## **Mandarin Vowels**

The basic Mandarin monophthong vowels are (the English gloss is the meaning when spoken with Tone 1 (high, level)):

[a] "ah"; [i] "clothes"; [u] "black"; [y] "pedantry"; [x] "take sides"

In addition (1) there is a rhotacized vowel:

Ę

[ə-] "son" E See next page for combinations of the rhotacized vowel with other vowels

In addition (2) there two sounds sometimes referred to as "apical vowels". The IPA illustration refers to them as syllabic consonants. Their occurance is very restricted: either after dental fricatives and affricates, or after postalveolar fricatives and affricates. In the first case they are described as a laminal denti-alveolar approximant, in the second case as an apical post-alveolar approximant:

Case 1 "thoughts"; Case 2 "wet"

In addition (3) Mandarin has many diphthongs and triphthongs (not illustrated here)

## Combinations of the rhotacized vowel with other vowels

There are many cases where the rhotacized vowel can be added to the syllable rhyme leading to a whole range of rhotacized vowel qualities (see Lee & Zee (2003), JIPA 33(1), p.111 for details).

Notes: (1) In some cases the combination results in a new rhotacized vowel, e.g [a-]
(2) When the original syllable ends in [ŋ], a nasalized, rhotacized vowel results

[tao pa <code>ə</code> ] >	[tao pa]	"hilt"
[çiao tçi ə <sup>-</sup> ]>	[çiao tçiə <sup>-</sup> ]	"chickling"
[¢iao tṣu ə <sup>-</sup> ] >	[çiao tşuə <sup>-</sup> ]	"pigling"
[ao ə <sup>-</sup> ] >	[ao]	"coat"
[xuən ə <sup>-</sup> ] >	[xuə]	"soul"
[xə tç <sup>h</sup> yən ə <sup>·</sup> ] >	[xə tç <sup>h</sup> yə <sup>-</sup> ]	"sociable"
[tan xuaŋ ゔ] >	[tan xuã]	"egg yolk"
[çiao çiuŋ ə <sup>-</sup> ] >	[çiao çiữ]	"little bear"

Click on the list to hear the examples. Click here to open the WAV file