

Cover Page



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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 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 Naskh), 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 throughout 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 inter-word 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 Mim) 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 of 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 Şefik 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

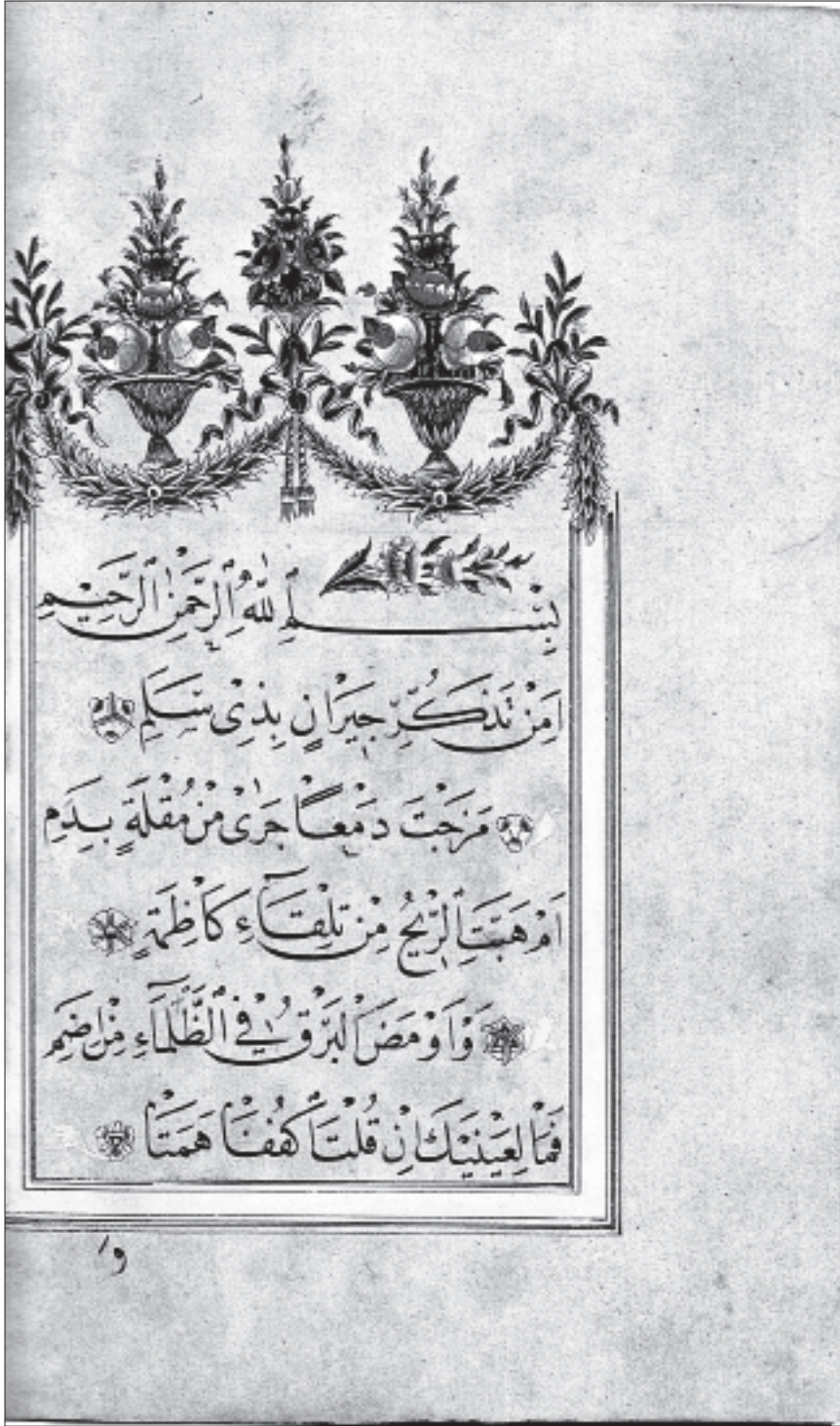


Fig. 4.1
The work of Mehmed
Şefik Bey completed in
1847 in Istanbul. Sakip
Sabanci Museum: SSM
190-0301-MSF

