

Utilization of Arabic Calligraphy to Promote the Arabic Identity in Packaging Designs

Noha A. Mohamed* Khaled T. Youssef

Assistant professor in Printing, Publishing and Packaging dpt., Faculty of Applied Arts, Helwan University,5
Ahmed Zwail st., Giza, Egypt

* E-mail of the corresponding author: nohmoh@yahoo.com

Abstract

Letters are considered an important element in graphic design. Arabic calligraphy, specifically, is an important art that give letters aesthetic form. Arabic letters are used in many different ways to form words. These words are then used in typography giving information and communicating with consumers. In Arabic packaging designs, Arabic letters are not yet utilized to give the cultural identity to the brand and graphic design of the Arabic products in general. This paper focuses at using Arabic letters and digital calligraphy to enhance packaging identity of Arabian products.

Keywords: Arabic calligraphy, typography, lettering, identity, digital calligraphy, packaging design

1. Introduction

Packaging provide surface upon which to communicate information about the product brand, and as such as, it's an essential element of product branding.(Ambrose, G. & Harris, P. (2011)

Packaging is the communication interface between the producer and the consumer, and it is composed of two parts: Structure design and exterior graphic design (color, typography, and decoration) (C. L. Teng.(1991). According to the differentiation in design elements, they can be divided into visual and functional (R. W. Y. Wang and M. C. Chou. (2009), M. L. Kang and C. H. Chen. (2005)

(a) Aesthetic design element: Shape (form), color, illustration (lines, symbols, graphics, patterns, and pictures), logo and brand, typography (company name, product name), pattern design (lines, patterns, illustrations, photos), brand name and address, product facts and usage instructions, ingredients, volume (or weight) and decoration to form a layout.

(b) Functional design element: Structure design (protection, storage, transportation, opening and resealing functions), material design (emotional appeal and window presence value), and volume design (economic function). (Wang, R. W., & Mu-Chien Chou.(2010)

Through the use of text, images, and other communication devices, packaging can articulate the attributes and benefits of a product to consumer. (Ambrose, G. & Harris, P. (2011).

Arabic letters has been recently, conventionally, and poorly used in packaging design. It has been used only as an informative tool neglecting the aesthetic considerations. While Typography, calligraphy and letter forming are concerned in art and design they have not been used so far in packaging design.

This research aims to introduce new, Arabic letters forming, techniques in packaging design. This study will serve the following:

- To emphasize packaging brand identity through Arabic letters.
- To communicate with words using graphic artistic design, in packaging, without reading.
- To use Arabic digital calligraphy in the graphic designs of packaging.
- To go over more packaging design techniques not only in the graphic design but also in the structural design.

2. Literature Review

2.1 Important Definitions

Typography definition; (from the Greek words (typos) means form and (graphe) means writing, is the art and technique of arranging type in order to make language visible. The arrangement of type involves the selection of

typefaces, point size, line length, leading (line spacing), adjusting the spaces between groups of letters (tracking) and adjusting the space between pairs of letters (kerning.) (Bringhurst, R. (2005).

Digitization opened up typography to new generations of visual designers and lay users, and David Jury states that "typography is now something everybody does. Jury, David (2006).

In packaging design, typography is the primary medium for the communication of the product's name, function, and facts to a broad consumer audience. The typographic selection, layout, and treatment of the words and letterforms affect how the type is read. Ultimately the packaging design typography becomes one of the most significant elements of the visual expression of the product.

Typography forms can be letterforms or individual characters, words, shapes or symbols.(Klimchuck, M. & Karsovec,S. 2012)

Calligraphy definition (from Greek kallos "beauty", graphē "writing") is a type of visual art related to writing. It is the design and execution of lettering with a broad tip instrument or brush in one stroke (as opposed to built up lettering, in which the letters are drawn). (Mediavilla 1996)

A contemporary definition of calligraphic practice is "the art of giving form to signs in an expressive, harmonious and skillful manner" (Mediavilla 1996). A style of writing is described as a script, hand or alphabet (Fraser and Kwiatkowski 2006).

