المَخارج
The Places of Articulation

Types, Definitions and Rules
The Arabic Consonants
الحروف العربية

• The Arabic alphabet consists of the following 28 consonants:

ب ت ث ج ح خ د ذ ر ز س ش ص ض ط ظ ع غ ف ق ك ل م ن و ه ي

• The letter hamza is a consonant and it comes in various forms; أ ئ ئ ئ

• Alif without a hamza or vowel point on it is not a consonant but a long vowel.

• In early times, the hamza used to be called alif.

• Hamzah was introduced as a separate letter and given the shape ء later on by Imam Khalil.

• Waw and yaa are sometimes vowels and at times consonants
The Arabic Vowels

- The Arabic Vowels are of 5 types:
  1. Short Vowels (al-Harakaat) الحركات
  2. Sukoon سكون
  3. Doubled Vowels (tanween) التنوين
  4. Long Vowels الحروف المدّة
  5. Soft Vowels حروف اللين
1. The Short Vowels

The following are the Short Vowels (al-Harakaat) الحركات:

- **Fathah** - َ e.g. بَ which is like the ‘u’ sound in ‘but’. Any letter with a fatha is called maftooha مَفْتُوﺡَة

- **Kasrah** - ِ e.g. بِ which is like the ‘i’ sound in ‘bit’. Any letter with a kasrah is called maksoorah مَﻛْسُوﺡَة

- **Dhammah** – ُ e.g. بُ which gives the ‘u’ sound in ‘put’. Any letter with a dhammah is called madhmoomah مَﺿْﺽُوﻡَﺔ

- Care must be taken that the length of the short vowels does not exceed one harakah or 0.5 alif which is approximately 0.5 seconds
  - one alif is estimated to be the time it takes a person to open a closed finger or close an open finger.
  - one alif ~ one second = 2 harakat
2. The Sukoon

- The sukoon سكون denotes the absence of a vowel.
- A letter with a sukoon is called sakinah ساكنة
- A letter with a sukoon means that it will be connected with the letter before it.
- In Arabic, a word cannot begin with a sukoon.
3. The Doubled Vowels

• The doubled vowels are known as تنوين
  tanween
• Tanween literally means to add a noon
• They are:
  1. Fathatain - ً e.g. ﺑَنْ = ﺑَا
  2. Kasratain - ٍ e.g. ﺑَنْ = ﺑِ
  2. Dhammatain – ٌ e.g. ﺑَنْ = ﺑُ
• Thus tanween = noon sakinah
• Vowels are doubled to denote the indefiniteness of a noun e.g. رجلٌ a man
4. The Long Vowels

- The Long Vowels are:
  1. **waw maddah** i.e. waw sakinah with dhamma before it – 
  2. **yaa maddah** i.e. yaa sakinah with kasrah before it - 
  3. **alif** is always a long vowel when there is no hamza or vowel on it.

- Their length is one alif = 2 harakat, which is approximately one second
- Care should be taken that this length is not decreased or increased
5. The Soft Vowels (Diphthongs)

• The soft vowels are known as حروف اللين
• They are:
  1. Waw sakinah with fatha before it e.g. بَوْ توْ جَوْ عَوْ فَوْ
  2. Ya sakinah with fatha before it e.g. بَيْ تَيْ جَيْ خَيْ دَيْ سَيْ
The Arabic Sounds

• All Arabic sounds can be categorized into 3 groups:

1. *Oral Cavity* (empty space in the mouth): for short vowels (harakaat) and long vowels (huroof madadah or huroof hawaiyyah). This makraj no.1

2. *Nasal Cavity* (empty space in the nose): for ghunna i.e. idgham or ikhfaa of nun and meem. This is makhraj no.2

3. *Consonantal Sounds*: for the 28 consonants that have 15 different makharij
The 17 Makaharij

