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Design Resource

# Gurmukhi Manuscript - Style Writing

Ik Onkar Passion Project Development by Dr. Nanki Nath SoD, MIT World Peace University, Pune

#### Source:

https://www.dsource.in/resource/gurmukhimanuscript-style-writing

- 1. Introduction
- 2. Holy Gurmukhi Script Birth and Developments
- 3. The Gurmukhi Akhars / Alphabets
- 4. The Patrons and Manuscript-Style Written Granths
- 5. The Traditional Lipi and Writing Practice with Paintī (35) Akhars
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- 11. References
- 12. Contact Details

### Introduction

Introduction to the Gurmukhi Script

Gurmukhī: Philosophy behind the Name ਗੁਰਮੁਖੀ: ਨਾਮ ਦਾ ਦਰਸ਼ਨ

Letters of a script are the seeds of a certain culture. **Gurmukhī akhars**/letters signify the Punjabi culture and heritage. Gurmukhī is a compound word, made of two words: ਗੁਰੂ (Guru) and ਮੁਖੀ (Mukhi) – meaning Guru's sayings/ utterences. Historically, the script is named so, meaning that the letters and words as part of sacred utterances from the *mukh* (*mouth*) of the Sikh Gurus while reading the hymns from the Guru Granth Saheb (ਗੁਰੂ ਗ੍ਰੰਥ ਸਾਹਬਿ). When the holy utterances are sung as hymns by a Sikh Guru, this *musical form of reading them in Gurmukhī script* is devotionally called *Gurbani* (*Gur ki Bani meaning 'from the mouth of the Guru'*) with the purpose of teaching of the Guru Granth Sahib Ji.

Around 300 years ago, the tenth sikh guru: Guru Gobind Singh ji, announced that since he would be the last of the living human Sikh Gurus, the sacred text of Adi Granth be the final, everlasting guru, to be called **Guru Granth Sahib: GGS**.





The standard version of the Mūl Mantar as part of beginning chapter from the Guru Granth Sahib [1]

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- 12. Contact Details

After the first Amrit Ceremony, the tenth sikh guru: Guru Gobind Singh ji gave the Khalsa a code by which to live their lives. A key part of that code includes the recitation of and meditation on certain *Banis*. *Banis* are Sacred Teachings in form of Songs; and written in the Gurmukhi script – given by the Divine to the Sikh Masters.

Guru Ram Das said: ਬਾਨੀ ਗੁਰੂ, ਗੁਰੂ ਹੈ ਬਾਨੀ ਵਿਚ ਬਾਨੀ ਅੰਮ੍ਰਤਿ ਸਾਰੇ | ਗੁਰ ਬਾਨੀ ਕੇਹੈ, ਸੇਵਕ ਜਨ ਮਾਨੈ ਪ੍ਰਤੱਖ ਗੁਰੂ ਨਿਸਤਾਰੈ ||

"Bani is the Guru and Guru is the Bani. In the Bani are contained all the nectars. If the servant obeys whatever the Guru says, The Guru, in person, saves him."

-Siri Guru Granth Sahib, Nat, 4th Mehl, Guru Ram Das, p. 982

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- 9. Digitizing Few Selective Akhars
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- 11. References
- 12. Contact Details

### Holy Gurmukhi Script - Birth and Developments

### ਗੁਰਮੁਖੀ ਲਪੀ ਦਾ ਜੰਮ ਤੇ ਵਿਕਾਸ

Gurmukhī script is much older than the present Devanagri although the name Gurmukhi was coined much later. The exact date of birth is not known, however, evidence of the first forms of letters exists much before the mid-16th century, and even before the times of Guru Nanak Dev ji – as the script had originated from an Aryan script kind, called the Brahmi script (5th – 8th century BC). In a well of Athoor (Ludiana district), a kutba was found which was much older than the birth of Guru Nanak Dev ji, in which letters are much closer to modern Gurmukhi script. These letters are much similar to Mahajani script which was prevalent in Punjab much before Guru Nanak Dev ji.

Authentically, the foremost written record in Gurmukhī is at the page numbers: GGS, 432-4. They are believed to be first written by Sri Guru Nanak Dev ji alongwith the *paiti likhi* (a composition of sacred writings in 35 paragraphs by Nanak that underscore the oneness of the Creator). Most of these paragraphs begin with letters of the Gurmukhi alphabet, in the very form that they are in use today.

During his lifetime, Guru Nanak Dev ji appointed his successor, Guru Angad to popularize the Gurmukhi alphabet as a strong resolve to establish his legacy. Hence, the *Gurmukhi* script was standardized for use and mass production by the Sikh second Guru Angad Dev ji (1504 – 1552), around 1539 to give a written identity to the Punjabi language. Since then, script has been part of recorded Sikh Scriptures and the teachings in a good number of well-established Holy Granths narrating the Sikh literature [Fig. 1].