Modern calligraphy ranges from functional hand-lettered inscriptions and designs to fine-art pieces where the abstract expression of the handwritten mark may or may not compromise the legibility of the letters (Mediavilla 1996). Classical calligraphy differs from typography and non-classical hand-lettering, though a calligrapher may create all of these; characters are historically disciplined yet fluid and spontaneous, at the moment of writing (Pott 2006 and 2005; Zapf 2007 and 2006).

Lettering definition: If the word calligraphy refers to direct writing, the term lettering usually refers to drawn, built-up or retouched forms. Logos, headlines and most works fit this category. The term lettering may also be used to cover every kind of letter-making, including calligraphy, drawn lettering, monumental letter carving, typeface design, and so on. (Waters, J. (February 2013)

2.2 Arabic Calligraphy

The History of calligraphy, like many other histories is cyclical: a new writing style is born, developed and eventually dies or goes out of fashion; this is followed by rediscovery, reappraisal and further improvement. (Morgan, M. (2001)

Arabic calligraphy integrates a cultural language with geometry. The fluidity of Arabic script offer indefinite possibilities for designing calligraphic expressions, even within a single word, since letters can be stretched and transformed in numerous ways to create different motifs.

Calligraphic expression is a form of creative design. The composition of such expressions is a non-deterministic iterative process that involves drawing and redrawing to develop, adjust and fine-tune. A calligraphic composition is composed of elements (letters) and relations (relative arrangement of the letters) defining an overall organization. During The compositional process, in each successive iteration, letters and their relative arrangements are updated, and the organization redefined. (Moustapha, H. & Krishmurt, R. (July 2001)

2.2.1 Features of Arabic Letters

- The Arabic alphabet contains 28 letters.
- It's Complex text language, because it has bidirectional script. It is written right to left; except for numbers and Latin words are written left to right.(Zawydeh, B. (2007).
- The Arabic writing system is a conjoined, right-to-left script and can include up to four forms of a single letter. (Szell, M.(2012)
- Many letters change their form depending on whether they appear alone, at the beginning, middle or end of the word.
- Letters that change form are always joined in both hand-written and printed Arabic. Hence, it is always cursive, as in the English hand writing.
- Only 3 long vowels are written. (Zawydeh, B. (2007)

Arabic in print: Arabic writing -typesetting and typing like other scripts- developed fundamentally as a handwritten script in close connection to calligraphy. Although it has been successfully adapted to new forms of typography — specifically, the printing press and computers — this has occurred with perhaps more difficulty than it did for Latin and Cyrillic languages, due to the Western-centric development of the technology as well as the unique features of the Arabic script. (Szell, M.(2012)

2.2.2 Arabic Calligraphy Styles

What follows is a brief description of these styles, their historical origins and contemporary uses:

Naskhi: One of the earliest cursive scripts, it gained great popularity in the 10th century. Highly legible, it was used for copying the Holy Qur'an. Naskhi is characterized by short horizontal stems and its almost equal vertical depth above and below the medial line. The Naskhi style is widely used today for headings, subheadings and copy in newspapers, magazines, books, advertising and promotional materials. It remains the most widely used of all Arabic styles.

Diwani: Diwani evolved in the 16th century in Turkey and is noticeably cursive. The decorative version known as Diwani Jali is widely used for ornamental purposes. See figure1.

Riqa'a: Can be traced back to the 15th century but did not come to prominence until the early 19th century. A derivative of a number of cursive scripts, Riqa'a was primarily used for secular purposes and is characterized by its thick rounded curves. Today it is widely used in Egypt under the name of Egyptian Rokaa. Egyptian Rokaa is wider and more airy than the original.

Thuluth: Can be traced back to the 7th century but did not develop fully until the late 9th century. Thuluth is still regarded as one of the most important of the ornamental scripts and its fluid. Thin lines are used for calligraphic inscriptions, titles, headings.

