

Title

Coupling Bilingual Typefaces

Author

Randa Abdel Baki
Assistant Professor
Graphic Design Department
School of Architecture and Design
Lebanese American University
Email: randa.abdelbaki@lau.edu.lb

Abstract

This presentation focuses on the process of designing and coupling experimental display typeface in Latin and Arabic. As the two scripts are in opposite directions, and the glyphs are different in many aspects, it is vital to understand the design challenges in order to design a successful bilingual family. This case study exposes bilingual display typefaces designed in Beirut, highlighting the work of my typography students at the Lebanese American University; where bilingual designs are prominent, and where matching Latin and Arabic typeface is essential.

The proposed paired bilingual typefaces are based on a modular system design, each resulting from a specific theme. The executed design method inspires the success of a harmonious bilingual type family. It proposes an approach to create distinct scripts with matching features without compromising the characteristics of each script. Therefore combining two distinct yet matching scripts with similar style attributes. These matched typefaces will be then utilized in bilingual display layouts without jeopardizing the design output.

Keywords

Bilingual Display Typeface – Typography – Arabic script – Calligraphy

1.Introduction

The city of Beirut has dominant Western influences that are manifested in the language and graphic design output. Beirut, the capital city of Lebanon is a cosmopolitan city in which most inhabitants are bilingual. Thus, bilingual designs are prominent, and matching Latin and Arabic typeface is essential, as most public signs, shop signs, brands, publications, and packages are bilingual. This presentation focuses on the development of Latin and Arabic matching bilingual display typefaces, highlighting the work of my typography students at the Lebanese American University.

The need to design matching bi-scripts of different nature is vital to develop homogeneous bilingual identity in publication and signage designs. Beirut shop signs will be examined to discuss the vernacular bilingual designs and to expose the need for a compatible matched bilingual display type.

Bilingual designs for a range of media—from street signs and graffiti to various forms of printed materials, including posters, pamphlets, and books—become an increasingly obvious "challenge" in design since coupling typefaces is a hurdle, and

creating successful bilingual layout is not explored thoroughly. Due to the scarcity of Arabic typefaces compared to the abundance of Latin typefaces, designers are faced with an inadequate matching system—unable to find a match for most of their Latin fonts. Here arises the need to find corresponding and complementary scripts, and a call for new and well-designed bilingual matched typefaces to create a homogeneous identity is required.

This paper presents the challenges of combining Latin and Arabic type, exposes the problems of the different bilingual shop signs in the city and finally, proposes experimental bilingual display typefaces that can be utilized to develop a harmonious and coherent identity. The proposed bi-scripts are based on typographic modular methods to construct bilingual Latin/ Arabic display typefaces with a consistent style and a comprehensive identity, maintaining the visual attributes and features of both scripts.

2.Challenges

To combine both scripts into one harmonious bi-script, the designer should keep in mind the differences of both scripts while maintaining the characteristics and proportions of each script.

On one hand, the Latin and Arabic scripts are of opposite directions. Hence, Latin is read from left to right whereas the Arabic from right to left. The curved, flexible nature of Arabic type that is rooted in its calligraphic foundations is in contrast to Latin typographic structure.

This script contains joining characters — a multiple forms for each glyph—each letter has three to four assorted forms depending on its position in the word and no capital letters. (Fig.1) In Arabic script, there is no distinction between upper and lower case letters, as the shape of each letters varies depending on its position in the word. In addition, the Arabic alphabet consists of eighteen shapes that express twenty- eight phonetic sounds with the help of diacritical marks. The same letter shape can form a “b” sound when one dot is placed below (ب) a “t” sound when two dots are placed above, (ت) or a “th” sound when three dots are added above¹.

Whereas, the Latin comprise of separate glyphs and a set of capital letters; uppercase and lowercase.

The distinct nature of both scripts is also accentuated in the appearance of the Arabic text that occupies different space than the Latin, with respect to the length and width of the paragraphs. (Nemeth, 2006) Arabic script is denser in texture. Texture of the script refers to the type created by the weight of strokes as well as the curvature of the script. In addition, the script has elongated verticals in contrast with Latin script structure that follows specific guidelines.

