z}|$  [z],  $|\theta, \mathfrak{d}|$  [ $\theta, \mathfrak{d}$ ], |q| [q], |2| [2], |K, R/ [ $\hbar$ , h;  $\mathfrak{s}, 2$ ],  $/\hbar$ ,  $\mathfrak{s}/$  [ $\hbar$ ,  $\mathfrak{s}$ ], /h/ [h], /2/ [ $\mathfrak{d}_2$ ],  $/\mathfrak{f}/$  [ $\mathfrak{l}, \mathfrak{r}, \mathfrak{s}, \mathfrak{s}$ ]. The 'Black voice' is possible (cf fig 14.1.15).

The fundamental *intonation* patterns are also given, at the end.

fig 14.2.32. 'Regionational' Arabic accents: Comoros.