Kufic: Kufic script achieved a level of perfection in the 8th century, resulting in its application to transcribe the Holy Qur'an. The script is characterized by its static, rectangular lines and the short vertical strokes and extended horizontal lines. Kufic was the dominant Qur'anic script for more than three hundred years. Decorative elements and illuminations were added to Kufic texts and the letters developed into purely ornamental forms. (Boutros, M. (2005)

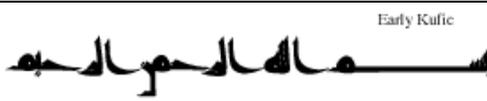
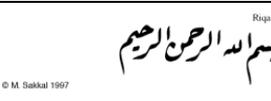
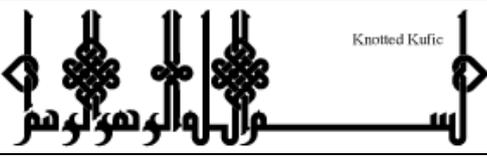
Naskh			Early Kufic
Diwani			Eastern Kufic
Riqa'a			Foliate Kufic
Thuluth			Knotted Kufic
Muhaqaaq			Square Kufic

Figure 1. Early Cursive Calligraphy Styles (Sakkal (1993)

2-3 Packaging Design

Packaging design is the connection of form, structure, materials, color, imagery, typography, and regulatory information with ancillary design elements to make a product suitable for marketing. (Klimchuck, M. & Karsovec, S. (2012). It is one of key elements of marketing strategy for product as it is the visual face that will be promoted, recognized and sought out by the consumer. (Ambrose, G. & Haris, P. 2011)

The use of color, typographic styles, characters, structure and other design elements often become category cues for consumers. (Klimchuck, M. & Karsovec, S. (2012). Informing is the job of graphic design. (Heller, S. & Mirko I. (2012). Within the same perspective of informing the consumer and promoting the product is the use of connecting letters as an informative tool. The use of these letters does not only accomplish the packaging design requirements as stated but it also strengthens the identity of Arabian products.

3. Lettering and Technology in Packaging Design

3.1 Lettering and Technology

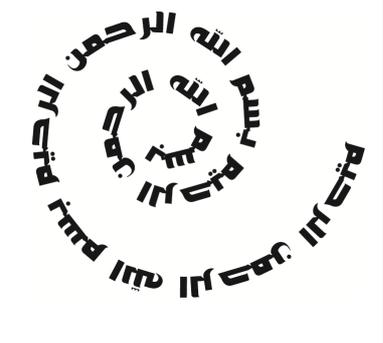
Technology has greatly reshaped every aspect of packaging design including the use of typography (Klimchuck, M. & Karsovec, S. (2012). Since the professional typesetter no longer exists, the role of the designer has expanded to include the mastery of typography. Today with computer technology, countless typefaces are being created. (Hakki, I. (2013). with global access to computers, designers have access to thousands of digital fonts. However, the art of typography can be easily lost and type hacked out with the use of technology and without artful care. The designer should therefore in their design focus on typography as a means of communication that is artistic and affected by the visual arrangement of words, letters, and styles. (- Klimchuck, M. & Karsovec, S. (2012)

In graphic design, letterforms play the most significant role in communication. They not only convey verbal information but also carry emotional and aesthetic information that has an impact on how the verbal message is read (Neuenschwander 1993). Resulting from certain developments in computer technology, numerous type forms are now available. However, the uniform, stiff and routine type forms used in software are insufficient for varied requirements in modern graphic design. Many designers make their own special letterforms to achieve particular effects. (Chuang, Y. H. (2004) Calligraphy, in 2-dimensional graphics and other design media, has been digitalized, too. This “digital calligraphy”, is defined by either direct creation via computer technology, using such means as software and digital panels/brushes, or recording/transferring, by using scanner or other devices. This digitization made ancient calligraphy closer to modern life than the traditional calligraphy that only existed in museums.