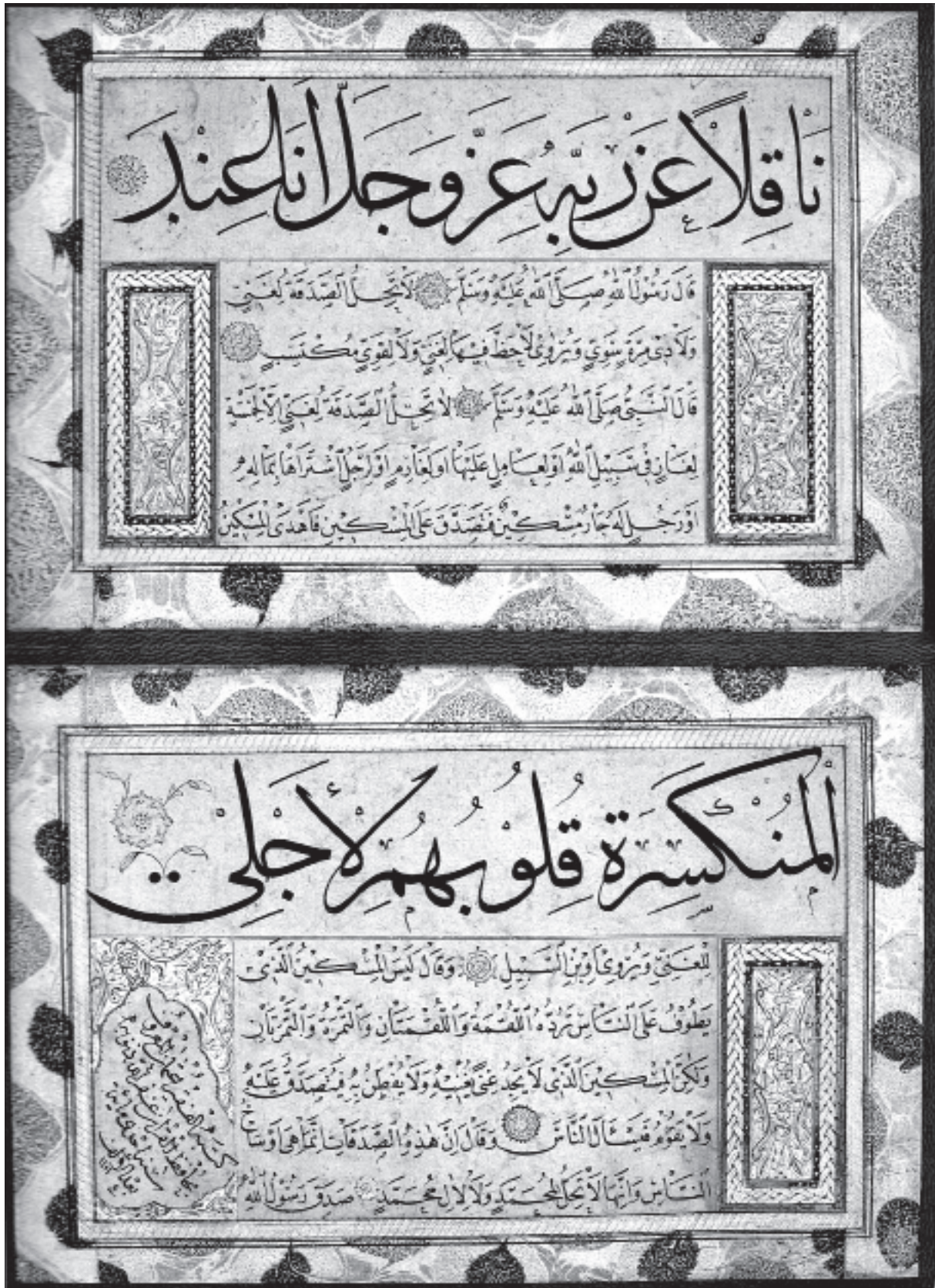


Fig. 4.2 The design process also referred to highlights of Ottoman calligraphy such as the work by master calligrapher Hafiz Osman, Sakip Sabanci Museum: SSM 120-0371-HO.

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 manuscripts 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 Şefik Bey 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 characters. The main departure is from the closed forms of Lotus such as the middle and final Ayn ع and the final Mim م (Fig. 4.3). Afandem Traditional maintains open counters so as to avoid the unevenness 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 deter 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 glyphs of Afandem Traditional were reduced to support 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 led to a host of other consider-

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.



Fig. 4.4 Comparison of text set in Afandem Traditional (top) and Lotus (middle) shows that both typefaces have a similar construction and overall rhythm.

زعموا أن غديراً كان فيه ثلاث سمكات: كَيْسَة (حسنة التآني) وأكيس منها وعاجزة. وكان ذلك الغدير بنجوة من الأرض لا يكاد يقربه أحد. وبقربه نهر جارٍ. فَاتَّفَقَ أَنَّهُ اجْتَازَ بِذَلِكَ النهر صيادان فأبصرا الغدير فتواعدا أن يرجعا إليه بشباكهما فيصيда ما فيه من السَّمَكِ. فسمعت السَّمَكات قولهما. فأما أكيسهِنَّ فارتابت بقولهما فخرجت من المكان الذي يدخل

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ations regarding the isolation of variables necessary for scientific testing, but this will be discussed in a separate section.

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-joining 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 fulsome 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 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 Şefik Bey and many of its characteristics such as the treatment of the Beh ب, Dal د, Jim ج, Yeh ي and many others (Fig. 4.5). It also refers to it in its fulsome design when the characters are tightly knit 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 origin, 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 Afandem Traditional shows the open counters (inner eye) of its letterforms...