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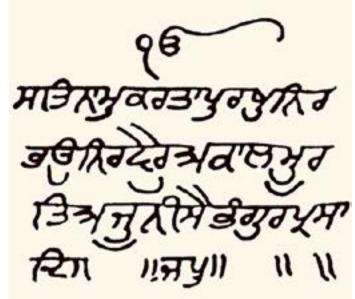




Figure 1. Sri Guru Nanak Dev ji painted portrait (2a), Portrait of Guru Angad Dev Ji: preserver of the Gurmukhi script (2b), *Mūl Mantar* in Guru Arjan's handwriting, 17th century Kartarpur manuscript (2b) | Source: vedictribe, inscoms.com

The oldest and surviving manuscript version of the Adi Granth / The Granth Sahib, c. 1599 has been preserved in the Guru Nanak Dev University, written in the modern version of Gurmukhī [4]. The *original Adi Granth*, containing verses by poetic gems of those times: beginning from the founder of Sikhism, Guru Nanak to other Sikh Gurus and saints, was compiled in 1603-4 by the fifth Sikh Guru Arjun Dev ji.

The usage of Gurmukhī letters in Guru Granth Sahib meant that the script developed its own orthographical rules. Later in the 20th century, the script was given the authority as the official script of the Punjab India, while in the Punjab Pakistan, the Persianate Shahmukhi alphabet is in use till date.

Modern / Proto-Gurmukhī has thirty-five original letters, hence its common alternative term *painti* or "the thirty-five," plus six additional consonants, nine vowel diacritics, two diacritics for nasal sounds, one diacritic that geminates consonants and three subscript characters [Fig. 2].

Guru Angad Dev ji not only popularized by the script by singing the holy texts to the people; he also gave a new shape and new order to the alphabet and made it precise and accurate in following ways:

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- 12. Contact Details

- He fixed one letter for each of the Punjabi phonemes.
- Use of vowels-symbols was made obligatory.
- Letters meant for conjuncts were not adopted and only those letters were retained which depicted sounds of the then spoken language.
- There was some rearrangement of the letters also such as 'sa ssa' / ਸੱਸਾ / ਸ and 'ha haa' / 'haa haa' / ਹਾਹਾ / ਹ being shifted to the first line and oorha was given the first place in the new alphabet.
- With above changes and additions, the total glyphs as part of Proto-Gurmukhi Character set comes to be 41 in number.

- Encyclopedia of Sikhism, Punjab University



Figure 2: The total of 41 Gurmukhi letterforms (the Consonants) were the revised new character set standardized for applications in texts with the efforts by second Sikh Guru Angad Dev ji | Source: Singh, H et. al. (2021) [7]

According to Tarlochan Singh Bedi, the *Proto-Gurmukhī* script developed during the 10th and 14th centuries from the *Devasesha stage* of the *Śāradā* script that evolved from this stage until the 14th century; with an inter-

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- 12. Contact Details

mediate stage being the *Siddha Matrika*, before the final evolution into Gurmukhī. The Sikh gurus adopted the Gurmukhī form, that has been used in scripture writings and has been used on the golden facade of Harmandir Saheb, the Golden Temple [Fig. 3].



Figure 3. The extended version of the *Mūl Mantar* at the Darshani Deori: main entrance pathway leading to the Golden Temple

Written languages were reserved for the powerful, the wealthy and the high-castes in those times. Up until that point in history, the dialect spoken by Guru Nanak and his contemporaries had no written equivalent. There was no writing or reading based on some common writing system. Historically, Gurmukhī script and the manuscript-style writing accomplished a special space for people. It allowed them to be able to read, sing as well as pronounce the sacred texts and hymns written by Guru Nanak in punjabi as well as other languages.

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- 11. References
- 12. Contact Details

### The Gurmukhi Akhars / Alphabets

### **Structure and Writing System**

Gurmukhī alphabets system of writing is an abugida, wherein, each consonant has an inherent vowel that can be changed using vowel signs. This sacred script adapted to write other languages, such as Braj Bhasha, Khariboli (and other Hindustani dialects), Sanskrit and Sindhi. They have roots in the proto-sinatic alphabet style (19th–15th century BCE) as part of the northwestern group of the Brahmi script.

In Punjab, there were at least ten different scripts classified as Landa, Mahajani being the most popular. Modeled specifically on the structure of the *Lahndi: Mahajani business shorthand*, written as: *Landā* was used by Guru Nanak during his early apprenticeship days in storehouses. *Landā* form is the *clipped alphabet style*. The Landā alphabets belong to that writing system which including letter formations without a tail, that meant that the script is without any vowel symbols. Lahndi is a descendent of the *Śāradā* script from the northwestern group of the Brahmi script (Fig. 4).