Digital Calligraphy takes calligraphy into the digital age, demonstrating how to capture the elegance and fluidity of this beloved art on to the computer screen. (Thomson, G. (April 2003)

However, these new applications do not just transfer calligraphy from papers to monitors without any change. It rather encompasses all traditional values, contemporary thinking and modern technology. (Chuang, Y. H. (2004) Table 1. Indicate how software helped in digitalization for Arabic calligraphy.

Table 1. Digitalization for Arabic calligraphy

Technique	Example	Technique	Example
Writing on curved line		Upper Arch	
Spiral f		Writing on circle	
Rotation from center		Filling form with Arabic letters or words	

3.2 What Arabic Calligraphy will add to Packaging Design?

Arabic calligraphy has its distinctive features that help to give packaging design not only aesthetic touch but also the Arabian identity that has been lost for many years in the Egyptian and eastern markets in general. Because corporations have seen how creative packaging and brand identity have positively impacted the sales and the growth of certain products, design is now being considered a real player in marketing (Dupuis, S. & Silva, J. (2008)

Packaging Identity: A packaging brand is essentially the combination of two distinct parts; its physical form and its design. Its form includes its shape and ergonomics, while its design concerns the surface graphics that present a story to the consumer. (Ambrose, G. & Harris, P. (2011)

Packaging design elements are the structural and surface graphics; then it classifies more into form, function, material and the finishes; branding, typography, imagery and color. (Calver, G. (2007)

As Design reflects culture, designers must strive to create work that speaks to current cultural environments while stretching boundaries into new sensory experiences (Dupuis, S. & Silva, J. (2008)