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

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



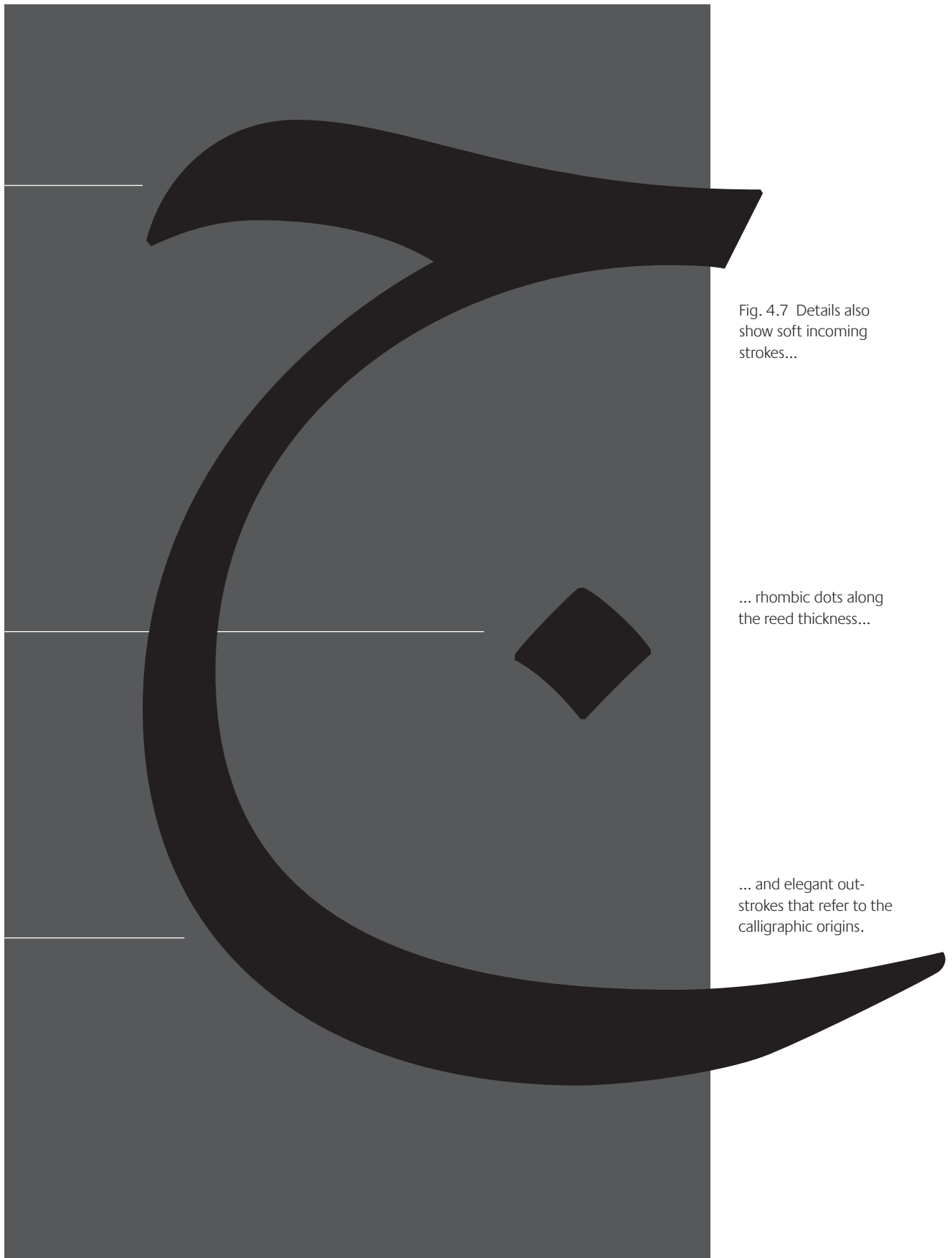


Fig. 4.7 Details also show soft incoming strokes...

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

... and elegant out-strokes that refer to the calligraphic origins.

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 Jim ج, Ayn ع, Feh ف, Qaf ق, Mim م, and Heh ه. 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 Sin س had different widths so as to fit the more simplified structure. Some forms changed (Waw و, Sad ص, Qaf ق) so as to be used in initial and middle positions (Fig. 4.8). The same applied for isolated Mim م.

The Simplified has more uniformity in dot positions (look at middle Teh ت in Fig. 4.10). The initial and middle versions of the tooth characters such as Teh and Theh 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 ع and the middle and final Heh ه proved to be quite tricky to design because of the bounce 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 Yakout (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, Yakout became the de facto newspaper face and the ultimate simplified Naskh typeface (Ross, 2002). Afandem Simplified follows the structure of Yakout 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 descenders than Yakout. 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

ا ا ب ب ب ت ت ت ت ث ث ج ج ج ح ح ح خ خ خ
 ا ا ب ب ب ت ت ت ت ث ث ج ج ج ح ح ح خ خ خ
 د د ذ ذ ر ر ز ز س س ش ش ص ص ص ص ص
 د د ذ ذ ر ر ز ز س س ش ش ص ص ص ص ص
 ض ض ض ط ط ط ظ ظ ظ ع ع ع غ غ غ ف ف ف
 ض ض ض ط ط ط ظ ظ ظ ع ع ع غ غ غ ف ف ف
 ق ق ق ك ك ك ل ل ل م م م ن ن ن ه ه ه و و ي ي ي
 ق ق ق ك ك ك ل ل ل م م م ن ن ن ه ه ه و و ي ي ي

Fig. 4.8 A comparison between Afandem Traditional (top) and Simplified (bottom) showing almost identical isolated shapes, and the reduction of 4 basic forms in the Traditional to 2 forms in the Simplified.

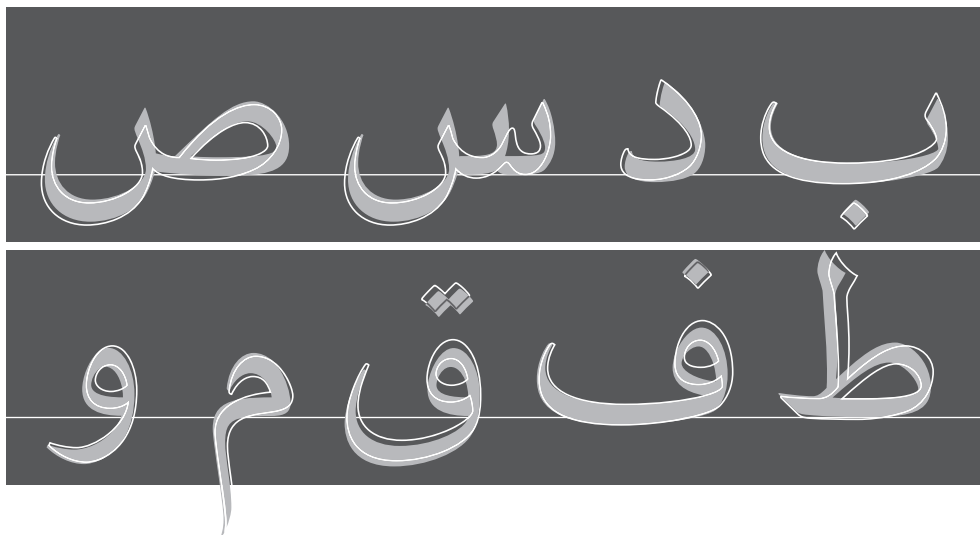


Fig. 4.9 Subtle changes made to Afandem Traditional (in white outline) in order to morph into the Simplified version (in gray filled color).



Fig. 4.10 The medial forms were mostly dropped in the Simplified version. Top: Some letters like the Heh and Ayn retained a medial form in the Simplified version (in white); Bottom: Most of the other letters (like Teh and Sad) did not.

Fig. 4.11 Comparison between Afandem Simplified (top) and Yakout (bottom).