The typographic guidelines differ; as the Latin script is based on four major guides that represent the ascenders, descenders, x-height and baseline, whereas Arabic typographic guidelines vary depending on their calligraphic origin such as Kufi, Naskh, Nasta'lik/Farsi, Riq'a, Thuluth and Diwani. (Fig.2) In addition each script is measured proportionally based on the letter —“Alef”—, either with the measuring dots—Nizam al Nukat, or based on a circle with a diameter that equals the height of the letter Alef: Nizam al Da'aira. (Fig.3)

¹ Metropolitan Museum of Arts. Arabic Calligraphy as an art form – Tools for educators website. <http://metmuseum.org/learn/for-educators/publications-for-educators/art-of-the-islamic-world/unit-two/arabic-calligraphy-as-an-art-form>

Name	Final	Medial	Initial	Isolated
alef	ا	آ	أ	إ
be	ب	ب	ب	ب
jim	ج	ج	ج	ج
dal	د	د	د	د
zein	ز	ز	ز	ز
sin	س	س	س	س
sad	ص	ص	ص	ص
ta	ط	ط	ط	ط
ayn	ع	ع	ع	ع
fa'	ف	ف	ف	ف
kaaf	ق	ق	ق	ق
kaf	ك	ك	ك	ك
lam	ل	ل	ل	ل
mim	م	م	م	م
noon	ن	ن	ن	ن
he	ه	ه	ه	ه
waow	و	و	و	و
ye	ي	ي	ي	ي

Figure 1. A few Arabic letters with variation of forms depending on their placement in the word



Figure 2. Classic Arabic scripts: Kufi, Naskh, Nastalik, Riq'a, Thuluth, Diwani.
<http://www.arabiccalligraphy.com/classic-types/>

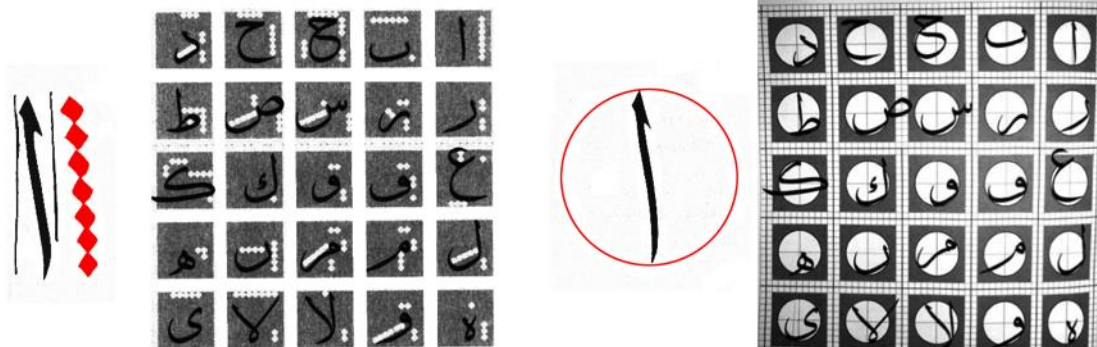


Figure 3. Arabic letters measuring systems.

It is possible to further dissect the differences in Arabic and Latin forms through looking at the anatomy of the letters and the scripts. The two scripts create different textures, which further complicate the representation of the two scripts together. Since the Arabic has a calligraphic aspect to it, thus a variation in strokes that depends on its original classification. These variations often clash with the structural typographic nature of the Latin script, thus, the challenge that designers face while matching both scripts. In an ideal bilingual display font, the weight of the two scripts should be to identical to preserve a balance and harmonious features.

3. Beirut's bilingual display signs

There are different ways of associating typefaces, either by designing both Latin and Arabic type simultaneously thus pairing them to secure a complete customized entity, or by matching a type to another and having a main script that influences the development of its matching script.

Choosing and pairing corresponding typefaces is crucial, since typefaces represent the vital component that set the visual personality and tone. (Craig, and Bevington, 1999)

Most of the bilingual signage designs in Beirut, especially shop signs disregard the importance of the weight, size and form of both scripts combined. They illustrate the subpar “mix and match” of distinct scripts, which are combined in a haphazard and unbalanced way. Therefore, they demonstrate the poor bilingual designs that confirm further the need for a harmonious matched bilingual typefaces to maintain a comprehensive identity and a balanced design.

Below is an overview of Beirut shop signs.

Based on the structure of scripts and their compositions, I divided the city signage into four main categories.

1. Mismatch of scripts
2. Treatment of Latin script as primary and Arabic script as secondary
3. Scripts of same weight
4. Customized bi-scripts

3.1 Mismatch of scripts

This category reveals a poor visual quality of incompatible scripts—Latin and Arabic. In this category, the shop signs combine distinct scripts—each conveys a character that clashes with the other. As Illustrated in figure 3, the mix of distinct scripts—Diwani, curved flexible Arabic script combined with a Latin structured type with large x-height, differ in weight, form, and size.

Figure 4 displays the inadequate insertion of the Arabic “kashida”—the horizontal extension used between glyphs that were intended to keep the width of both logotypes equal. Hence, this makes the Arabic logotype weaker in form and identity. Moreover, the use of Latin capital letters in the logotype accentuates the contrast in texture and shape with the Arabic script that has joining glyphs and appears smaller and secondary.