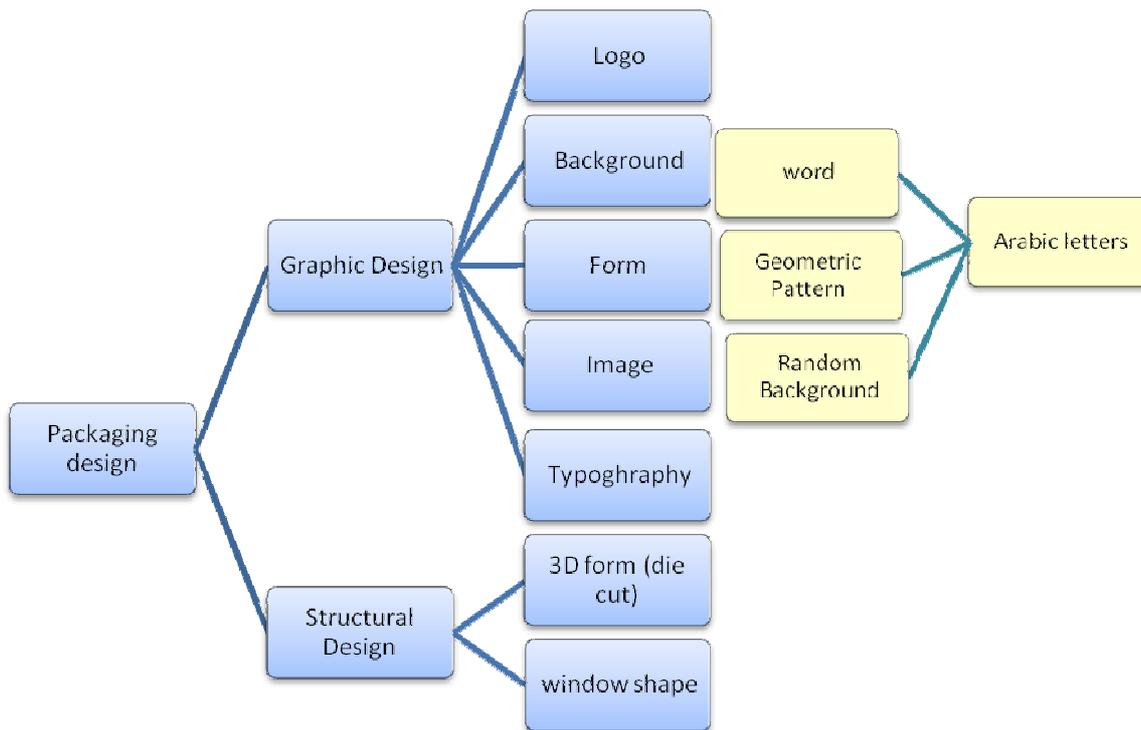


Figure 2. Packaging design elements through Arabic letters

4. Methodology of Research

The research is conducted using set of steps dependent on the descriptive and applied study as follows:

- First - various packages designs from different countries were selected depending on its graphic design showing letter forming in a descriptive study.
- *Second* - creative designs have been introduced as an applied study reflecting what Arabic calligraphy can add to graphic design (form shape and background).
- *Third* - over ten ideas of Arabic letter forming and calligraphy were created and applied in packaging design; emphasizing Arabic oriental identity for selected Arabian products.

4.1 descriptive Study

Table 2. represents different packaging designs; these indicate the utilization of letter forming in graphic design. Usage of letters in graphic design by different ways of packaging will be described.

Letter forming; different calligraphy by different languages using different techniques were used in packaging design in different areas and places around the world. These designs represent the region's culture and emphasize identity through graphic design. Researchers described some of successful designs in which letters were utilized in some packaging graphic design elements; examples are: logo, background, and image.

Table 2.Utilization of letter forming in different packaging design (descriptive study)

Representatives	Description
	<p>Japanese package design; The opposite image shows Japanese craft package. The design uses mono-color Japanese characters as a large object in the middle of its graphic design.</p>
	<p>The Image shows a wine bottle; the classic Latin letters have been used inside a geometric pattern background in one golden color.</p>
	<p>Chinese calligraphy were used in the secondary as well as the primary Chinese package</p>



4.2 Experimental Study for the Utilization of Arabic Calligraphy in Graphic Design

Utilization of Arabic calligraphy in expressive words:

The researchers applied creative designs using Arabic calligraphy to express the product form; Figure 3 (a, b, c). The design utilized the Kofi font in the design sketches and modified it appropriately to reach its final shape. Squared Kofi letters were used in the design; this font depends on geometric ratio. Although other Arabic fonts like *Diwani* and *Thulth* are more flexible, yet the results were expressive and impressive.

These designs can be used to express logos or forms in package graphic designs.

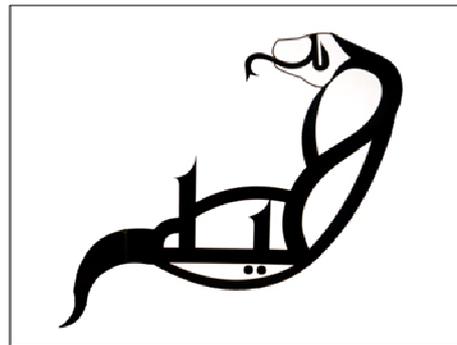
Using Arabic Letters in Background Designs

Words as patterns: Writing words can establish a rhythmic design. By choosing a few words of a theme (such as musical terms or names of garden herbs) the designer can produce interesting effects (Morgan, M. (2001)

Not only words can establish interesting background but also only individual letters can similarly generate rhythms. Digital techniques introduced a great aid in rhythmic letter forming, effects and design patterns. Researchers used the term digital calligraphy in describing modern techniques used by graphic design software to transfer arts from paper to screen in two different techniques. The first one by arranging letters in an Islamic geometric pattern while the second arranged them in a random distribution as shown in the figure 4(a, b)



(a) Letter forming "Bottle" design



(b) letter forming "Snake" design



Figure (c) letter forming (olive design)

Figure 3; (a, b, c) Different Arabic fonts calligraphy in expressive word designs

