# **Geometric Letters Models**

Separate,
Connected
and Mixed Letters

**Invention or Discovery?** 

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#### 1- Geometric Letters Models

Three models of separate, connected and mixed geometric Arabic letters were developed, and the first model was chosen to be the nucleus of the geometric method of writing (Taha).

Arabic letters are written in several manual forms, such as Naskh, Ruqaa, and Kufi, as well as several modern fonts on the computer. They are connected letters designed for handwriting so that the classical letter shape changes according to its position in the word. While the separate Greek and Latin letters, both small and large sets, are used in writing words.

The geometric letter shape does not change in the word, but it may differ slightly from one model to another. Although the mixed geometric letters model is the closest to the classical Arabic letters, the separate geometric letters model is the most likely to compete and win undisputedly, similar to the Arabic numerals.

Arabic geometric letters do not confuse the consonant letters with Arabic vowels, which are just long movements called "Mudood". They deal with the short and long vowels in the same manner. Geometric letters rescue the Hamzah from its predicament with vowels. The geometric letter Hamzah or Alif is written in one way, like all other consonant letters.

The 13 un-dotted geometric Arabic letters, similar to classical letters are of two types:

- 6 short geometric letters consisting of the shape of one square, four open squares and one right angle called Nabira with Hamzah above it. All short letters accept dotting.
- 7 long geometric letters consist of adding one side above or adding two sides below or above each of Nabira, the left open square, and the square. 3 long letters accept dotting. The following arrangement of 13 un-dotted Geometric letters is called Tardi which differs from Ahmadi arrangement where long letters are embedded in the middle:



The 15 dotted Arabic Geometric letters are made by dotting, in addition to 4 English specific letters (p, g, v, ch) and the Tied Taa (**d**) which is pronounced Haa at stops as follows:



Thus the total of 32 Phonetic Geometric letters are capable with vowels, which are just short and long movements, to write Arabic, English and French texts from right to left.

# 1.1- Separate Geometric Letters Model

Letters are never connected to each other and based on 2 squares attached vertically.

Dots			Dotted	Un-dotted		#			
Place	3 D	ots	2 D	ots	1 [	Oot	Lett	ers	π
Above	ث	ث	ت	ت	ن	ن	ź	Î	1
Below	Ĵ	р	긡	ي	Ļ	ب		-	
Above					Ė	خ	_	ح	2
Below	⊋	ch			Ţ	ج			
			Ċ	g	Ċ	غ	⊏	3	3
	Û	ش					Ц	س	4
Above					ń	ض	П	ص	5
Above	Ô	V	Ö	ق	Ġ	ڧ		م	6
			ä	äـ	Ь	ظ	Ь	ط	7
					j	ز	Ⅎ	ر	8
					5	ذ	5	د	9
None	5	ك		J	3	٥	9	9	13 -10

الحروف الهندسيّة المنفصلة − تُلدين -ل⊡نادين -لصنادت الحروف الهندسيّة المنفصلة − تُلدين (When short vowels are removed)

#### 1.2- Connected Geometric Letters Model

In this model, all the letters accept the connection with what comes before and after them. There is some change in the shape of the separate letters and each letter ends with a joint.

ت-ط_لــة	_لمعت	يـــة ګــــ	<u></u> <u>_</u>	<u></u>	<u> </u>	<u> -</u> 5	لَة –	سِيَّةُ الْمُتَّصِ	آلْحُروفُ الْهَنْدَ
Dots			Dotted	Letters		Un-d	#		
Place	3 D	ots	2 D	ots	10	Oot	Let	ters	
Above	ث	Ç	L:	Ç	L.	C.	។	£	1
Below	ų	р	Ţ	ي	7	).	1		I
Above					·IJ		l.	V	2
Below	Ĵ	ch			η·	ح		J	_
			Η̈́	Ø	Η̈́	.ه	Ė	ھ	3
	û	ش					Ь	س	4
					Ä	ۻ	Ь	ص	5
Above	â	٧	ë	ق	ė	ۏ	<u> </u>	م	6
			ä	قہ	Ь	ظ ط	Ъ	ط	7
					ij	ز	-1	ر	8
					ڌ	ذ	۵	٥	9
None	5	ك		J	Ē	٥	<del>4</del>	و	13 -10

الحروف الهندسيّةُ المتّصلة – ئلحية المتتطلة

(When short vowels are removed)

# 1.3- Mixed Geometric Letters Model

In this model, some letters do not accept the connection beyond them.

Dots			Dotted	Letters		otted	#			
Place	3 D	ots	2 0	ots	10	Oot	Let	ters		
Above	Ļ	ث	Ŀ	ت	L.	ن	Ļ		1	
Below	Ţ	р	ب	ي	ᅻ	ب		•	,	
Above					ذ	خ	П	ح	2	
Below	Ĵ	ch			구	5		J		
			Ļ	g	Η̈́	غ	Е	3	3	
	Ĥ	ش					ш	س	4	
Alagora					ä	ض	ь	ص	5	
Above	ê	٧	ق	ق	ė	ڧ	_	م	6	
			ä	ــة	Ь	ظ	Ь	ط	7	
					Ĺ	ز	_	ر	8	
					5	ذ	占	۷	9	
None	5	ك	٦	J	4	٥	9	9	13 -10	

الحروف الهندسيّة المختلطة – ئلحروف -لقندسيية -لمختلطة

(When short vowels are removed)

#### 2- Separate Geometric Letters

#### 2.1- Separate geometric letters and diacritics

The separate geometric letters are an exact copy of the Arabic letters in pronunciation, but they differ in a strange way to the extent that the researcher thinks that they are the original and not the other way around. It means a return to the first square, to the Canaanite squared house that symbolized the letter B of the alphabet.

