

Mirsaal typeface by Rana Abou Rjeily

letter	letter name	letter transliteration
ا	alif	'ā
ب	bā'	b
ت	tā'	t
ث	thā'	th
ج	jīm	j
ح	hā'	h
خ	khā'	kh
د	dāl	d
ذ	dhāl	dh
ر	rā'	r
ز	zā	z
س	sīn	s
ش	shīn	sh
ص	ṣād	ṣ
ض	ḍād	ḍ
ط	tā	t
ظ	ẓā	ẓ
ع	ayn	'
غ	ghayn	gh
ف	fā'	f
ق	qāf	q
ك	kāf	k
ل	lām	l
م	mīm	m
ن	nūn	n
ه	hā'	h
و	wāw	w/ū
ي	yā'	y/ī
ء	hamza	'

Changing the Face of Arabic

Sandy Saghbini and Raisa Zaidi explain the complex, controversial, and creative impact of technology on Arabic typeface development

Arabic Around the World

Over the past two decades, the influence of Arabic language and culture has swiftly spread across the world. Indeed, Arabic is one of the most widely spoken languages on the planet — it is spoken in 23 countries and is the native language of roughly 300 million people. Designer David Learman claims that the Arabic language has not only influenced countries around the world, but has also spread “rapidly across most developed societies.” He goes on to assert that “no matter where you are located — London, Paris, Berlin, or indeed on the other side of the world in the U.S. or Australia — awareness of Islam and Arab cultures is becoming increasingly important from a design and communications perspective.” As design practitioner Halim Choueiry points out, many experts consider globalization’s greatest impact to have been on the Middle East. At the heart of such change is the Arabic language itself.

With the development of communications technology, Arabic designers have worked hard to ensure that their language is included. However, this is only a recent development. For years, Middle Eastern designers and typographers struggled to keep up in a global market largely dominated by Latin-based alphabets. These struggles have plagued the development of Arabic typography throughout history. Indeed, Arabic calligraphers were not initially part of Gutenberg’s movable type innovation of the late 1440s, mainly due to the language’s cursive, non-Latin structure. Renowned typographer Mourad Boutros offers insight to Arabic’s traditional structure and its conflict with the

function of the metal press (movable type). To put it simply, the “methods of creating typefaces for printing from metal type were developed specifically for the Latin alphabet,” meaning that languages with other alphabets, such as Arabic, had to conform and make sacrifices in order to use the same process and keep up with the world’s technology.

Difficulties with Movable Type

Such sacrifices often meant total reconstruction of Arabic letterforms. Metal type consisted of blocks of metals that were divided into units, with the “deciding and dictating factor” for Latin typefaces dealing with the construction of the letterforms to their collective height. In other words, it was ultimately the height of the metal type’s body that determined linear type for Latin alphabets. As Boutros further explains, the majority of Latin fonts are designed “so that each letter is set and spaced apart from its fellows.” Latin fonts can also “be described as being of a vertical construction,” with much emphasis placed on the ascenders and descenders of its letters. Arabic, however, appears to be the complete opposite in its construction, with much emphasis placed on letterforms that are physically linked by a horizontal line within a word. It is precisely Arabic’s more fluid and horizontal form that puts it in such contrast with the more “controlled and inflexible Latin letterforms.” And, to make things even more complicated, the Arabic alphabet’s 28 basic letters each have different forms depending on their position within the word: whether the letter is at the beginning, middle, or end of a word changes its appearance.

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In the article “Advances in Arabic Printing,” Walter Tracey, who in 1947 became the manager of typeface development for Linotype, explains that Arabic’s cursive characteristic and the variations in letterforms “made the manual and mechanical typesetting of Arabic a more laborious task than the typesetting of European languages.” In turn, this made it difficult for Arabic-speaking countries to keep up with the technology of movable type and printing. The metal press had initially been created for a vertical, spaced, and less fluid alphabet than Arabic.

