الإجابة الإيجابية تجد العلاج
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شاعور باللغة
علم بتأشيرة سفر

محلوليت: تراكيس

المؤلفين العراقيين في ثمانينات

التعليم غير المتكاملي. وعملها يعود في الدور الإداري

التعليم غير المتكاملي. وعملها يعود في الدور الإداري
Fig. 3.6 Packaging brings in many different typographic lettering styles. The adaptation of logos into Arabic has mixed results.
Kufi lends itself to low resolution and also results in a modern look that TV stations very much favor (Fig. 3.8).

In terms of web design, the browser support for font linking has opened up the door to typographic variation on the web. Prior to that, Arabic users had access to only 2 different typeface designs on Windows, a number that is shockingly small. At the time of writing, the use of web fonts has not yet gained traction in the Middle East as it is still very new technology and full browser support for Arabic web fonts has only been around since the summer of 2011.

As for smaller screens and hand-held devices, the field is still very open. Linotype library typefaces like Frutiger Arabic and Neue Helvetica Arabic, both designed by the author, have made it into car navigation systems. The most extensive Arabic typeface family designed specifically for mobile devices is Google’s Droid Naskh and Droid Kufi by Pascal Zoghbi for the Ascender Library. The widespread use of smartphones is opening up a new medium in digital communication that requires further research and typographic investigation.

**Close Up: Multi-Script Families and the Relationship to Latin Type**

It would be highly inaccurate and unrepresentative to talk about Arabic typography today without going into the discussion of bilingual design. By nature of communication in countries like Lebanon where the majority of advertising and branding is done in English or French, or in the gulf countries where English is a recognized official second language, it was only a matter of time that multi-script families would come
This chapter offers a glimpse of Arabic typography as it stands today in the Middle East. It is a descriptive rather than a prescriptive review. It is an introduction to what Arabic typography is, rather than how it should be. Though that question is of great interest to this researcher, it is beyond the scope of this dissertation for the point here is illustrate the setting in which the legibility studies are taking place. The realities of Arabic type design and the visual culture that Arab readers are immersed in informed the design of Afinand, a new typeface system created especially for the legibility studies to be done. The process of the design, and the details surrounding the design choices are documented in the next chapter.
Chapter 4
The Design of Afandem

At this point in the dissertation, we get to the design and practical implementation of the research. As mentioned in the Introduction, the first chapters provide the setting through which the story unfolds. By this point, it is important to have shown how technology has influenced the development of typeface design, why Arabic typefaces look the way they do, and the wide-open fields available for exploration today thanks to the increasing sophistication of font technology and software support. Now we go back to the original question, if we are able to design in the simplified, traditional or dynamic styles, which way do we go?

This dissertation tries to answer that exact question, and the coming chapters will further explain the background of reading and legibility studies and the actual experiment designed. For now though, and having briefly explored the the world of calligraphic and typographic letterforms past and present, we move on to examine the design of Afandem. It is a typeface system designed by this researcher specifically for the legibility tests to be done.

Goals

Afandem is a system of three typefaces that are to be used to set the text of the legibility experiments. As such they need to satisfy two broad purposes. The first is that they need to be authentic to the design styles that they represent (Simplified, Traditional, and Dynamic Naskhi), so this is a set of external design relationships. The second purpose is that they are internally consistent as a typographic system. The only typographic variant in the legibility experiment to be conducted is the complexity of word formation. This means that parameters such as weight, optical size, stroke treatment, modulation, terminal treatment, contrast, axis, leading, width, spacing, structure, proportion, and rhythm must all remain constant through the design of the three typefaces.

Source of Inspiration

When looking for sources of inspiration for the design of Afandem, it proved fruitful to refer to Ottoman Naskh as it represented the culmination of several centuries’ worth of artistic development. One work that stood out, in terms of elegance of rhythm and beauty of form, and that was by Mehmed Şefik Bey (Fig. 4.1).

