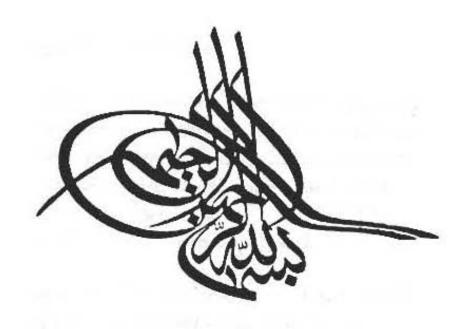
# الحروف الهندسية العربية

# Arabic Technical Letterstyle Xhalid Ne Xhalid

#### MHA

and entering the field of architectural practice that I came to realize the problems of Arabic technical lettering. I found the system wholly inappropriate and of a very poor graphic effect.

It set me thinking and, with investigation, I attributed faults to both proffesionals working on it and the



resources at their disposal.

My colleagues were requiring an Arabic letterstyle that would match the techno-architectural forms they were producing.

At their disposal there is their own freehand lettering, the aid of proffesional calligraphers, letterguides and drytransfer sheets.

Mostly you will find thom using English inspite of their weak knowledge of it, for the blocky effect Roman characters give. When it becomes necessary to use Arabic, they would hand down their sheets to calligraphers.

Calligraphers today acquire their job with little or no formal training at all. It was sometime in their past when they observed a certain potentiality in their handwriting, decided to commence forth, having nothing better to do, and become calligraphers. They lack the proper training and knowledge of design and composition. Their work while far behind the standards required by modern demands, lacks the originality and perfectness that marks the beautiful calligraphic forms produced by masters of our

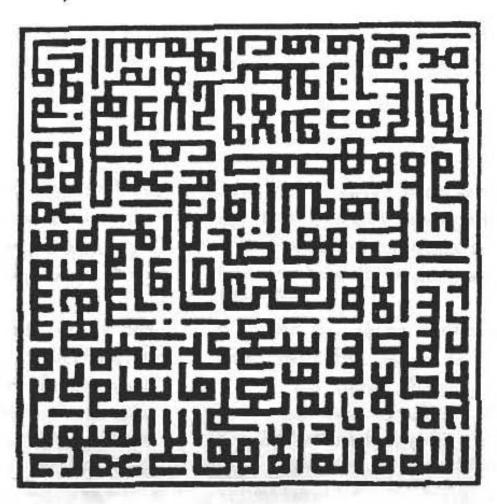
good old times.

When considering the materials, drytransfer is almost all for headline and display effects. Stencils are cumbersome and awkward and movever devoid of the required style... Nothing really good.

With all this to consider, I set forth some ten months ago hoping to improve the situation.

At the beginning I was much possessed by and consequently, concertated on improving letterquides. I think they pose more problems than any other medium and the solutions arrived at can be easily applied to the dry-transfer lettering process with only minor edjustments.

This commentary is an attempt to describe the design, and give an account on the process by which it was conceived and implemented.



## 2 HOW

My first step was to set the criteria required to shape up better stencils than what was commonly available, some of which were really tough things to use.

Arabic lettering stencils usually come in more than one piece, particularly for the larger sizes, with a double operation for each character where you had to trace the characters outline and then fill it in (Fig. 1b). Single stroke Arabic letterguides do exiet, but the

one I tried gave such aukward lettering that it could hardly rate with even the most primitive laymans handwriting. I wonder how its production is justified (Fig 1a).

In order to alone these imperfections I set forth the following:

7: The style should have a technoarchitectural character.

