

افتراض assuming

<u>that all vowels are voiced</u>	<u>articulated with a constriction</u> انقباض <u>of open approximation.</u>	all vowels are oral sounds اصوات فميه
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oral sounds (i.e. that the **velum** اللوز اللهاه is raised during their production). The range of positions which the tongue can occupy within the oral cavity while remaining in a constriction of open approximation is quite large

the entire available space for such articulations the vowel space. We will require a means of plotting the point at which a given vowel is articulate in the vowel space.

The vowel space is represented along two dimensions. بعدين

1- High/low.	According to this dimension, the vowel could be : high vowel, or low, or high-mid, or low-mid.
2- Front/back	. According to this dimension, the vowel could be : front, back, or central
third parameter,:	lip position given vowel articulation, the lips are rounded or not . So a vowel could be rounded or unrounded

1	/i/ Long	is front, high and unrounded vowel.	See /si:/, lead/li:d/, seed/si:d/ tea/ti:/ key ki:
2	/u/ long	is back, high and rounded vowel.	food, soon, loose
3	/e/ short	is high-mid, unrounded vowel.	, pet/pet/, led نفسه, sell/sel/
4	/o/ short	high-mid back rounded vowel	Pot, doll, song
5	/a/	low front unrounded vowel	
6	/æ/ short	=low front unrounded.	Ant/ ænt , pat/pæt, ban/bæn
7	/ɛ/ long	front low-mid unrounded	CUR K3:
8	/ʊ/ short	high back rounded vowel	Put p ʊt, full f ʊl
9	/ɑ/ long	low back unrounded vowel.	Aunt [ɑ:nt], car / Kɑ:/ march /mɑ:tʃ/ park
10	/ɔ/ long	low-mid back rounded.	Core Kɔ: SAW Sɔ:
11	/ʌ/ Short	central unrounded low-mid	putt/pʌt/, hub, love
12	/ə/ Short	mid-central vowel. Schwa	. about/ əbaʊt, upper əper,
13	ɪ	SHORT	Pit fill mid = plt fil mld

