

## Inventory of phonemes, by Lameen Souag:

### Consonants:

Stops: /b; t, d, ṭ; k, g, q/. (/p/ occurs in loanwords for some speakers.)

Nasals: /m; n/

Laterals and rolls: /l, ḷ, r, ṛ/

Fricatives: /f; θ, ð, ð̣; s, z, ṣ, ẓ; ʃ; x, ɣ; h, ɦ, ʕ/. (/ʒ, ʔ/ occur in recent loanwords, and for some speakers /v/ as well; /θ, ð/ have been absorbed by /t, d/ in many, perhaps most, dialects.)

Affricates: /tʃ, dʒ/

Semivowels: /j, w/

The emphatic (velarized or pharyngealized) consonants /ṭ, ṣ, ẓ, ð̣, ḷ, ṛ, q, x, ɣ/ often induce emphatic spread, making surrounding consonants emphatic (especially those without phonemic emphatic counterparts).

Vowels: /aː, iː, uː, ə, ʊ/ (/æ/ occurs in French loanwords for a few speakers.)

The vowels have a variety of allophones: [aː, iː, uː, ɪ, u] normally, [aː, iː, oː, ə, oː] in the neighbourhood of emphatics, [æː, iː, uː, æ, ʊ] next to pharyngeals, [ɛː, iː, uː, ɛ, ʊ] next to glottals. The long vowels, particularly /aː/, also shorten in certain environments. Moreover, /əj/ and /əw/ become /iː/ and /uː/, and /əjj/ and /əww/ becomes [ijj] and [uww].

### Syllables:

[C]CV(:/C)[C], and word-initially V:C[C]; no more than three consonants in a row are permitted. Epenthetic /ə/ is inserted word-initially before CC, resulting in syllables that cut across word boundaries; if this phenomenon is taken into account, stress consistently falls on the penultimate syllable. When addition of a suffix would result in an impossible open CV syllable with a short vowel, it becomes VC; eg /ṭṃɛṛ/, “date” (collective) + /-a/ => /ṭəṃṛa/, date (singular).

### Regional differences:

- /θ, ð/ have been absorbed by /t, d/ in many, perhaps most, dialects, including Algiers'.
- In some areas /dʒ/ is realized as [ʒ], particularly the west.
- /θ/ is often [d] in dialects without /θ, ð/.
- /q/ and /g/ are frequently not distinguished phonemically, with many dialects opting only for one or the other.

### Transformations:

- /h/ is normally elided between vowels.
- There are two sets of emphatic (velarized or pharyngealized) consonants, /t̤, s̤, z̤, ð̤, ʎ, r/ and /r, q, χ, ʁ/. The former set may cause emphasis of nearby dental, alveolar, and post-alveolar consonants, while the latter may cause emphasis of velar and uvular ones; either may cause emphasis of bilabials, but emphasis of pharyngeals and glottals is impossible. Note that /r/ is in both sets. This phenomenon is regular for those consonants without phonemic emphatic counterparts, including bilabials, and sporadic even for ones with contrasting emphatics. Both sets always emphasize neighboring vowels.
- Regressive assimilation of voicing/unvoicing (eg /səbt/=[sɪpt], "Saturday") and of place of articulation for nasals (eg /tənɒləq/=[tənɒləq], "it closes") is routine, though it does not occur in careful speech; likewise, pharyngeal + /h/ => [ħh].
- /j, w/ are realized as [i, u] in two-consonant clusters when not adjacent to a vowel.
- The definite article /l-/ assimilates completely to all dental, alveolar, and post-alveolar consonants, except for (in most dialects) /dʒ/.

### Vowels:

	Front	Central	Back
Close	i:		u u:
Close-mid		ə	
Open-mid			
Open		a:	

### Issues:

/ʊ/ is fairly rare, occurring only in the neighborhood of velars or bilabials, but is unpredictable and marginally contrasting: /kʊ:lɪ:z/, "all of me", versus /kəlɪ:z/, "as if", and /kʊ:lɪ:z/, "eat for me", although only the second of those three is semantically entirely sound or likely to be attested in normal speech.

### Regional differences:

- /ə/ is reported to be non-phonemic in some dialects, at least in Morocco; in Dellys and most other areas of Algeria, however, it has several minimal pairs (e.g. /ħəbs/, "jail", versus /ħbəs/, "he stopped", or /sməʃt/, "I/you heard", versus /səməʃt/, "she heard".)
- Some conservative dialects retain /əj/ and pronounce it [e:] (unlike Dellys and many others, which turn it into /i:/.)

### Transformations:

The vowels transcribed as /a:, i:, u:, ə, ʊ/, have a variety of allophones: [a:, i:, u:, ɪ, u] normally, [ɑ:, ɪ:, ɔ:, ə, ɒ] in the neighborhood of emphatics, [æ:, ɪ:, ʊ:, æ, ʊ] next to pharyngeals, [ɛ:, ɪ:, ʊ:, ɛ, ʊ] next to glottals. The long vowels, particularly /a:/, often shorten before two consonants (e.g. [qol:i] for /qu:l:i:/, "tell me") and, except for emphasis, always shorten in word-final position. Moreover, /əj/ and /əw/ become /i:/ and /u:/, and /əj:/ and /əw:/ become [ij:] and [uw:].

### Syllables:

[C]CV(:/C/C:)[C], and word-initially V:[C]; no more than three consonants in a row are permitted. Epenthetic /ə/ is inserted word-initially before CC (including C:), resulting in syllables that cut across word boundaries. If this phenomenon is taken to cause syllable division even for words in isolation (for instance, segmenting /dʒa:bu:h/, "they brought it", as /dʒa:.bu:.h-/) stress consistently falls on the word's penultimate syllable, and -CC syllables are allowed only due to suffixation (as in /fəf-t.-kum/, "I saw you".)

When addition of a suffix would result in an impermissible open CV syllable with a short vowel, it becomes VC; e.g. /tmər/, "date (collective)" + /-a/ => /təmra:/, "date (singular)". This phenomenon does not, however, affect geminate consonants (unlike Classical Arabic vowel shifts) which behave as unities for this purpose, e.g. /səl:ək/, "he finished" + /-u:/ => /səl:ku:/, "they finished" (although they can also be generated by juxtaposition of morphemes, eg /l=ləsqɑ:/, "the glue".)