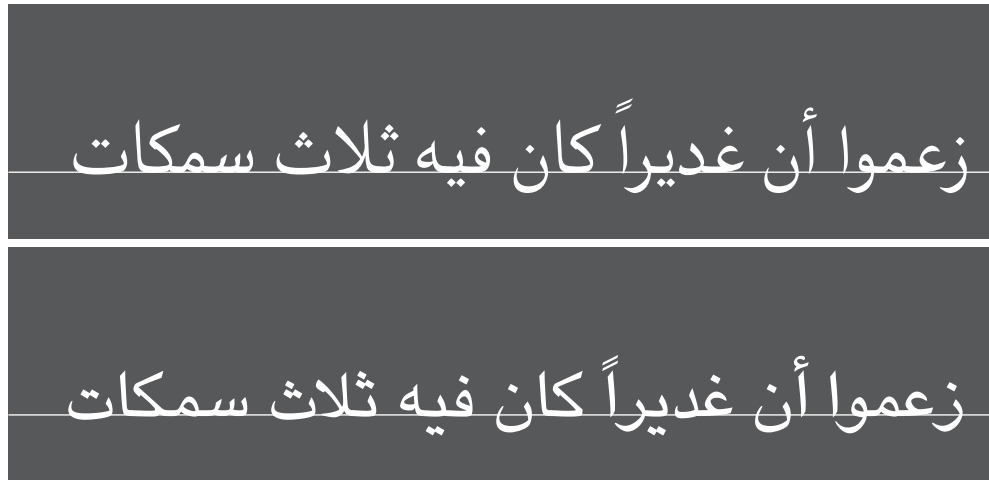


Fig. 4.12 Comparison of text set in Afandem Simplified (top) and Yakout (bottom) shows that both typefaces have a similar construction and overall rhythm.

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proportion were deemed to be less critical and were designed to match Afandem Traditional rather than Yakout. As a result, Afandem Simplified is a Simplified Naskh design that is characterized by soft graceful curves and a gentle rhythm. It retains the elegance of the more fluid forms of Afandem Traditional and its closely-knit appearance. As such, it retains the fulsome design and when set at the same optical size as Yakout, it takes up similar space (Fig. 4.12).

Afandem Dynamic

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 Tasmeem 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 Tasmeem 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 afore-mentioned typeface was not ready at the time of the research. The Tasmeem 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

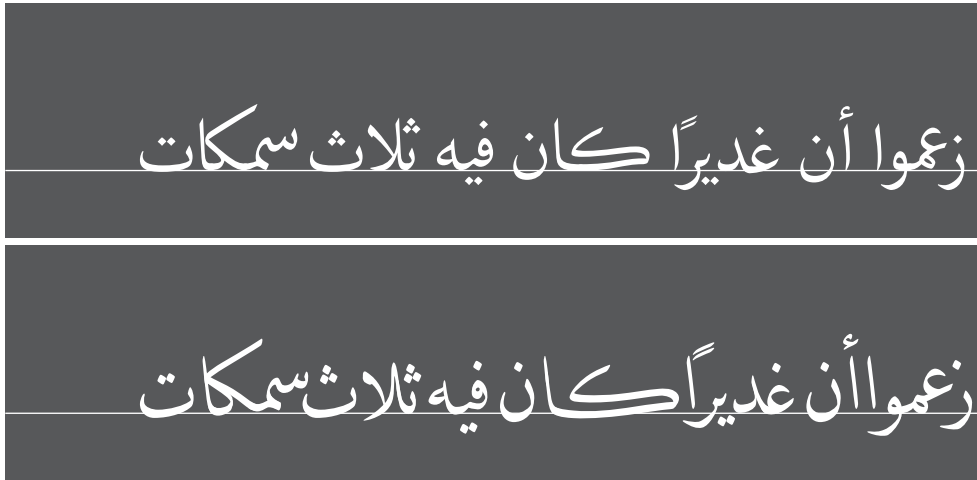


Fig. 4.13 Comparison between Afandem Dynamic (top) and Decotype Naskh (bottom).

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Fig. 4.14 Afandem Dynamic (top) follows the script grammar of manuscript Naskh as analyzed by Decotype Naskh (bottom).

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decide fully on the text samples. The next task was to set the same text in Decotype Naskh, 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 Naskh 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 Naskh 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 amount 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 swash 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 Naskh. 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 ل and Mim م (Fig. 4.17). The nature of these letters is quite dynamic and these letters 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 Naskh. As mentioned earlier, Afandem Dynamic is based on the same basic character set 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 Naskh:

- . 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 Naskh, has an alternating rhythm. Some characters are very close to one another, and others are quite spaced out