The Merging of Western and Arab Worlds

Arabic has managed to become one of the most influential languages in today’s global communications market thanks to the collaborations between Western and Middle Eastern businesses. Halim Choueiry explains that, for the last century, the Middle East has been “importing to the Arab world what has been produced by the West,” which has “resulted in many people growing accustomed to speaking two languages.” The Middle Eastern country of Lebanon is often used as a prime example of this, since most of the population speaks Arabic, English, and French to such an extent that it is normal for them to switch between and integrate Latin words into their everyday conversations. Lebanon is also known as one of the most Westernized countries in the Middle East, where many multinational companies kept their offices during the 1960s. Most creative work in advertising, design, or branding took place in Lebanon’s capital, Beirut, before the onset of war in 1975. With the oil boom of the Middle East, both multinational and local companies wanted to create brand identities that would appeal to Arabic speakers while keeping their Western identity. This resulted in a movement in which Latin letterforms and Arabic letterforms appeared together in logo designs, ultimately bridging the typographies of Western and Arab worlds.

Simplifying the Arabic Alphabet

This collaborative design method proved quite successful in establishing trendy and memorable brand logos for both local and multinational businesses, prompting designers to think of more creative ways for Arabic and Latin alphabets to interact while keeping the original logos’ feel. But such wasn’t new: about 20 years earlier, a Lebanese architect and typographer, Nasri Khattar, created “Unified Arabic,” a simplified printed form of the Arabic alphabet that consisted of 28 detached characters. Unified Arabic “was meant to ease the learning and writing of the script by reducing the number of shapes letters could assume.” Indeed, Khattar’s approach toward simplifying the Arabic alphabet ignited a movement that is still influencing many typographers and designers today.

A key figure in this movement is Boutros, who is best known for the development of “Simplified Arabic Type” in 1993, which revolutionized Arabic’s availability on computers. With his wife, Arlette Boutros, they created truetype fonts that were compatible with Microsoft’s Arabic Windows as well as the Mac OS Arabic Language Kit. The Boutros couple has also designed more than 50 Arabic type-

faces, with some available on IBM printers as core fonts. But aside from these accomplishments, Mourad Boutros had followed Nasri Khattar’s lead by designing a detached, non-cursive Arabic font known as “Basic Arabic.” By creating a detached alphabet, Arabic became more compatible and simpler to work with when dealing with Latin-based computer systems, and also became more appealing to non-Arabic speakers and the global-market.

However, merging the Arabic alphabet with Latin alphabets is a complex undertaking. According to Boutros, “Conveying a theme from one language to another is not a simple task, and we should not treat this lightly, given all the cultural connotations that it entails...Latin and Arabic typographies should interact as if putting two cultures together. Once each shows its own identity then, in the design of the artwork, the typographies will work concurrently.”

Keeping Up with Modern Technology

But why is it so important for the Arabic alphabet to be simplified and merged with Latin alphabets? Boutros explains that the movement to simplify the Arabic alphabet will help solve problems that have made technological advances with typography difficult in the Middle East. For example, the first mobile phones in Arab-speaking countries did not have an Arabic typeface, so mobile phone users would use the Latin alphabet to express Arabic words. However, not all Arabic letters could be matched by a Latin letter, so Latin numerals were used in between the Latin letters in order to properly express the Arabic word. According to Boutros, this created “a hybrid language based on technological limitations that became habit.” Even with today’s availability of the Arabic Mobile Interface, this type of language is still used when texting, emailing, and chatting. Boutros told *Language Magazine* that his books were meant to address these types of problems.

The dearth of Arabic fonts installed on computers is a result of the fact that only Latin based languages were taken into account at first. Only two Arabic fonts are currently installed in the majority of users’ computers around the world, which means websites created in Arabic stay limited to these fonts so they are readable to most visitors. Therefore, most Arabic websites come across as bland and messy.

