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DEVELOPMENT OF THE MINA FONT PROJECT : **INNOVATIVE APPLICATION OF DIVERSITY IN TYPOGRAPHY - A CASE STUDY**

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ABSTRACT:

This paper portrays the journey and development of the Mina Font project. It documents and discusses the various phases of the project and the processes undergone throughout this project. The task was to develop a font that would be modern and contemporary but would adhere to the design language of Bangla forms. The paper discusses the readability, legibility, aesthetics and underpinning ideology of Mina, a geometric type system based on the existing Latin font family Exo designed by Natanael Gama. Mina is an attempt to reconsider the forms of the Bangla characters which could be distinctive at large point sizes but can also be read with ease at smaller sizes, in bodies of extended text.

1. INTRODUCTION:

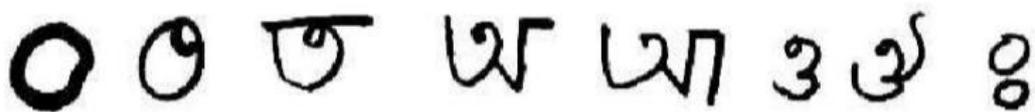
Every typeface is a testament to the time when it has been designed. The Mina Font project has strived to adhere to the same ideology. There is undoubtedly a need to respond to the rapidly evolving requirements in the new globalised, multi-script, multi-language typographic environments. Thus an important discourse is constantly created between tradition and modernity among communities, thereby providing a fresh and refined identity to them. In such a scenario, to cope with the scarcity of the availability in terms of typography in certain scripts, in this case Bangla, it is quite evident that new designers like myself end up looking for inspirations from the existing, more available font styles. Mina took the design cues from the existing Latin Exo as well.

2. My past experience in advertising gave me an opportunity to explore constantly with forms while designing logos for clients. This aspect got carried along while trying to explore a definitive form for my first font.

2.1 LETTERFORMS: There are different approaches taken to teach how to write a language. I was introduced to writing Bangla by being introduced to art samples already available in the Bengali culture.



The simple contours of Alpana (ritual painting on the floor of the house), mainly practiced by Bengali women at the time of religious festivals played a significant role. To my earliest memories, Graphemes were introduced after teaching straight lines, adjoining straight lines with dots, triangle, rectangle and circle respectively. All the geometric shapes in 'Alpana' were drawn by using clay. These basic shapes were gradually metamorphosed into the graphemic shapes that was a strange and new experience as a child learner.



Graphemes, on the basis of their homogeneity, e.g., sounds like ba, ra, ka, dha, jha etc. with their atomic triangular graphemic shapes or o, ta, ou, oi with the basic circular shapes were put together with the contours of 'Alpana' for executing learning process.



In typography we try to create shapes and forms, and the willingness to see shapes that we haven't previously seen, draws more light to what can be done. This was the key line of thought initially while trying to conceive the form for Mina.

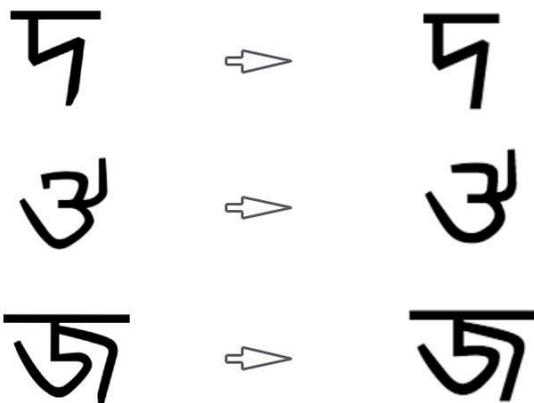
The different character forms we usually see in Bangla are mostly varied on the grounds of modulation of the strokes and the nature of the curve. Most of the letterforms adhere to the styles where the features like the knots, buds, circular lobes and bowl and the gentle curves on the diagonal strokes of the deltas in certain characters. These are some of the key aspects that has helped me construct the overall style of the font. The initial drawings started with trying out a very square form, with sharp rounded corners and straighter strokes. The rounded knots being replaced with squarer ones and the buds with slightly tapered angular spurs.



The serpentine tails in some of the letters like 'u', 'uu', 'o' and 'auo' getting a straighter form as well. The initial drawings of some letters like the 'da', 'ja' and 'e' also had tapered and sliced terminals of the vertical strokes.