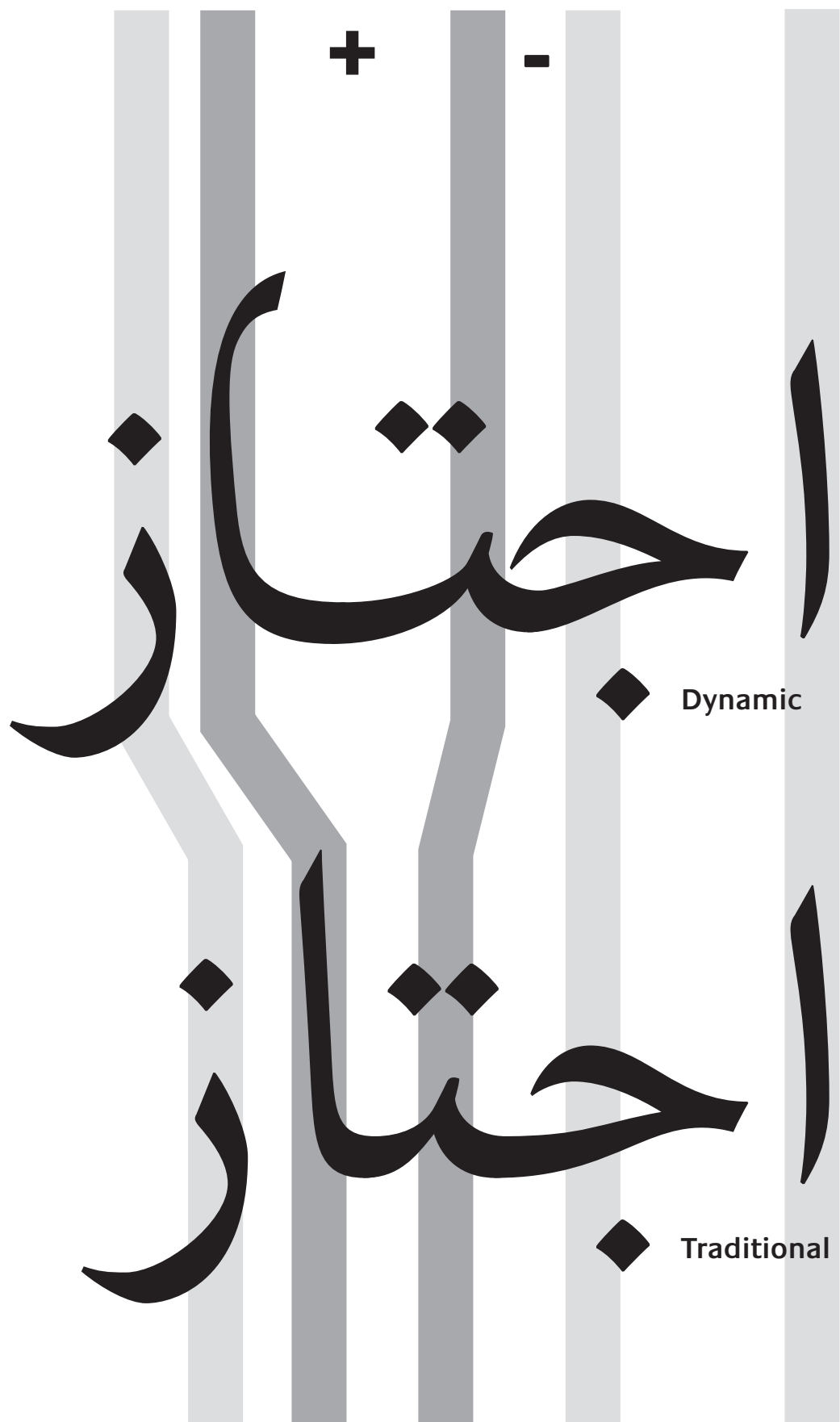


Fig. 4.15 Afandem
Dynamic has an alternat-
ing rhythm where some
characters come closer
together while others
are set wider apart. This
variation is typical of
manuscript Naskh.

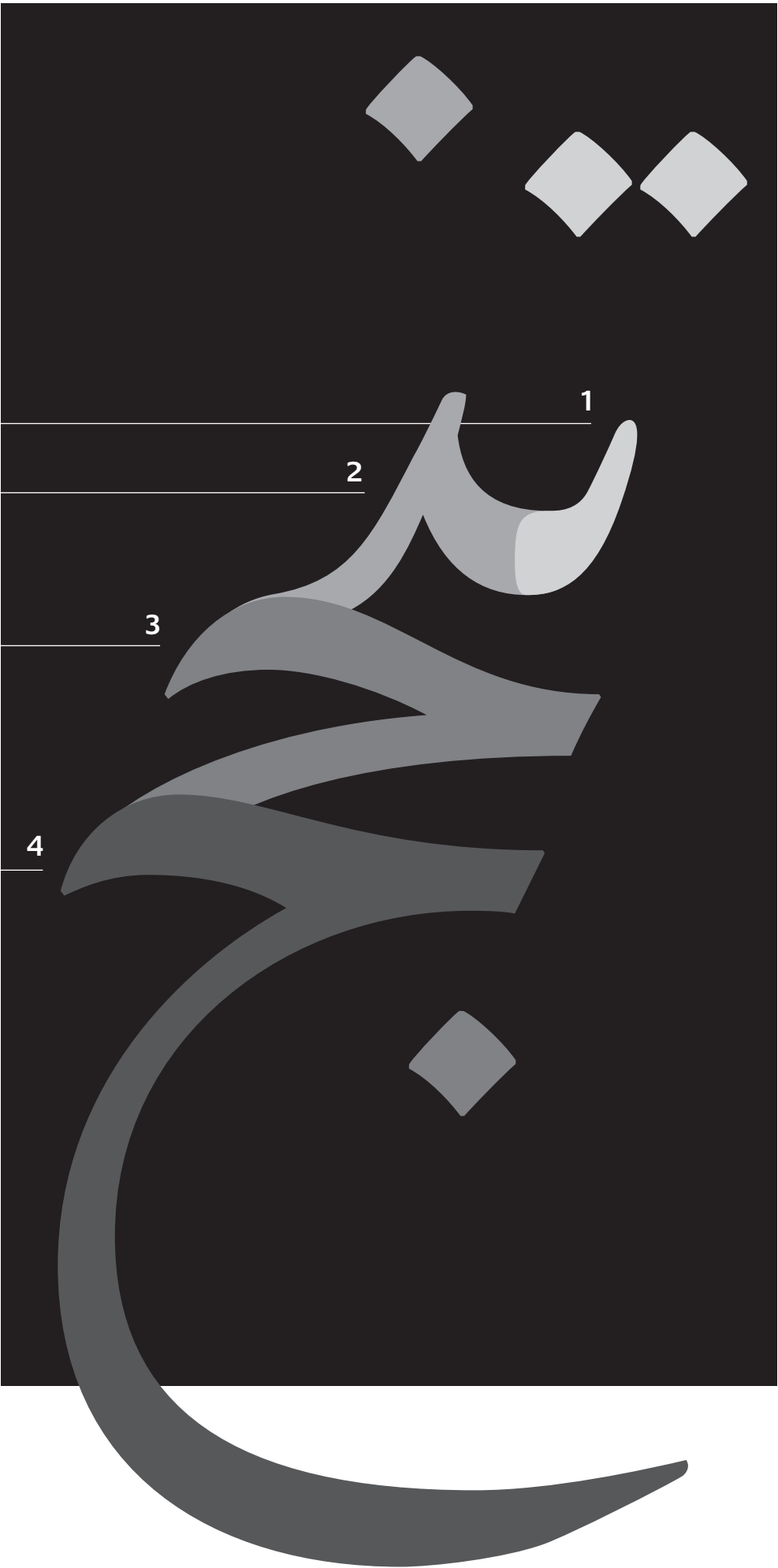




Fig. 4.16 Which dot belongs to which character? The Dynamic version has words that have characters stacked vertically in a tight composition. The panel on the left breaks down the complex composition into its components.