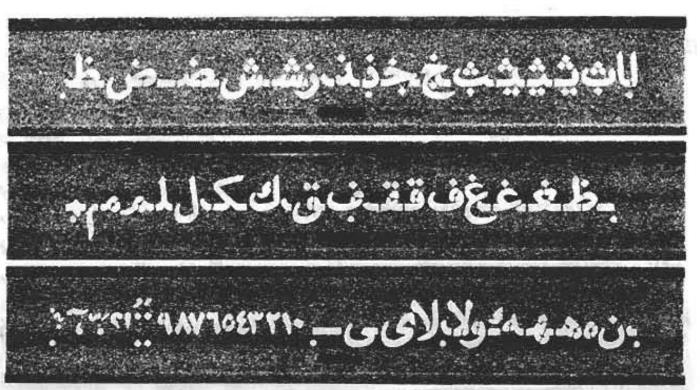
2: It should comply, as much as possible with microfilm standards.

a: Ease of use: Single stroke chara-

# لا ادرى كيف وجد صابع هذه المسطره مبررا لصناعتها فاحرفها لا تزقى المقارنه حتى مع

(Fig 7a) The ecripture above was produced by a stencil under the name: Omegraph. Apart from the auxiliard looking style, the stencil was technically inferior and very hald to use.

(Fig 1b) this one here is very common. A double operation, multiple piece "Neekhi" style letterquide; quite cumbersons.





2a

all could be held on a single "chip"

A major leave was the deciding on the required 'style'.

Traditional Arabic calligraphy has two distinctive styles: the hard genre (Fig 2a) and the east genre (Fig 2b). I chose to improvise on the Kufic style of the hard genre for its strong geometric aspect and its ready decorative qualities.

The problem remained in the fact that the Kufic style is not much familiar أَاثِ ثِبُّ بَ جَ جَ جَ جَ ذَذَ زَ رَ شُ شُدُ شُ ضُ ضَ ضَ ضَ ظَ ظَ ظَ ظَ غَ غَ هَ غَ فَ فَ هَ فَ قَ قَ قَ قَ كَ كَ كَ كُ كُ لِ لَا لَمْ مَ مَ مَ نَ يَ يَنَ ةَ هَ هِ ةَ وَ وَ لَا الذِي ي ي

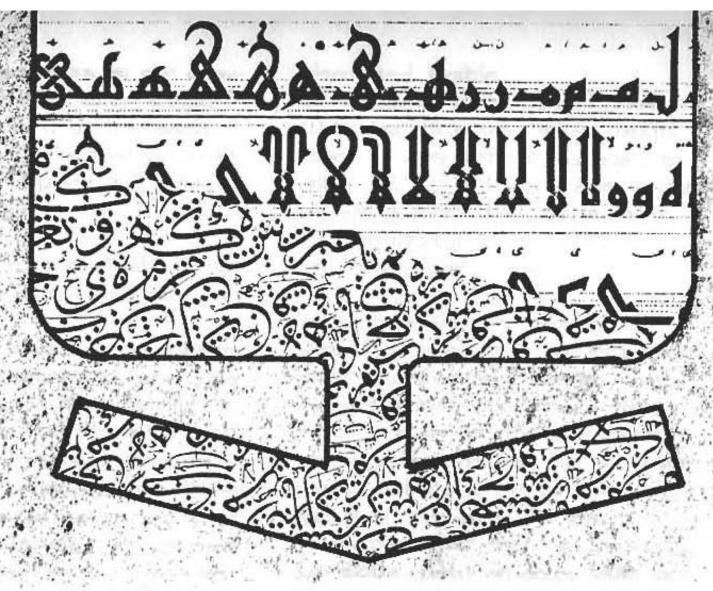
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as it is not used for general reading and printing purposes.

Soft genre styles as the Naskhi, the common printing fount, and the Ruk'ā, for handwriting, are more recognizable and common.

My solution was to introduce, in controlled doses", an amount of softness into the hand styles. The result while retaining the blocky character of the handstyles, would have the appeal and familiarity of the common soft letterforms.

The controlling agent throughout the



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blending process was my own conviction of what each letter should look like. I made it up that each character had to be that particular letter in the first place, and it had to be the letterstyle as well.

I devised a "structure sheet" from which the characters could be generated (Fig 3).