**Figure 3. “Salon Pavillon”
hairdresser shop in
Pavillon Hamra. Beirut
Lebanon**



**Figure 4. “Allen’s” Shoes.
Hamra, Beirut. Lebanon**

3.2 Treatment of Latin script as primary and Arabic script as secondary

This category shows the application of the Arabic script as secondary to the main Latin logotype—a mix of two diverse entities. (Fig. 5, 6)

Figure 5, shows “SONY” logotype sign with its Arabic translation that is under-designed. We notice that the Arabic script translates solely the brand name without implementing any design features, or handling the layout structure and design. Latin script is used to “set the tone,” the Arabic script takes on a secondary role, disregarding the specific visual heritage.

In figure 6, the Arabic script accompanies the principal Latin logo. It is placed on both sides forming an independent calligraphic logo mark that embellishes and enhances the brand’s identity. Here the application of Arabic calligraphy reinforces the identity and culture. This design solution is common, as most designers are unable to combine both Latin and Arabic type in a harmonious way, they often create a smaller calligraphic Arabic symbol associated to the Latin logotype.



**Figure 5. “SONY”
products shop.
Beirut. Lebanon**



**Figure 6. “Domtex”
linen shop. Hamra,
Beirut. Lebanon**

3.3 Scripts of same weight

This category represents the combination of two distinct scripts that have equal weight, and relatively same height. This application leads to a semi-harmonious visual quality, yet creates a common and unanimous design that disregards the visual identity of the shop.



**Figure 9. “Abiad Pharmacy”.
Beirut. Lebanon**



**Figure 10. “International
Exchange Center” Beirut.
Lebanon**

3.4 Customized bi-scripts

The fourth category represents the usage of a customized display bi-script that maintains the character of the brand. This approach is a successful response to the challenges faced in displaying a bilingual logotype. It preserves in an equally balanced visual quality presented in both scripts. (Fig.7,8)



**Figure 7. “Chama” boutique
clothing shop. Beirut. Lebanon**



**Figure 8. “Balaa” shoe shop.
Beirut. Lebanon**

4. Bilingual logotype designs

A proposed solution for bilingual logotype designs is to develop a bilingual display font that holds similar characteristics for both Latin and Arabic scripts, while enhancing the visual identity of the brand. However, if the logo is designed initially in Latin, then the designer should adapt the corresponding Arabic logotype in a way that ensures the same weight, guidelines, and an identical visual quality.

4.1 Adaptation of existing logotype

In type adaptation, it is vital to maintain the same appearance. To obtain a successful result on the level of bi-script design, the designer should solve most of the challenges without distorting one of the scripts involved. Distorting —means changing the shape and letter proportions of one script, in order to bring it closer to the other. Therefore, the original anatomy of the letter of the script is at stake. Many unsuccessful attempts were made out of dissecting and slicing Latin letters in order to construct from the fragments Arabic letters. This method leads to an Arabic “Frankenstein” type, known as Latinized Arabic, where the proportion and the anatomy Arabic letters are distorted. (Chahine, 2007)

A successful way to complement a Latin logotype with its matching Arabic version is to have them both carry the same modules, weight, and size, thus bringing them as close to a harmonious identity. Primarily, the designer has to understand the logotype and analyze its components in order to proceed in designing its complementary matching Arabic version.

Figure 11, presents of a few Arabic adaptations based on original Latin logotypes — designed by my typography students at the Lebanese American University. What is common to all projects is the use of the Latin typographic guidelines to preserve the same size in the Arabic adaptation. In both scripts, the ascenders and descenders are kept the same, yet in a few instances students had to extend the descenders or ascenders to preserve the proportions of the Arabic letter.

What is required in this exercise is to apply the identical weight of stroke, and same modules while using the same guidelines to maintain a harmonious bilingual identity of the brand.



Figure 11. Arabic logotype adaptations. Designed by LAU
Advanced typography students (Names listed from top to bottom)
Ghina Itani, Mohamoud Alaeddine, Nora Husseini, Rola Khadra.
LAU, Beirut 2008

4.2 Bilingual display typeface design.

Many attempts have been made to match and pair bilingual scripts. For example, the Khatt foundation lead by Huda Smitshuijzen Abifares, has brought together Dutch and Arab typographers to conceive five new Arabic typefaces inspired by Latin type (Smitshuijzen AbiFares, 2009). Abi Fares' approach brought together Latin and Arabic typefaces in a generic and practical manner, disregarding, the complexity of Arabic calligraphy, and following primary Latin scripts guidelines such as a single baseline and an x height Arabic becomes Latinized.