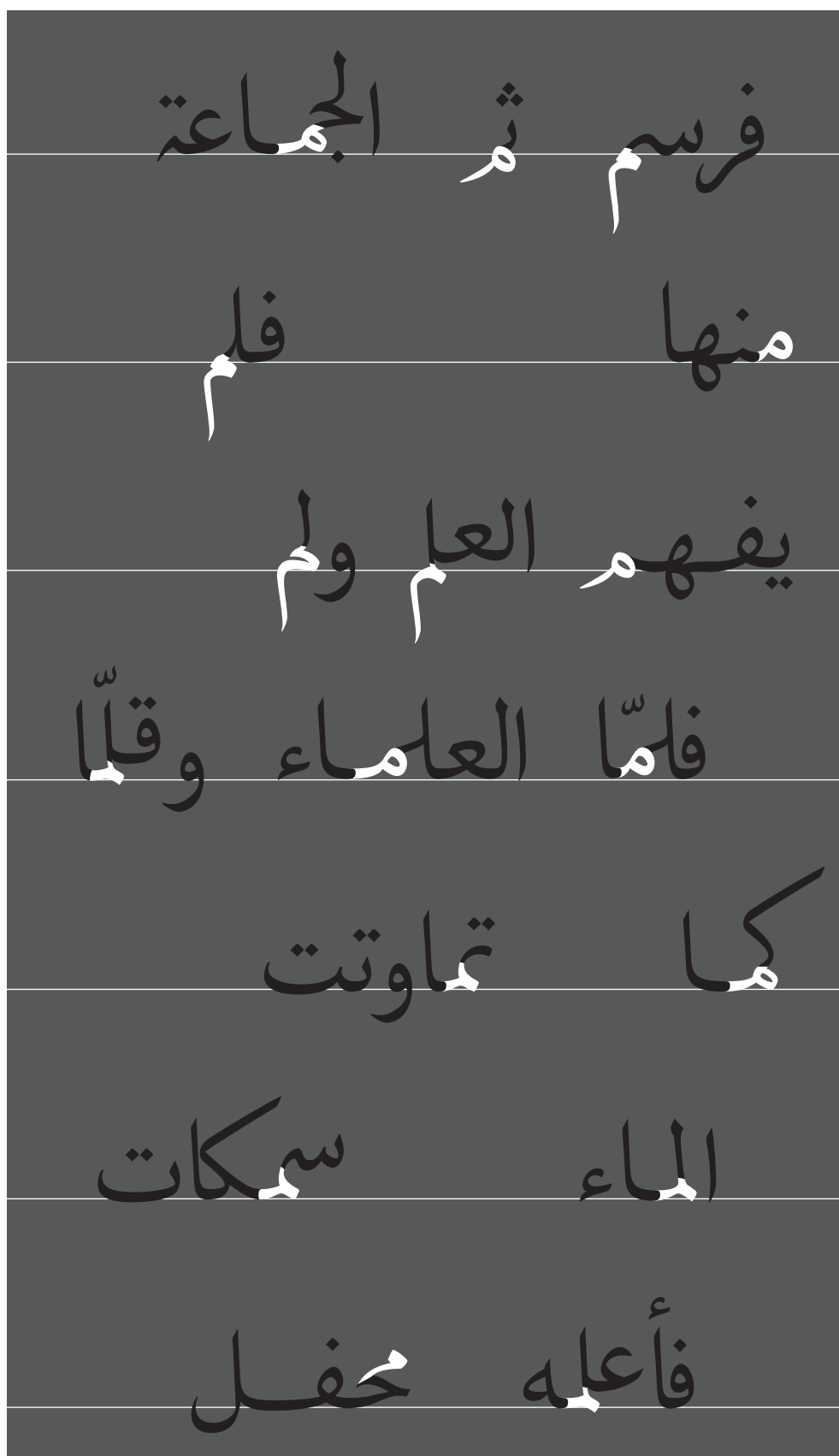


Fig. 4.17 The letter Mim (in white) has a large number of alternates in Afandem Dynamic, especially in its medial and final forms.



Fig. 4.18 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.

Dynamic



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

فتحت

Traditional

صحيح



The motion of the pen is more fluid and is not raised off the page.

Middle Yeh transforms to small raised nub and is extended elegantly across the baseline.

Double storey version of Qaf.



The final Zeh shape loses the top part and simply flows down from the previous letter.

The Nun middle form changes from straight stroke to simply an upward curve that rolls into the next character.

Kaf has different shapes. One is more extended and elegant.

Fig. 4.21 (both pages) Detailing of how Afandem Dynamic (in white) is different from Afandem Simplified (in black).



Fig. 4.22 (both pages)
Detailing of how Afandem
Dynamic (in white) is
different from Afandem
Simplified (in black).

Mim loses its inner space
and turns from circular
form to a small stroke
that doubles on itself.

Yeh transforms to small
raise in the stroke.

Raised Feh climbs on
following letter Yeh.



Extended version of Yeh

gives balance to the complex form on top, similar in effect to swashes in Latin.

Raised Jim climbs on

following letter Yeh.

Raised Feh climbs on

following letter Jim.

(حسنة التائي)، وأكيس منها، وعاجزة. وكان
 حد. وبقره نهر جار. فاتفق أنه اجتاز بذلك
 رجعا إليه بشباكهما، فيصيدا ما فيه من السمك.

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Fig. 4.23 comparison
 of the 3 variants of
 Afandem. From top to
 bottom: Simplified, Tra-
 ditional, then Dynamic.
 Dynamic takes up the
 least space horizontally.