- According to the widely accepted opinion of Imam Khalil, there are 17 Makahrij.
- Including the first two Arabic sounds, the letters that share a common makhraj can be grouped in to the following 11 categories:
1. Al-Huroof al-Maddah
2. Al-Khaishoom
3. Al-Huroof al-Halaqiyyah
4. Al-Huroof al-Lahatiyyah / Lahawiyyah
5. Al-Huroof as-Shajariyyah
6. Al-Harf Al-Haffy
7. Al-Huroof Ad-Dhalaqiyyah / At-Tarafiyyah
8. Al-Huroof An-Nitaiyyah
9. Al-Huroof Al-Lithawiyyah
10. Al-Huroof As-Shafawiyyah
11. Al-Asliyyah
1. Al-Huroof Al-Maddah / Al-Hawaiyyah

• The oral cavity i.e. the empty space in the mouth
• The following are articulated from here:
  • The short vowels i.e. 
  • The long vowels 
• The long vowels
2. Al-Khaishoom
الخَيْشُوم

• The nasal cavity i.e. the empty space in the nose.

• The following are articulated from here:
  1. Ikhfaa of noon and meem
  2. Idghham of noon and meem
Al-Huroof Al-Halaqiyyah

الحروف الحَلَقِيَّة

• The consonants of the throat are:

ء ه ع ح غ خ

• These have the following 3 different makharij:

3. ه ء 起源 from the bottom of the throat

4. ح ع 起源 from the center of the throat

5. خ غ 起源 from the top of the throat
Al-Huroof As-Shafawiyyah
الحروف الشَّفوَيَّة

- The consonants of the lips are:

م ب و ف

- They have the following 2 makharij:

6.1. م is pronounced from the dry portion of the lips

6.2. ب is pronounced from the wet portion of the lips

6.3. و is pronounced by the incomplete meeting of the lips

7. ف is pronounced when inner center of the bottom lips touches the edge of the upper incisors
Al-Huroof Al-Lahatiyyah / Lahawiyyah
الحروف اللَّهَتِيَّة / اللَّهَاوِيَّة

• The uvular consonants are:

ق ك

• They each have a different makhraj:

8. ق is pronounced when the extreme back of the tongue touches the palate close to the uvula.

9. ك is pronounced when the back of the tongue touches the palate.

The difference between both is that in qaf it is the extreme back of the tongue that touches the palate while in kaf it is not as far back of the tongue as that of qaf but a little more closer to the front.
10. Al-Huroof As-Shajaryyah
الحروف الشَّجَرِيَّة

• The palatal consonants are:

ج چ ي ي

• These are pronounced when the center of the tongue touches the palate.

• The yaa is only a palatal consonant when it is not a long vowel i.e. sakinah preceded with kasrah.
11. Al-Harf Al-Haffy

• The molar consonant is the following:

ض

• It is pronounced when the back upturned edges of the tongue; the right, left or both sides, touches the roots of the molars and pre molars
The alveolar consonants are:

- ل ن ر

12. ل is pronounced when the edges of the tongue touch the upper premolars one side to the upper premolars on the other side

13. ن is pronounced when the edges of the tongue touch the upper canine on one side to the upper canine on the other side

14. ر is pronounced when the edges of the tongue including the tip touch the central and lateral incisors.
15. Al-Huroof An-Nitiyyah
الحروف النَّطِعِيَّة

• The dental letters are:
  ط د ت

• These are articulated when the tip of the tongue touches the roots of the upper central incisors.
16. Al-Huroof Al-Lithawiyyah
الحروف اللِّثوِيَّة

• The alveo-dental consonants are:

\( ض ذ ث ظ \)

• These are articulated when the tip of the tongue touches the edges of the upper central incisors.
17. Al-Huroof Al-Asaliyyah
الحروف الأسليِّة

• The inter-dental consonants are:

ز س ص

• These are produced when the tip of the tongue touches the edges of the lower central incisors along with the upper central incisors.