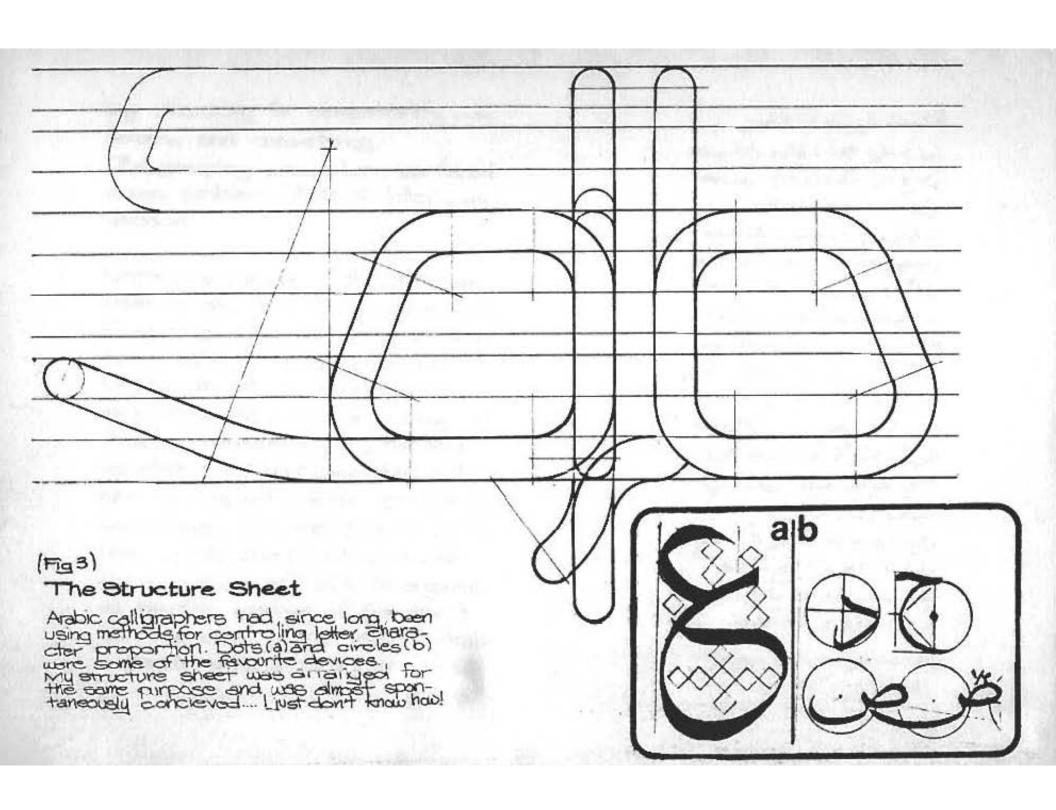
The structure sheet was my means for regulating line motion and achieving an acceptable degree of uniformity. I found out later that the amount of uniformity I was originally requiring was eamewhat unnecessary. Character identification could have been much better if more variety in line movement was allowed, but for our purpose, readability at the level of text reading can, acceptably be eacrificed. The etyle is otherwise very

clear and legible.

Of microfilm standards I chose the 0.7 h line thickness/letter height ratio. It was difficult, however, to apply the 0.7h lower case height, as letters started to look strange. I substituted it for a 0.65h ratio and things were 0.K. again.

As all the basic line movements were determined and the structure sheet implemented I started composing the individual characters, tracing them off the structure sheet with pencil on thin transparent paper, picking up the portions of line that produce the letter.

The character then is gradually perfected untill an acceptable form is arrived at, and with the accomulation of a usable number of characters, I tested letter group-



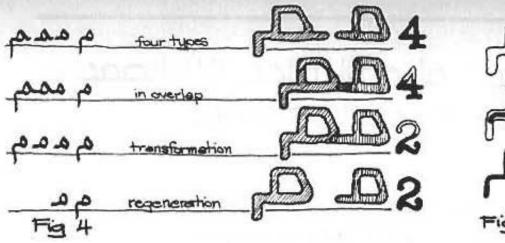
ing checking for competibility, coherence and consistency.