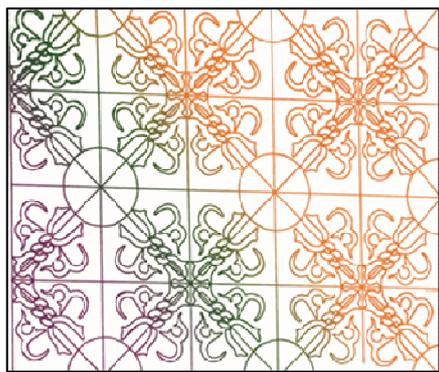


Figure (a) Islamic geometric pattern

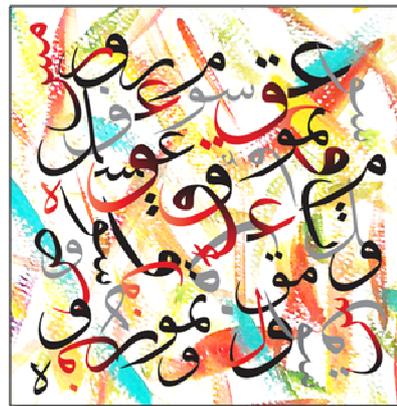


Figure (b) random distribution

Figure 4. Application of Arabic calligraphy in background design

4.3 Arabic Calligraphy and Letter Forming Techniques for Packaging Design

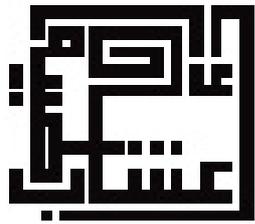
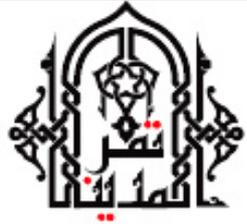
Innovations in design can strongly influence the marketing of a product (Dupuis, S. & Silva, J. (2008).

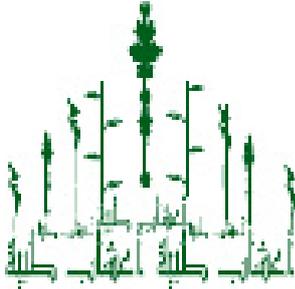
Depending on Arabic letter itself, one word or more; different techniques can be used for creating many designs through packaging design elements. The designs techniques by Arabic letter are described in table 3 also its application on Arabic product packages.

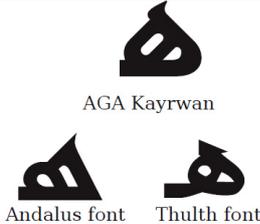
The designs show the flexibility of Arabic letters; how it can be stretched, modified adapted in aesthetic forms. Digital software provided a great help in bringing art in paper into digital graphic design. Researchers connected Arabic letters in every packaging design element even in structural packaging design. In this Research, more than ten creative Ideas have been introduced as new and creative techniques; enhancing design, emphasizing identity through usage of Arabic letters in packaging of Arabian products. Table 3 represents creative ideas of packaging design for Arabian products by using letter forming techniques. These designs serve to enhance packaging design and to emphasize the Arabic identity.

Table (3) applicable study of Arabic letters forming utilization for packaging design

Packaging Design element	Technique	Design Example	Application
	Adapting a few repeating Arabic words to outline a square or corners. (honey jar label)		
	Adapting a few Arabic words in a square outline design and filling the area in the center of the square with a geometric shape or letter or both.		
Logo	Rotation of Arabic word 'Bokhor' from center in circle the rotation figurative print presents the word meaning "essence"		
	Rotation of Arabic word 'shai' (Tea meaning in English) on the outside of a circle, this rotation gives a movement in the design and forms a living element as a flower		

<p>Adapting words in square corner and adding a geometric motif by extending one of the letters on the right giving the shape of a corner, another in the middle as a spiral.</p>		
<p>Connecting between two initial (AL) same letters -shown to the right- of the two words to give a decorative step like design</p>		
<p>Another processing of Arabic words by overlapping in the letters and contrast between two colors</p>		
<p>Connecting initial and final letters with motif</p>		