The letterforms are characterized by a smooth horizontal spread that gives a feeling of unhurried elegance. The proportion of the characters as well as the interword spacing presented a clear image with a gentle and relaxed rhythm. The counters are
quite open and the overall look and feel are generous and inviting. These qualities make this specific hand appear quite modern and so would make a good reference for Afandem Dynamic as it would lend itself well to more simplified versions. Specifically:

- **Horizontality**: The writing is quite horizontally spaced and the amount of vertical movement is rather minimal. This makes it suitable and flexible enough for the simpler typographic versions to be designed where vertical movement is more or less curtailed.

- **Spacing**: The inter-word spacing is quite generous therefore closer to what one expects in typographic forms. Manuscript Naskh often has variations in how tightly knit the letters are together and this work has just the right spacing for the exercise to be done.

- **Open counters**: The test samples in the experiment are to be read on screen. This means that there are resolution restrictions on how the type will be shown. This implies that the design needs to have relatively open counters (the inner spaces in letters like the م) so that they do not close up when viewed on screen. This manuscript source has quite well formulated and clearly drawn letterforms and generous counter proportions and therefore fits quite well to the requirements.

- **Beauty of shape and rhythm**: Design decisions often come down to personal preferences, and the beauty and elegance of this manuscript made it an ideal source of inspiration for the work to be done.

This is not to say that other manuscripts from the same period, or even from other periods, are of lesser calligraphic quality or show inferior penmanship. The state of Ottoman calligraphy was at such a level that there are many other places to look. The requirements for horizontality, calm gentle rhythm, and generous spacing disqualified a significant portion of works that showed a higher level of energy and motion. A personal preference for a hand that exhibits strictly vertical ascenders rather than one that slants forward also influenced the selection process. But finally, as is often the case with design decisions, it all comes down to the designer's eye and the instantaneous response that one has when one is presented with an inspiring visual.

Furthermore, the work of Mehmed Selik bey appears quite modern and that in itself is a very promising start. The question of what makes an Arabic style modern (as in the contemporary sense) is not a simple one to answer. To this researcher, this is embodied by the openness of the design, the gentle rhythm, and the clarity of forms. These qualities are very important, for the typefaces to be based on this manuscript are to be used in today's reading. This supports the external validity of the research, as the typefaces are then very much in keeping with contemporary aesthetics.

There are, unfortunately, disputes within the world of Arabic type design as to what a modern Arabic typeface should look like, what authentic Arabic is, and in some cases, if classical calligraphic styles are valid sources of inspiration for modern design at all. The approach that this typeface design takes is a practical rather than an ideological one. There are the three interpretations of Naskh as described in Chapter 2, and Arab readers are exposed to all three of them. There is also this experiment that requires the setting, using related typeface styles, of text to be read on screen. Once the sources of manuscript and typographic references are established, the design can proceed with the desired function in mind. This approach is function-driven in
both inspiration and execution: 1. Identify a good source of reference for Afandem
dynamic while keeping in mind the intended use of the typeface family; 2. Start the
design of the Afandem typefaces while making sure that all three versions relate to
one another and to the genre that they represent; 3. Test these typefaces to make
sure that they fulfill the functions they are meant for.

It would be possible, for this design exercise, to have chosen a different source of
inspiration. It is also possible to have designed the typefaces in a different manner.
The bottom line is, a design problem can have more than one solution at the time
only one is needed. Therein lies the great field of design experimentation.

The Process of the Design

The design of the Afandem typeface system started with research into the different
hands of Naskh while trying to get familiar with the intricacies of Naskh manu-
scripts as well as looking for a specific example to use as reference. Once the choice
was made and an analysis of the visual characteristics of the manuscript of Mehmed
şeyh key was done, the design of Afandem Traditional started. The idea was to
begin with the middle step in terms of complexity, and then take one step in either
direction. The reason for this was that the overall design concept had to be flexible
enough to work in all three levels and the easiest way to assert that was to start in
the middle ground.

Afandem Traditional

The design of Afandem Traditional follows in the steps of traditional Naskh book
faces and hence the adjective traditional. It specifically refers to the design of the
Linotype book face Lotus which is one of the most popular ones (Ross, 2002).