One of the most important developments for the improvement of Arabic typeface design came about in the late 20th century, with Letraset’s invention of the dry transfer process. Boutros explains that this process allowed typographers to use “Instant Lettering” sheets to form words and texts by “releasing a letter from a retaining sheet.” Letraset’s development ultimately led to the production of the typeface Tanseek, which took a new approach in developing Arabic for print. Unlike prior Arabic typefaces developed for movable type, Tanseek was developed with Latin being used as a supplementary font. Instead of having the Arabic alphabet depend primarily on supplementing the Latin alphabet, the Latin alphabet was now being used to supplement the Arabic alphabet. Tanseek proved to be highly successful in its bilingual approach, resulting in a harmonious relationship between Latin and Arabic alphabets.

Letterforms in connected Arabic

medial joined/final joined isolated/medial unjoined/final unjoined



Letterform in Mirsaal

final position medial position initial position



Page from *Cultural Connectives*

Detached Arabic Alphabet: An Educational Tool

Keeping up with and solving problems concerning technology are not the only good reasons for simplifying the Arabic alphabet. One of the most important reasons revolves around making the language easier to learn for non-Arabic audiences. "Unified Arabic" and "Basic Arabic" are described as typefaces that serve "as educational tools to simplify and accelerate the process of learning to read and write Arabic."

Making Arabic less difficult to learn is the subject of *Cultural Connectives*, which focuses on Mirsaal, an Arabic font that Abou Rjeily created from scratch to lend a more detailed understanding of harmonizing Arabic and Latin alphabets. The presentation of Mirsaal is creative, visually appealing, and easily understood. Yet, creating a detached Arabic alphabet poses problems as well. Many Arabic speakers have voiced their concerns about a detached alphabet, several believing it to be inappropriately "Westernizing" the language and stripping it of its cultural tradition. But Abou Rjeily believes otherwise, "Calligraphy and typography have very different purposes and,

in my opinion, separating Arabic type from calligraphy is not disrespectful — on the contrary, it assists in the development of the language and leaves room for experimentation." She also tells *Language Magazine* that Mirsaal was not created nor meant to be seen as a substitute for the Arabic alphabet. "Mirsaal is a message, a medium that helps simplify a very complicated script. It is not a substitute."

To get this message across, Abou Rjeily juxtaposes the traditional Arabic alphabet with the Latin alphabet in a way that makes it easy for readers to compare the two, "Instead of totally substituting Arabic with Latin, or using calligraphic Arabic, which has a very complicated shape, I use a detached font to introduce Arabic to non-Arabic speakers." Mirsaal "maintains the integrity of the Arabic script and letters by only simplifying their representation. Each letter has one shape wherever it stands in a word instead of three or four shapes. This way it's less difficult to recognize the letters and memorize them."

Cultural awareness is of great importance when merging of Arabic and Latin alphabets. Large corporations have made huge mistakes when advertising their products in Arabic, sometimes coming off as culturally inappropriate.

Still a Long Journey Ahead

Whether in design, technology, or business, the Arabic language has experienced immense growth in a short period of time. Yet, there are still many obstacles that continue to afflict its growth. If Western developers don't open up more toward Eastern languages, these problems will continue to persist. In order to gain more support, it is up to Arabic-speaking typographers and developers, like Mourad and Arlette Boutros, Choueiry, Kandalaft, Abou Rjeily and others, to bring forth creative and innovative designs that will revolutionize Arabic's participation in technology, as well as preserve its cultural tradition and creativity. ❧

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Sandy Saghbini asks Rana Abou Rjeily, creator of Mirsaal typeface, how type designers adapt to changing demands

Staying True to Type

In 1514, about 73 years after Gutenberg's printing press, a

Venetian man named Gregorio de Gregorii wrote what is often credited as the first Arabic book published using movable type. The book was a Christian prayer book called *Kitab Salat al-Sawa'i* (*The Book of Hours*). Initially written for export to eastern Christian communities, the book proved extremely crude and difficult to read, primarily because of difficulties creating separate metal blocks that would print Arabic letters so that they could connect fluidly. Such contrasts in horizontal and vertical aspects, as well as the contrast in fluidity, caused this conflict. But Gregorii's book proved that it could be done, sparking the movement for Arabic-speaking countries to begin designing fonts that would be more compatible with movable type. It wasn't until 1586 that Arabic typeface began to improve in movable type, when famous French type designer Robert Granjon got involved. Initially known for his Latin and Greek calligraphy designs, Granjon created a more legible, oriental-styled Arabic font that would be used by the Medici Press (an Arabic printing press created by western Papacy to communicate with Eastern Christians).