However, on further development on the basic letterforms, it became the need to stick to certain aspects of the known anatomy and incorporate them in an improvised manner. This led to the exclusion of the knots and the spurs from the structure and give it a more Neo-Humanist form. The curves became more gentle losing their sharpness and the getting flat endings: where they terminate on angular shears. The forms portrays open apertures.



Having worked on some of the basic forms for the vowels and the consonants, incorporating the same characteristics in some of the letters become a challenge. The letters like ‘pa’, ‘ttha’ and ‘bha’ are few examples.

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2.2 STROKE MODULATION: Bangla has a rich cursive base, and by nature the style of writing have had modulated strokes. The characteristics of the letters completely depend on the author’s handwriting. The complex and cursive nature not only makes the characters difficult to construct as digital outlines, but also makes them less identifiable without a context. Mina having a Neo-Humanist style of construction, have very less modulation in the strokes. The weight mostly increases on the outer outlines along the curves and gradually straightens as they approach the terminals. With sharp corners, squared curves, and straight strokes in lieu of slow curves, the terminals are slightly angled like the Latin Exo.

2.3 CONJUNCTS: The group of conjuncts are probably the most critical and debatable aspects of the Bangla script. This makes writing in Bangla quite difficult, and to transform these characters into type a challenging task. The varied and cursive nature not only makes the characters difficult to construct as digital outlines, but also makes them less identifiable without a context. There are examples of conjuncts where the letterform doesn’t adhere to the inherent letterforms that builds them.

ক্ + ষ্ + ঞ্ = ঞ্

According to Prof. Debaprasad Bandyopadhyay, renowned linguists from the Indian Statistical Institute, Kolkata, these are “opaque characters” of the script, and it further creates ambiguity among the learners of the language, irrespective of their age. He further explains that different interpretations of such complex forms by different users creates further confusion mostly among the young learners.

During his involvement in the Education for All in India program, or the “Sarva Shiksha Abhiyan” on behalf of the Indian Statistical Institute, Kolkata, in the early 1990’s, he and his team observed that in spellings like “panchayat”, where there is a use of the conjunct nya+ca, most of the students had immense difficulties in writing the complex structure.

পঞ্চায়েত

ঞ+ঢ = ঞ

It became more difficult for them as there are different representations of the same complex letterform, where the delta in the letterform can be written on either sides.

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Hence the teachers were directed to mark the students correct, who would spell the word in a more transparent manner by writing the inherent letters of the words, even without using the complex conjuncts.

Working on the conjuncts, maintaining the same sort of style as the primary characters was a significant challenge. I do feel the need for refinement in a number of these complex characters, so that there is a balance in the space around them and within them. I also feel the need to scale some of these letterforms to create uniformity among the characters. Throughout the process of working on the conjuncts, the other aspect that intrigued me was the preference of the letters involved in their formation. What is the factor that determines which character will gain prominence over the others? Initially it seemed that letter that concluded the conjunct while pronouncing it gained more visual prominence. But on further studying them, I found that it didn't hold true to a whole lot of conjuncts.

On further discussing this aspect with Prof. Debaprasad Bandyopadhyay, he mentions that “such ambiguity is one of the key reasons why the language has faced problems in the recent times. There has been quite an amount of redundancies in the formation of the complex letter clusters and special focus should be provided on the aspect.”

2.4 WEIGHTS: Mina has been designed with two weights: Regular and Bold having weights 400 and 700 respectively. This effectively enables the fonts to be used as a display typeface, but it will also work well at small to intermediate text sizes to be used across the User Interface designs.

বিলম্বিত

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3 CONCLUSION: Type design is a social design and this inspires me. I have always longed to see a Bangla font devoid of its characteristic features, vis a vis the rounding of the terminals or knots and contrasting bowls. The stroke movements, shapes, axis, knots, loops, and ratio between horizontal and vertical strokes all played a significant role in the design, and the complex conjuncts required substantial attention while working on the Mina Font project. Combining the letters with a curvilinear nature with the style I intended was challenging. Constructing them with digital tools that are Latin-centric, like glyphs naming required for testing, was also difficult. To develop Mina I faced all of these:- Every decision brought more decisions, and connecting them with a logic proved to be the greatest challenge.

The ultimate goal however, lies in making the script not only easier for the native nascent users of the scripts but also for the users who are enthusiastic in learning that language that has the seventh largest user base globally. Through this project, I have attempted to get closer to the nuances of the Bangla script and learn the way they function through contemporary practice in digital typeface design.

The full progression of the project is available on <https://github.com/suman51284/Mina>

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