Afandem Traditional maintains a similar structure to Lotus in most of its char-
acters. The main departure is from the closed forms of Lotus such as the middle
and final Ayin and the final Meem (Fig. 4.3). Afandem Traditional maintains open
counters so as to avoid the unyielding of ink blobs (virtual or real) and to maintain
the highest legibility in small sizes. Another feature differentiating the 2 typefaces
is that Afandem Traditional has shorter connecting strokes even though the overall
word proportion is similar (Fig. 4.3). This is because it generally employs more open
counters giving it a full and curvaceous feel, and this results in a more pleasant
appearance (Fig. 4.4). This is especially so as it avoids having relatively long and spindly
horizontal stretches of the connecting strokes.

The first aim of Afandem Traditional is to work well as a book face on par with
the norms of Arabic book face design. The minor departure in the openness of its
counters does not differ from that purpose. The second aim is to be part of a 3 level
typographic system where the levels increase the complexity of word formation. To
prepare for this, a crucial test was done halfway through its design. A sample phrase
was designed in all 3 levels. The glyph of Afandem Traditional were reduced to sup-
port only 2 forms per character, modified along the lines of Simplified Naskh norms.
In the meantime, the basic glyphs were joined into special ligatures that reflect the
change in positioning and stacking present in the manuscript examples of Naskh.
The exercise demonstrated how the system could be formed and what one could
expect in terms of rhythm and line length. This lead to a host of other consider-
The Design of Afandem

Fig. 4.3 First from top: Afandem Traditional; second: Lotus; third: Comparison of characters that are different in the two; fourth: Typical ligatures in this style.

Once the test passed inspection, the design of Afandem Traditional could carry on its development. This included extensive testing in paragraph setting with a focus on clarity and evenness of proportion and color. The word shapes were an important test of the design. Given the fact that Arabic is a semi-joined script, the characters interact in a more dynamic way than unattached scripts such as Latin. The connecting strokes and the space in between the main bodies of the characters create phantom characters that need to be addressed with just as equal attention as the real ones.

The design characteristics of Afandem Traditional are, as stated earlier, its open counters (Fig. 4.6) and its halaline design. Its strokes are evenly modulated, with soft, gentle swellings (Fig. 4.7). Its words are evenly spaced and avoid the flickering effect of many Arabic typefaces by eliminating sharp edges and maintaining a consistent color and rhythm. It also supports such a basic set of ligatures, as is the norm in the genre it aims to belong to. These ligatures add to the fluidity of the design and provide a reference to the calligraphic origins of this typographic style.

Afandem Traditional also maintains the horizontal spread of the calligraphic example by Mehmed Şehib ey and many of its characteristics such as the treatment of the lâh, kháh, và, và, và, và, và, và, và, và, và, và, và, và, và, và, và, và, và, và, và, và, và, và, và, và, và, và, và, và, và, và, và, và, và, và, và, và, và, và, and many others (Fig. 4.5). It also refers to it in its halaline design when the characters are tightly knitted together. This reference to the manuscript original was important to maintain, as it had to be taken over into the dynamic version. As such, in Afandem Traditional, the isolated letterforms still bear a strong resemblance to the calligraphic origina, but the setting of the words themselves do not, and that difference very clearly illustrates the constraining effects of printing and typesetting technology and the way it has shaped the most common forms of Naskh typefaces.

Fig. 4.5 Comparison of the Afandem Traditional design with the manuscript source of reference shows that the design does not stray far from the handwritten original work.
Fig. 4.6 Detail of Afdem Traditional shows the open counters (inner eye) of its letterforms...

... soft transition of strokes to avoid sharp corners...

... and blurred edges to avoid creating sharp angles that are difficult for the eye to read.

Fig. 4.7 Details also show soft incoming strokes...

... rhombic dots along the reed thickness...

... and elegant outward strokes that refer to the calligraphic origin.
Afandem Simplified

Once the design of Afandem Traditional was getting to almost complete, it was time to move on to the simplified version (Fig. 4.8). The process of designing Afandem Simplified turned out to be quite tricky as several concessions had to be made in order for it to even function. The initial premise of the Afandem system was that all possible parameters were controlled and only the level of complexity of word formation is changing. That turned out to be impossible to achieve. The structure of many characters had to be modified in order to be able to take on the double function such as initial and middle or final and isolated (Fig. 4.9). The critical modifications can be summarized in the following paragraphs.