Though Granjon's Arabic designs revolutionized the Arabic printing press and made it easier for designers to create more compatible fonts, it wasn't enough to place Arabic type development on the same page as Latin fonts. Arabic typography was still behind, and though its initial difficulties in construction and form had been modified to create more compatible fonts, Arabic still proved to be difficult to deal with in movable type and technology.

As designer Halim Choueiry states, "For the majority of the time, Arabic typeface development has been playing catch-up with Latin-based languages."

Case in point, the first Arabic typewriter didn't emerge until 1914, approximately 40 years after the first American typewriter. It wasn't until 1977 that the first IBM-compatible PC keyboard was developed to

accommodate right-to-left languages such as Arabic, Farsi, and Hebrew.

This resulted in an increased movement for Arab designers to create fonts that would appeal to the Latin-based structural system of computers. Designers hoped to create font designs that would make the language easier for non-speakers to learn. The trend to match Arabic typography with Latin typography emerged so that the two could exist in harmony. This need came to light in the 1970's and 1980s in the form of branding, when western companies began settling businesses in Arabic-speaking countries. These companies wanted to convert their logos into Arabic, so Latin alphabets converted into Arabic became necessary.

The production of creative Arabic typefaces boomed.

The creation of an Arabic typeface has always been extremely creative, but there are typically two ways to work on an Arabic typeface. According to Choueiry, the first and most common way involves the conversion of a Latin typeface into Arabic that it is in reach of every designer. The second and more complicated way is to create an original typeface from scratch by using an object, item, or similar inspiration.

The first method of converting a Latin typeface into Arabic aims in preserving the look and feel of a Latin typeface, thereby creating a visual match or cohesion between the two. Choueiry describes some common ways to do this by rotating, twisting, or tweaking Latin letters so that they resemble Arabic ones.

With the second method, any source can be used to create an Arabic typeface from scratch. As Choueiry explains, designers could analyze the imprint of a tire that has been scanned, looking for any sort of shapes that can be taken and warped to resemble an Arabic letter. Other examples could be scanned surfaces of carpets, skin, objects, and so forth. It's up to the designer's imagination.

To get a better idea of this creative process of developing an Arabic typeface, the author of *Cultural Connectives*, graphic designer and typog-

“In countries like Lebanon, Tunisia and Algeria, the young generation use their second language more often than not, which compromises writing Arabic in Arabic letters, and instead use something we now call Arabizi.”

are buying the book mostly because it's a new approach they'd like to read about, and because the book presents interesting information about both Arabic and Latin scripts. It also is a useful reference for Arabic type and graphic designers.

LM: In Mourad Boutros' *Talking About Arabic*, two ways of creating Arabic fonts are explained. As you already know, the first and most common way consists of tweaking or twisting Arabic and Latin letters to create harmonizing shapes, while the second is more complicated and deals with creating an Arabic font from scratch. Although I know you mentioned that you paid close attention to Nasri Khattar's Unified Arabic and Mourad and Arlette Boutros' Basic Arabic to create your font, I was unsure as to whether that meant you used the more common method or whether you created the font from scratch. Could you possibly tell us a bit more about your method of making Mirsaal?

RAR: Mirsaal consists of Arabic and Latin fonts. The Arabic was conceived before the Latin, which means it was drawn and studied separately. Once the Arabic Font was completed I started designing the Latin Mirsaal. And this was done through the second method that Boutros talks about which is designing from scratch and only maintaining the stroke width with slight variations of thicknesses that the Arabic had.