زعموا أنَّ غديراً كان فيه ثلاث سمكات: كيّسة (ح)
 ذلك الغدير بنجوة من الأرض، لا يكاد يقربه أحد
 النّهر صيّادان، فأبصرا الغدير، فتواعدا أن يرجعا

زعموا أنَّ غديراً كان فيه ثلاث سمكات: كيّسة (ح)
 ذلك الغدير بنجوة من الأرض، لا يكاد يقربه أحد
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زعموا أنَّ غديراً كان فيه ثلاث سمكات: كيّسة (ح)
 ذلك الغدير بنجوة من الأرض، لا يكاد يقربه أحد
 النّهر صيّادان، فأبصرا الغدير، فتواعدا أن يرجعا

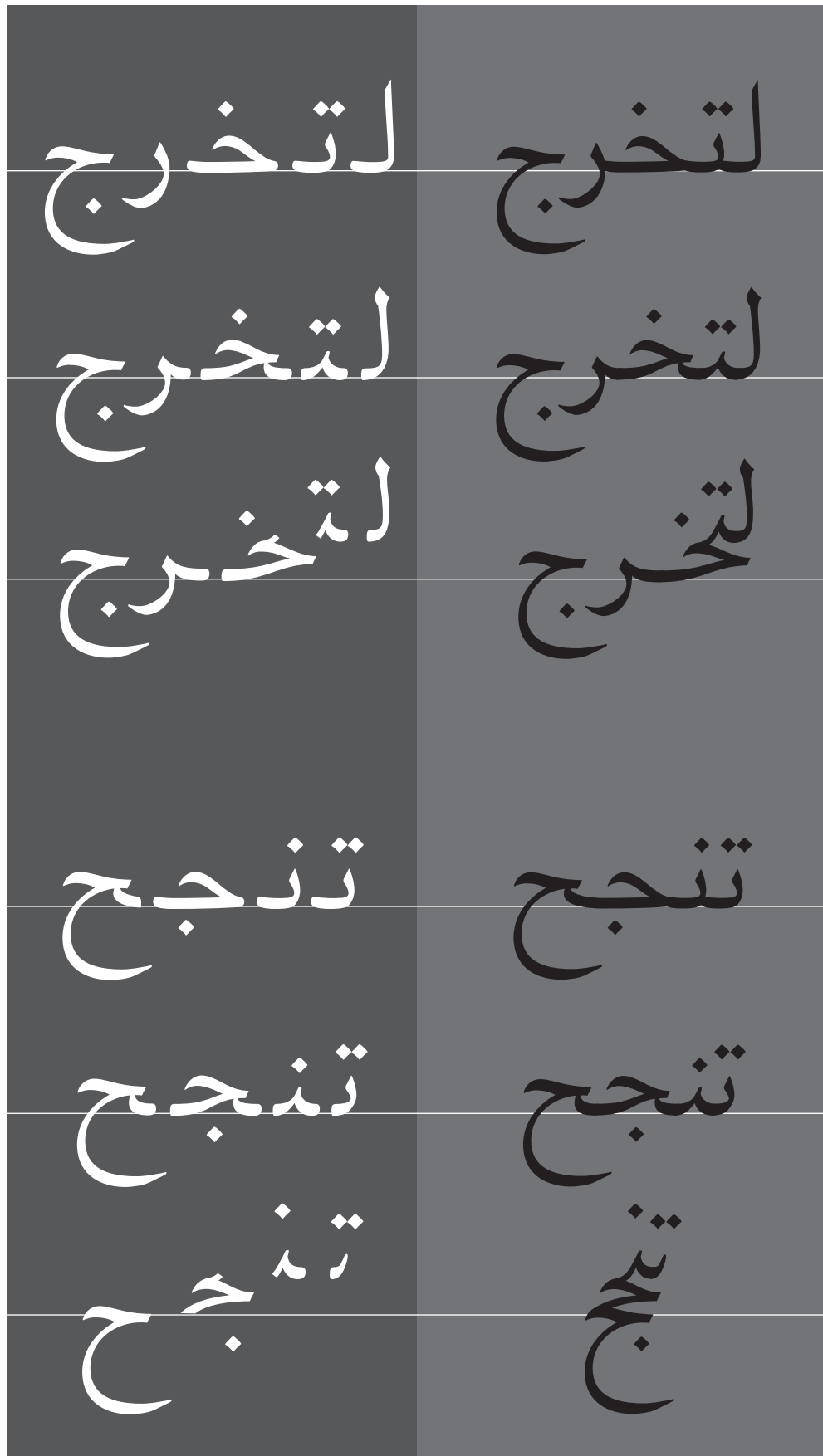


Fig. 4.24 (Both pages)
Comparison of the 3
variants of Afandem.
From top to bottom:
Simplified, Traditional,
then Dynamic. Each word
is split into its separate
letters (shown here in
white). The Dynamic ver-
sion is often more visually
dense due to the manner
in which the characters
join to each other.

الجهل	الجهل
الجهل	الجهل
الجهل	الجهل
سمكات	سمكات
سمكات	سمكات
سمكات	سمكات

Fig. 4.25 Comparison of the 3 variants of Afandem. From top to bottom: Simplified, Traditional, then Dynamic. Each word is split into its separate letters (shown here in white).



(Fig. 4.15). This variation is a big feature in manuscripts and, though possibly avoidable, was deemed to be essential for Afandem Dynamic to be truly representative of this genre. Many of the typical character combinations would not be possible if not for the tighter spacing, and an overall tighter spacing would jeopardize the results. An overall tighter inter-character spacing would have an effect on reading speed as will be discussed in the next chapter, and the resulting visual composition would not be in full keeping of the manuscript tradition. In a way, it is almost as if calligraphers intuitively know that the words need to breathe, and they therefore elongate some characters or connecting strokes to give a bit of breathing space.

- . Economy of space: Afandem Dynamic takes up less space than Afandem Traditional, which in turn takes up less space than Afandem Simplified. The nature of combining characters, the fact that they often climb up, means that the more combination one has, the less space one needs for a given amount of text. In this specific case, the difference between all three styles was minor, though still slightly noticeable. The difference is most pronounced between the Simplified and Dynamic versions (Fig. 4.23).
- . Density: Though close in density to the Traditional version, Afandem Dynamic has a more compact density than that of the Simplified (Fig. 4.24). This is a natural byproduct of the combining characters and could not be avoided. However, a balancing factor is the fact that a tighter column width leaves wider margins i.e. more white space around to compensate for the denser composition.
- . Word spacing: This was maintained as constant across the 3 styles (Fig. 4.23). Word spacing has an effect on reading speed as will be discussed in the next chapter and thus was left constant though calligraphic Naskh can sometimes be set tighter. However, this digression did not negatively affect the overall look and feel of Afandem Dynamic.
- . Overlapping swashes: This is another feature of manuscript Naskh that was significantly toned down. It is sometimes the case in manuscripts that the isolated or final forms of certain characters are extended and the swash extends underneath the next word. This overlap was seen here to be intrusive and a factor that could affect reading speed and was therefore minimized. There were some cases where the left-side tip of the swash was kerned with the following word though no major overlap was present. This was done to avoid white holes in the text, as that is the primary function of the overlap. In short, swash finials were treated with restraint and caution (Fig. 4.23).
- . Energetic base ribbon: Compared with the rather static Simplified version, and the moderately moving Traditional one, Afandem Dynamic sits on an upbeat base ribbon that flows up and down like a real ribbon in a light summer breeze (Fig. 4.20). It would have been possible to have an even more energetic version, but this would have strayed too far from the other 2 styles.