<p>Background</p>	<p>Filling geometric shapes with letter in positive and negative pattern</p>		
<p>Form</p>	<p>Arranging Arabic letters in vertical or horizontal line design Like smoke in Bokhor ' essence' package.</p>		
	<p>Using floral stems along straight vertical extended letters that write ' herbs' in Arabic letters.</p>		
<p>Image</p>	<p>Expressing image 'olive' using Arabic word by tracing and filling in the shape of an olive and using the olive color.</p>		

Structural Packaging design	Window cut; Using the space around to form the package window.		
	Creating structural package design by using Arabic letter outline; letter Ha' in the first of word written by different fonts are shown in the opposite figure	 <p style="text-align: center;">AGA Kayrwan</p> <p style="text-align: center;">Andalus font Thulth font</p>	

5. Conclusion

This study aimed to enhance the Arabian identity of the packaging design by introducing Arabic letter forming techniques and Arabic calligraphy into the packaging design.

The use of Arabic letters comes from the fact that they reflect history, culture and identity.

Various Arabic calligraphy styles and types were shown to give great flexibility for utilization in different packaging design elements even in structural design. Software and modern digital systems facilitates transferring Arabic calligraphy from fine arts and paintings drawn on paper to computer monitors then subsequently facilitates the usage of these digital graphic designs on packaging.

The consistency and unique features of Arabic letters enabled its usage in different designs with different forms. It also provides harmony with its different character length that gives consistent and smooth flow in the whole design.

The Arabic designer should use this study to emphasize Arabian identity through the utilization of Arabic letters in different design techniques in packaging. The Arabic letter forming and calligraphy can be introduced in modern designs expressing ideas and word meanings through design outline not only as a geometric letters arrangement.

The Arabic letters offers vast variations through geometric Islamic designs that can be utilized in packaging graphic design; shape, form, background in innovative formation.

Packaging design can carry a purposeful message through its detailed design elements expressing culture and history in which identity can be emphasized through the character of the Arabic letters.

Arabic letter is a shape unto itself; letter can be expressive when used, as an outline, or as a texture or pattern in the graphic design of a package.

The spaces inside and around the bold of a letter, called counter spaces, are often overlooked as design elements. Their shapes can be customized using color, pattern, or texture. It can also be used as packaging window or die cut.

Connecting the structural and graphic design elements in a 'logo, background, form, shapes even structural and window cut' with Arabic calligraphy and letter forming techniques enhance the design identity for special Arabian products; Bokhor, herbal, dates, etc.

The connectivity and coherent forms in Arabic letters help to adapt Arabic letters and add geometric, floral and Islamic motif to the graphic design. These give the Arabic letters an edge and distinguish it from other languages letters thus emphasizing the identity of Arabic packaging design.

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Noha A. Mohamed (TA'01–L'05–AP'11). The Author has been born in Cairo, Egypt, 22-3-1976.

This author became a teaching assistant (TA) of Faculty of Applied Arts, Helwan University in 2001, a Lecturer (L) in 2005, and an assistant professor (AP) in 2011. She had a Bachelor degree of science in Applied Arts; Printing, Publishing and Packaging Dept. in 1998, Helwan Univ., Egypt, Master degree in "pharmaceutical Packaging printing techniques" 2001, Helwan Univ., Egypt, PH. D in Glass packaging in 2005.

Khaled T. Youssef(TA'99–L'05–AP'10). The Author has been born in Cairo, Egypt, 23-8-1969.

This author became a teaching assistant (TA) of Faculty of Applied Arts, Helwan University in 1999, a Lecturer (L) in 2005, and an assistant professor (AP) in 2010. He had a Bachelor degree of Applied Arts; Printing, Publishing and Packaging Dept. in 1992, Helwan Univ., Egypt, PhD degree in " The Digital Flexographic Plates Preparation Systems" 2005, Helwan Univ., Egypt.

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