LM: What were your main sources of inspiration for creating Mirsaal? In Boutros' book, they showed examples like tire imprints or tree bark scans that typographers used to find shapes that might work with Arabic letters. Did you do something similar to create Mirsaal?

RAR: When I started Mirsaal, I looked into books for teaching Arabic and into people's handwriting to see how they simplify the Arabic letters and I've used their drawings as inspiration. The letters drawn were somehow deprived of their complications and calligraphic details, hence the simplicity of it. Each letter in Mirsaal is also a hybrid outcome or combination of all the shapes this same letter can have in cursive Arabic.

LM: I was wondering if you could tell us a little more about the role of Islam in the development of the Arabic language and typeface. Do you find it a necessary component for all non-Arab speakers to take into account when learning the Arabic language or when dealing with Arabs in business?

RAR: First, Islam has an important role in the development of Arabic Calligraphy since it has forbidden any figurative representations. The Quran is written in Arabic, that's why through history calligraphers have worked and created so many beautiful scripts to be worthy of writing the holy Quran with. Archaic Arabic started as a very basic script and without vocalization marks or dots and developed with time into what we know today. Second, I think it's very important to understand the relationship between Islam and the Arabic language, but it's not a must to know the script's history to be able to communicate to an Arabic speaker.

LM: Do you think that the recent "revolutions" in the Middle East will affect the development of Arabic typography and design? Is it the next step toward globalization in the Middle East?

RAR: It is known through history that design has played an important

role in socio-political revolutions or manifestations. Graphic arts and typography were heavily used in wartime propaganda during the 60's. Design can change the world we live in as it highly influences the viewer. It is a way of expression since design can call for action, present a problem or suggest a solution. I can't deny that the visuals created for the recent revolutions in the Arab world are very creative and witty and can be inspiring for us. Maybe this will push designers to experiment some more and use their design skills for things other than branding and advertising.

LM: Personally, I know many Middle Easterners who believe that globalization is stripping their cultural identities and making them conform to Western traditions. Do you think this is true? What are your general thoughts on globalization, and do you think people might view Mirsaal as trying to conform to a Western standard?

RAR: In Middle Eastern countries, taking Lebanon as an example, I can clearly see how the west left its imprints on our visual culture. My country is known to be more open to the western trends than other countries in the region. This is reflected in our visual culture as well. Typographically speaking, few books are done around Arabic design and type, so we tend to study western graphic design history and trends rather than focus on our own cultural heritage. Globalization highly influences us but I can see now the young generation of designers is trying to establish a new identity for our visual culture by trying to be inspired by history and the vernacular.

LM: I read that the phenomenon known as 'language schizophrenia' occurs often when readers compare Latin and Arabic alphabets because of Latin's more vertical form and Arabic's more horizontal form. Could you possibly give us some more details about 'language schizophrenia' and describe why and how it occurs?

RAR: Typography derives directly from handwriting and calligraphy. Calligraphy is written using different nibs, pens or brushes depending on the style and language. The nib in Arabic was cut diagonally in a way that when horizontal strokes are drawn they will look thicker than the vertical ones (somewhat like a marker). Plus, Arabic is cursive and connects at the baseline level which makes it look more horizontal. These details mentioned were reproduced in typography. Latin letters have strong vertical strokes like the "l," "i," "h," "t," and "f." This explains the different aspects of Arabic and Latin scripts. My book *Cultural Connectives* explains more of how the differences between both scripts are addressed using Mirsaal.

LM: Lastly, could you possibly tell us about what you are currently working on or any of your planned projects for the future? Thank you for all your cooperation.

RAR: I have been planning on doing a PhD but I am taking some time off now. I'm rather concentrating on designing my own Arabic fonts and teaching typography. I love the message that *Cultural Connectives* is sending out. And I hope to develop further projects with the same message of bridging cultures but this time with a group of people from other disciplines. Any future project will be announced on my website (www.culturalconnectives.com). ❧