The middle and final forms were scrapped except for the ji
d, Ayn ١١, Feh ١٣, Qaf ١٤, Mimm ١٥, and Heh ١٦. This is the norm in Simplified Naskh. For all other letters, only 2 forms were used. The initial form doubled for the middle, and the isolated for the final. This meant that the new middle and isolated forms did not have the usual connecting stroke on the right that usually connects to the previous character. This led to many repercussions on the structure.

The horizontal base strokes of characters in Afandem Simplified were flattened to the baseline in order to be able to connect to the following characters. Some characters such as the س ١٩ had different widths so as to fit the more simplified structure. Some forms changed (Waw ٢٠, Sad ٢١, Qaf ٢٢) so as to be used in initial and middle positions (Fig. 4.8). The same applied for isolated Mimm ١٥.

The Simplified has more uniformity in dot positions (look at middle T
d in Fig. 4.10). The initial and middle versions of the tooth characters such as Teh and T
d were now identical, and so the height of their dots was now the same in both positions. This is not the case in Afandem Traditional since the middle tooth is shorter and so its dots are also lower.

There were also some correcting measures to be done in order to preserve the same weight and rhythm: The initial glyphs had to be shifted to the right so as to accommodate the loss of the connecting stroke from the following letter. This meant that the connecting stroke on the left was twice as long as in Afandem Traditional. The baseline stroke was reduced by 9 units to compensate for the extra weight. Since the connecting stroke was flat for a longer duration, this contributed to a heavier color and had to be compensated.

Some characters such as the middle and final Ayn ١١ and the middle and final Heh ١٦ proved to be quite tricky to design because the bounces in the baseline stroke. To these characters a long stroke on the right was added and this was designed to completely overlap with the incoming stroke from the previous letter (Fig. 4.10). This ensured that these characters appeared to be written in one continuous stroke. Given all the changes above, spacing also had to be adjusted in order to compensate for all the changes and to maintain the same rhythm.

Afandem Simplified was designed in reference to Linotype’s Yaktot (Fig. 4.11), which was the second Simplified Arabic to ever be designed and the main one to be marketed by Linotype. Due to the widespread use of the Linotype machine, Yaktot became the de facto newspaper face and the ultimate simplified Naskh typeface (Ross, 2002). Afandem Simplified follows the structure of Yaktot but it differs in several ways. Its proportions mainly follow that of Afandem Traditional in order to maintain that parameter as constant. Similarly, it has longer ascenders and descendents than Yaktot. Its counters are more open and clear. Its design is less stiff and rigid since it tries to maintain the fluidity and motion of the strokes of Afandem Traditional. Its baseline stroke is more curvaceous in order to give the typeface a lift.
The third and last installment of this typeface system is Afandem Dynamic. This sibling is meant to emulate the genre of typefaces that aim to replicate the behavior of the Naskh calligraphic style in manuscripts. This genre of typefaces contains very few examples. At the time of the research there were only a handful of typefaces that are able to capture the nuances of manuscript Naskh. Of this, the most remarkable is Decotype’s Naskh typeface as powered by the Tasmeeem extension for InDesign.

The original plan for Afandem Dynamic was that it would be built along the same lines as Decotype’s Naskh for use with Tasmeeem as that was the most developed system for typesetting calligraphic Arabic (Fig. 4.13). Unfortunately, that turned out to be unfeasible. A system for developing fonts that have the capability of the aforementioned typeface was not ready at the time of the research. The Tasmeeem typefaces were built upon font templates and Macro scripts. However, the current templates served to add a mere hint of the full functionality that would be needed to achieve a truly dynamic Naskh typeface. As such, building a working font to follow in the steps of Decotype’s Naskh typeface was not an option.

At that point there were only 2 options available. The first was to scrap Afandem completely and build a Traditional and Simplified versions of the Decotype Naskh. The second was to design the extra alternates and manually set the sample texts. The first option was highly unattractive as this meant several concessions on the design level. Decotype Naskh has the full functionality of manuscript Naskh, but its design had certain features that were not appropriate to the task at hand. The characters are set too tightly, and the typeface has a forward slant and a busy rhythm that would have not translated well at all into the Simplified version.