Separate geometric letters are distinguished by the fact that each letter has one sound and one shape. And that each letter has a state of movement or Sukoon, symbolized by a special diacritic mark written above or below the consonant letter or after it as a vowel letter.

Geometric letters include 28 consonant letters in addition to the Tied Taa, which is pronounced (h) at stops and (t) when moving, and 4 Arabized English letters. They also include 5 short vowels and 5 long vowels called vowels if written after the consonant letters.

There are other signs that can be replaced with consonant letters and short vowels. The stressed letter, is replaced with a double consonant letter followed by a vowel, and the Tanween is replaced with a short vowel followed by a static (n) and Maddah is treated as an extra-long movement.

Geometric letters do not recognize silent letters, which are not always pronounced like solar (I), and are completely neglected. Hamzatu -wasl is replaced by a joint when connectig words. Finally, the Geometric letter Alif and the letter Hamzah are identical because Alif is no longer used as a vowel.

Offah	Kashah	Kasrah	Dummah	Fathah							
		Ò	૽	Ó	Common	Arabic ar	nd English				
프	<u></u>	=	_	-	Short Vowels						
0	e	i	u	a							
Mad Off	Mad Kash	Mad Kasr	Mad Dum	Mad Fath							
		ي	و	1	Common Arabic and English Long Vowels						
4	<u> </u>	_	<u>9</u>	上							
0	Е	I	U	A							
Maddah	Shaddah	Tanween Kasr	Tanween Dum	Tanween Fath	Sukoon	Waslah					
~	័	្ខ	ំ	Ć	°		Arabic				
<u> </u>	쁘	Ŧ	쁘	르	ㅁ	Marks					
~	W	N	M	L	G	-					
<u> </u>											

#### 2.2- Separate geometric letters and Latin Matching Letters

Separate geometric letters can be converted to Latin matching letters (lml) and vice versa by changing the font. In order to match the geometric letters to the Latin letters letter by letter, all small and large Latin letters are redefined to include all Arabic and English letters.

Dots	Dotted Letters						Un-c	lotted I	#				
Place		3 Dots			2 Dots	5		1 Dot		OII C	iotted i	"	
Above	В	ث	ڽ	t	<b>"</b>	٦	n	١	ن	X	ź	اً ا	1
Below	p	پ		у	÷	ي	b	Ţ	ب	Х	_		1
Above							С	j	خ	С	٦	,	2
Below	Н	Ĵ	ch				j	f	5	C	_	ح	2
				g	Ë		Q	Ė	غ	q	С	ع	3
	F	Û	ش							S	Ц	س	4
							D	i	ض	S	П	<b>6</b>	5
Above	V	Ô		K	Ö	ق	f	Û	ڧ	m		٩	6
				R	Ħ	نط	Z	Ŀ	ظ	Т	Ь	日	7
							Z	Ŀ	ز	r	Ⅎ	ر	8
							Р	5	ذ	d	5	١	9
None	k	5	ك	l	J	J	h	3	٥	W	9	و	13 -10

t-Lcepeoe -LL-c-i\_uu-6e -Loedip-6-6 (Taham)

xalcurUfu -llatIniyyaRu -lmuTAbiKaR (lml) - (الْحُروفُ اللاتينيَّةُ الْمُطابِقَة (حلم

# 2.3- Separate Geometric Letters and English Matching letters

Separate geometric letters can be converted to matching Latin letters by changing the font and vice versa. According to writing Arabic way {wAw}, Geometric letters can be converted to matching English letters by editing 8 large Latin letters (B, H, F, R, C, Q, Z, P) to compound letters (th, ch, sh, t/h, kh, gh, dh, dh) and Tied to (h) at stops or to moving connected (t).

Dots	Dotted Letters								L	Jn-dott			
Place		3 Dots	;		2 Dots	;		1 Dot			Letters	#	
Above	th	ث	ث	t	ï	ت	n	ن	ن	***	ċ	Î	1
Below	р	Ļ		у	ij	ي	b	Ļ	ب	X	_		7
Above							kh	j	خ	С	٦	ح	2
Below	ch	Ĵ					j	Ţ	ج			ر	_
				g	Ë		gh	Ċ	ع.	q	С	3	3
	sh	Û	ش							S	Ц	س	4
Λ la aa							D	ή	<u>ض</u>	S	П	ص	5
Above	V	Ô		K	Ö	ق	f	Ġ	ڧ	m		م	6
				t/h	님	ä_	Dh	Ь	ظ	Т	Ь	ط	7
							Z	Ė	ز	r	Ⅎ	ر	8
							dh	5	ذ	d	5	د	9
None	k	5	ك	L	J	J	h	3	0	W	9	و	13 -10