Overall, Afandem Dynamic is a middle ground solution to the problem at hand. If pushed towards more uniformity and less energy, it would stop being part of the genre it tries to represent. If pushed into more calligraphic abundance, it would then introduce too many variations that might confound the results. However, this is in no way a problem. Manuscript Naskh is flexible and there are many different ways

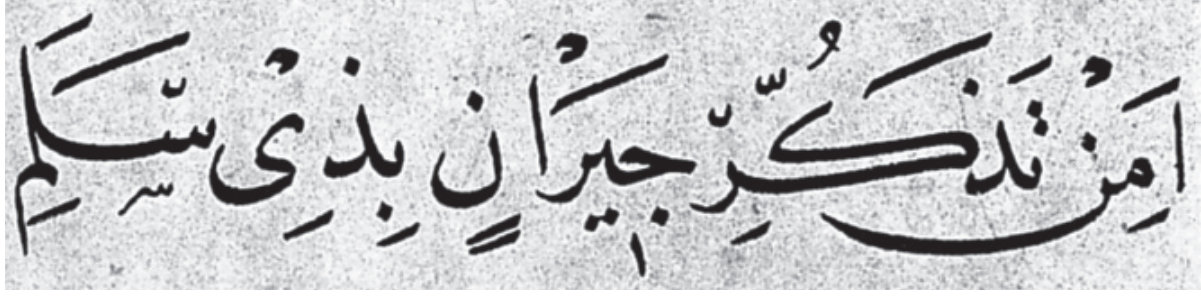


Fig. 4.26 Comparison of the original manuscript reference (top and middle) with Afandem Dynamic (bottom).

to render a piece of text. Some Naskh manuscripts are calmer, and with a more open feel to them. The choice here was for an elegant and restrained version, one that is true to its genre but without the excessive calligraphic swash. This is true to the original Ottoman Naskh sample by Mehmed Şefik Bey, which also shared these traits.

In effect, the complexity of word formation ended up triggering a chain of reactions that affected several aspects of the design. This was unavoidable and the utmost care was given to minimize this effect. However, at the end of day, these changes are what make the Dynamic version more complex than the other two. They are part and parcel of the same issue: a complex word formation mechanism will bring about certain visual characteristics that are different from a simpler and more straightforward formation.

From the first steps of the design of the Afandem family, the typeface design was heavily influenced by the shapes and proportions of the original manuscript source. This is evident in the design of the isolated contextual shapes even in the Simplified and Traditional versions. The elegance of movement seen in the manuscript left a trace in its typographic adaptations. During the design of Afandem Dynamic, the typeface was continuously tested against its original source of inspiration. The typeface and its manuscript point of reference are related in many aspects of their design and visual impact (Fig. 4.26):

- Letterform design: Afandem is highly influenced by the shape, structure, and proportion of the Mehmed Şefik Bey reference. There are some minor differences, but the overall look and feel is quite similar.

- . Rhythm and proportion: The speed with which letterforms make up words, the overall word proportions, and the rhythm of the text are again very similar. Both rhythms are widely set, unhurried, relaxed, soft, and generous in feel.
- . Horizontality: Afandem Dynamic maintains the smooth horizontality of the manuscript source, and offers a rhythm where the words sway very elegantly across the line rather.
- . Some changes: The design of Afandem had to depart from the manuscript source in some details such as the size of the small counters, such as in Mim, and the positioning of the two dots in Teh. It also shows lower contrast between thin and thick stroke, and this is to avoid the flickering effect when viewed on screen. Other than that, most of the small differences in detailing stem from the requirements needed to adapt the design of Afandem to the Simplified and Traditional versions.

When designing typefaces that refer to historical handwritten models, there are various design questions that come up in this process:

How close should the typeface be to the source of reference? Are the curves drawn to be an exact replica, or are there any changes implemented? If yes, what are these changes and why have they been added? For what purpose is this typeface being drawn, and is it similar in function to that of the original?

Afandem Dynamic is very close in design to its source of inspiration, but it is not an exact replica. The changes, as described earlier, were implemented specifically to leave room for the simpler versions to be designed, and also to make sure that this typeface is suitable for being read on screen. As will be described in Chapter 7, the text of the experiment is set in black on white and over a large screen. The typeface size is not so small that it creates reading problems, but it is still a context of a visual being displayed on screen. The function, then, is somehow different from that of a manuscript. This is the driver of change. The end result, as can be seen in Fig 4.14, is a modern interpretation of the calligraphic origin: similar in design, and look and feel, but tweaked to work for contemporary usages.

Designed for Reading

At this point, a nagging question comes to mind: How much do type designers know about reading? There is irony in the fact that those who design text for reading are very different people from those who investigate how reading and eye movement actually works. The existence of the two groups is not a problem as the skill sets and fields of expertise are quite different. However, the scarcity of contact between the two is troubling and quite detrimental to the efforts of both. Fortunately, this situation is slowly changing and there has been an increase in recent years in the number of type designers interested in legibility research. Contact between the two fields of study is improving.

It is in this mindset that we turn over to the next chapter and switch from design talk and the look and feel of type to psycholinguistics and the studies and findings and statistically significant results. The reason for this jump is simple, for we, no matter how skilled as designers, cannot say for sure which style is easier to read if we do not know how reading works in the first place.