The second option, though it relied heavily on manual work, seemed the best option at the time. And so, the work process went as follows. The first step was to...
decide fully on the text samples. The next task was to set the same text in Decotype Nash, and in Afandem Simplified and Traditional. Then, the three paragraphs were compared until a common line-break was achieved so that the text breaks at the same words in all three styles.

The following step was to optimize the rhythm of Decotype Nash as the default setting needed extra work to achieve a good rhythm. This included trying out different word forms, as well as the insertion of elongated alternates every once in a while in keeping with the manuscript tradition. Once the Decotype Nash paragraph had the word forms that were well balanced, the word shapes were analyzed in detail to determine the shape of the extra alternates to be designed (More details on the alternates will follow in the next paragraph). Once these alternates were designed, the words and lines were assembled in Fontlab Studio. This is digital manual typesetting as the words were assembled and spaced by hand. Once the lines were formed, these were taken into Adobe Illustrator and assembled into paragraphs (Fig. 4.14).

Just as the Simplified version brought with it a certain number of concessions, so did the Dynamic one. Afandem Dynamic is built around the same skeletal structure as Afandem Traditional. However, it differs in several ways. The characters combine in many different stacking orders. They literally climb on top of each other, sometimes four of them at a time (Fig. 4.16). The fact that characters are not always joining in the simple side-by-side formation means that slightly different forms are needed so that the characters connect properly (Fig. 4.18). These amounts to the majority of the extra alternates that were designed. Moreover, most of the alternates maintained the same basic shape and the change was in the incoming or outgoing strokes. Elongated swish characters were also included within words or as final or isolated forms. These occur frequently in manuscripts and give the text its unique visual flavor.

In many cases, the stacking order was a simple side-by-side form but its rhythm was slowed down so the result was that the connecting strokes are slightly elongated (Fig. 4.15). This enhances the elegant feel of manuscript Nash. Several key characters had tighter settings, so the body of the character stays the same but the connecting stroke is significantly shorter (Fig. 4.15). Many words had a gradual slope towards the lower left and this necessitated alternates where the outgoing stroke was on a lower level than the incoming stroke. The letters with the highest number of alternates were the Lam łą and Min łą (Fig. 4.17). The nature of these last five dynamic characters interact heavily with the surrounding characters. Also, these are amongst the most frequent letters in Arabic so this is to be expected.

Overall, Afandem Dynamic utilized a significantly larger character set than the Traditional or the Simplified, and this is only while setting a total of six short texts. It is to be expected that many more alternates would be needed to be able to represent any given Arabic text.

As for the concessions mentioned before, these had to do with the very nature of manuscript Nash. As mentioned earlier, Afandem Dynamic is based on the same basic characters as Afandem Traditional. All isolated characters remain absolutely the same in all three styles. The tricky part is what happens when characters are connecting. The Dynamic version exhibits a more complex relationship of characters within words. The various methods of the Dynamic stacking order bring about certain by-products that are an essential part of what really defines manuscript Nash:

- Movement: The Dynamic version has more movement along the y-axis. The overall "feel" of this style is more energetic (Fig. 4.19).

- Rhythm: Afandem Dynamic, like manuscript Nash, has an alternating rhythm. Some characters are very close to one another, and others are quite spaced out.
Fig. 4. Which dot belongs to which character? The Dynamic version has words that have characters stacked vertically in a tight composition. The panel on the left breaks down the complex composition into its components.
The Design of Afandem

Fig. 4.17 Afandem Dynamic had many variations on the letterforms found in the Traditional version (in black). These were especially needed for the variation in how letters stack with each other as well as the spacing fluctuations between characters that are tightly spaced and ones that are very loosely set. Most of the alternates maintained the same basic shape and the change was in the incoming or outgoing strokes. Elongated swash characters were also included within words or as final or isolated forms.
Fig. 4.19 The Dynamic version has more movement along the y-axis.

Fig. 4.20 The Dynamic version has a more energetic baseline ribbon.