I have used similar approach with my typography students at the Lebanese

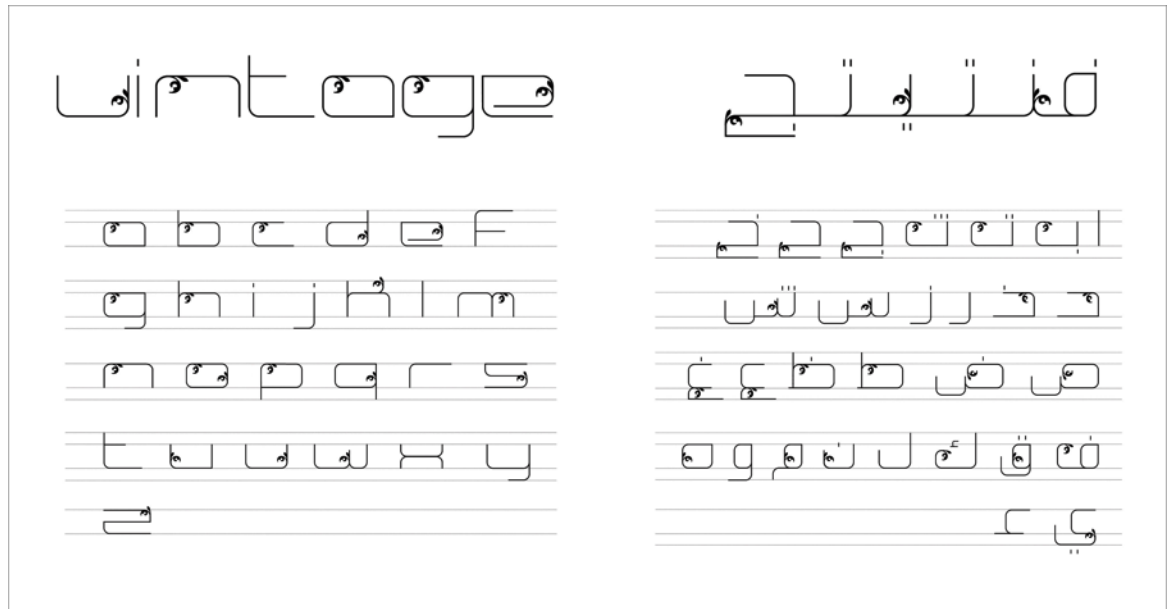
American University to assist them design bilingual display scripts based on a modular system following the Latinized guidelines, using their Latin script as the primary script, then following its x-height, ascender and descender. The designer's challenge is to design one compatible bilingual script without jeopardizing or distorting the scripts. As Robert Bringhurst notes, "the more closely different alphabets are mixed, the more important it becomes that they should be close in color and in size, no matter how superficially different in form". (Bringhurst, 2002)

Each choice of script is based on a theme, where students create a couple of modules related to their topic to be utilized in their bilingual display typeface. These thematic typefaces are only used for titles or display layouts exhibiting large letters. The main objective is to create homogenous typefaces pairing Arabic and Latin scripts in order to understand the differences of scripts and their challenges. Students are required to design concurrently Arabic and Latin display typefaces based on a modular system, without compromising one script for another. Designing both scripts simultaneously generates a well-balanced equal bi-script with matching appearances.

Constraint by time to develop two complete typefaces: (5 weeks to finish their project) students are required to solely design lower case Latin script and the freestanding Arabic letters, since the shape of Arabic letters varies depending on its placement in the word. After completion of the bilingual font, students will design certain intermediate Arabic letters only to complete the font's name. (Fig.12, 13 and 14) The limitation of the students work, lies on the modular systems and Westernized guidelines, as most students have no Arabic calligraphy background. In some instances, students chose a reference type in Latin and Arabic, to help them achieve the correct proportions. As Fawcett-Tang notes in his book, "working with conventional, commercially available typefaces focuses the designer's attention on the essential qualities of the font, paradoxically often resulting in designs that seek out new typographic directions, The clean typographic forms are sometimes adopted as the foundations on which the overall design is built." (Fawcett-Tang, 2007).



Figure 12.
"Tokia" typeface design by Tala Rawas.
LAU, Beirut 2011



**Figure 13. “Vintage” typeface design by Carine Attar.
The red circle represents the module. LAU, Beirut 2010**



Figure 14. The red and blue circles represent the modules. “Dana” typeface design by Dana Abdul Ghani. LAU, Beirut 2007

Conclusion

To achieve a harmonious bilingual display typeface, that preserves both the overall form and culture, the designer has to initially analyze both scripts, understand their differences and structures then proceed with the design.

The specific issues posed by Arabic script can be used as a foundation to be expanded on, as script-based differences will inevitably produce different affects. The development of different scripts of distinct nature will certainly pose challenges that can only be overcome by the understanding of the original scripts and their evolution as an indicative of a cultural exchange.

The need to design a hybrid bilingual typeface as an intercultural tool is derived from the universal communication that is required by our day, to thus open up a new horizon of varieties and possibilities.

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