The grouping procedure surfaced a new problem: That of letter connection.

Writing is a mode of thought expreceion, and it is truly convenient if one can write at an equal pace to the rate of idea generation. Connecting letters considerably increases the speed of writing. In Arabic handwriting is not only facilitated by latter connection but also by character form variation in accordance with the position of the letter in the word (Initial, medial. and terminal), all this to be augmented by the omittion of the tacit short vowels. In this respect Arabic handwriting becomes an ultimately convenient and truly organic

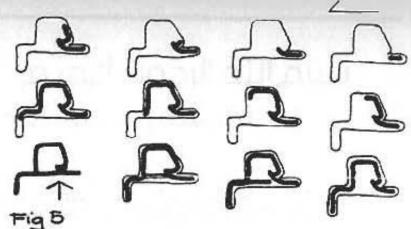
الكتابة طريقة في العقير ... ثيت المرد نعما انقاره واهاسي تنصيح سايمكن تذكره وتعديله وتغيره ومن مثم إيصاله الى الاغربي مى مسعة ستعاملة ويفهومة ... ويكون من المنس حقا ان يتليع المرة الكتابعة سرعة ثننت ويعدك تدنن الدنكار ... نيستوعب المكتوب حينين سمل المعنى وتينطم الغكرة ملد مصر مضاحة مي عياص العنعيان لتناتحى معد ذلك إلى الورف مِعَرَاة لد شب مي سحة حالما حنفا منفت في الذهن اول الامر .... ومي العربيات تبتسر الكتابة بانقال الحروف مع تقطيع متوازن وتغيرى بثعل الحرف حب رفعه ن اللهة

An example of ordinary Arabic handwritings my own... it may not be that good but it really turns me on to write this way...



mode for expressing human thought. Even though letter connection might not be as beautiful when considering mechanical lettering processes as printing, typing ... etc., Arabic letters remain connected with almost all mechanical processes in use now... so let it be.

I found that almost all initial letters can serve as medial ones and therefore by amitting the



leading connecting segment one can have only 2 characters per letter instead of four (Fig 4). Not only gaining in reducing the number of characters, but the tracing of many characters will become much easier and more accurate, as the passing in from the leading connection to the inside of the rounded letters, as often happens, causes the pen to loose its track and eventually distort the character form (Fig 5).

### بسمالله الرحمن الرحيم فلهوالله احد الله الصمد لميلد ولميولد ولميكن له كفوا احد

#### المنب جنج ذر ششاض طغف غفف کاک الاممن هخف ولالاحب کی ۱۲۳۵۵۲۷۸۹۶۱

The basic problem, actually, was the determination of the length of the connecting segment.

The segment had to be long enough to reach the bottom right of figures like D and III and yet connect with others like j and N without undue space between them. A length of 0.35 h is at present satisfactory, hoping to thoroughly

revise it at production stages.

After most of the characters were eletiched out and carefully balanced I commenced on preparing accurate chawings with ink on tracing paper. As this was finished I had them photo copied to the number required to compose the four-line layout shown above.

Culting and pasting came next: Characters were combined into words and the words were arranged in the four lines and then hung up on a wall where I had them photographed. Real trouble started here. Lack of proper equipment, inferior photocopy services, shortage of time and continuous blackouts piled frustration over frustration .... It took more time than I've expected, even more than it did to create and implement the design. Anyhow, I managed toget through the clouds of developer vapour and equeeze the format into a single 135 mm frame. I then had the Aexibility to print it to the sizes I required . I wanted to see how the letters will look in their actual working sizes... The results were quite encouranging, those that had seen it liked it and

I thought that it could probably work a way through production, so here we are;

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