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- 10. Conclusions
- 11. References
- 12. Contact Details

Figure 4. The Chart comprising different forms of Landā used in Punjab (Leitner, 1882) | (Pandey, 2009)

The Gurmukhī script was standardized for active use by the second Sikh Guru: *Landā* may be grouped into the two regional typological sub-classes of 'Punjabi' and 'Sindhi' (Fig. 5).

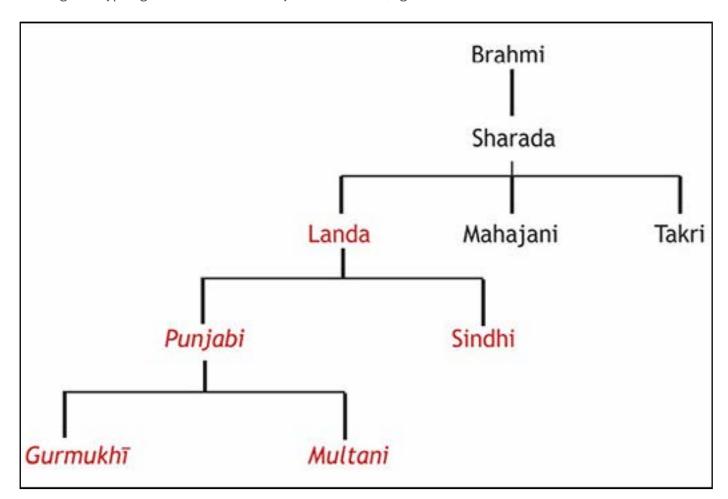


Figure 5. Landa to Gurmukhi family chart

The Landā scripts were put to use prominently in the households and for the trade purposes in Punjab in those times. Sikh gurus, however, favoured the use of Proto-Gurmukhī for writing scriptures in manuscript-style granths.

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- 8. The Personality Mapping
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- 10. Conclusions
- 11. References
- 12. Contact Details

### The Patrons and Manuscript-Style Written Granths

The process of writing in the *Gurmukhī* script (esp. in the old Sikh manuscripts) represents a profound significance of Guru Nanak Dev ji's philosophical worldview. Hand written Guru Granth Sahib with 714 folios was produced at the heights of the Sikh manuscript tradition from 18th till the 19th centuries. Affluent Sikh patrons would commission highly talented scribes to produce elaborately decorative copies of the Guru Granth Sahib (Fig. 6, 7 and 8).



Figure 6. Hand written Guru Granth Sahib from Dr. Gurpal Singh Bhuller collection, ca. 1830-1860

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- 9. Digitizing Few Selective Akhars
- 10. Conclusions
- 11. References
- 12. Contact Details





Figure 7. The continuous, modulated bi-colour chains of Gurmukhi writings in Illuminated Guru Granth Sahib, ca. 19th century Suresh Bhalla collection (7a) and red-black uniform gurmukhi writing from Ch 3, Bhagawad Gita in Punjabi script: CC-0 Punjab University Chandigarh





Figure 8. The continuous, modulated letterforms of Gurmukhi as part of The Guru Granth Saheb (5a) and traditional pothi written script scrolls (5b) | Mann (2008) | Source: Sikhnet.org

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- 10. Conclusions
- 11. References
- 12. Contact Details

# The Traditional Lipi and Writing Practice with Paintī (35) Akhars

The Gurmukhī Lipi includes a total of paintī (35) letterforms and the proto script form has a total of (Gurmukhi complete traditional Varnamala, Figure 4a; Gurmukhi Unicode Chart, Figure 4b). Based on the traditional character set of paintī (35: 8u) Gurmukhī letterforms, the correct writing sequence was applied to develop chain-like continuous lines of each letterform/ akhar [Fig. 9].



Figure 9. The traditional painti akhars / 35 letters in Gurmukhi script (9a), the Unicode complete character set of proto-gurmukhi (9b) | The Unicode Standard, Version 13.0

**Manuscript-style Writing Practice:** 

#### Selections and Synthesis for Ik Onkar project

The choice of traditional chain-like and modular grid inclusive manuscript writing scroll forms were an instrumental offspring from the old manuscript-style specimens of writings of hymns, etc. in Gurmukhī as part of

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- 8. The Personality Mapping
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- 10. Conclusions
- 11. References
- 12. Contact Details

Punjabi scriptures as well as few symbolic references from The Granth Sahib pages. The context here is based on historical evolutions of the script in manuscripts and applying for the current passion project.

- The Manuscript style has a long history in case of the 500-year-old Gurmukhī script and later researchers in 20th century times have shared cues that Gurmukhi script was developed by showcasing some of the earliest Sikh manuscripts including the Guru Harshai Pothi and Govindwal pothis of 16th CE (Mann, 2008).
- Her aim has been to achieve rigorous practice of correct stroke formations, understand letter constructions in a continuous, manuscript style and increase the muscle memory of the hand in relation to proportionate, bal anced letter shape constructions in smaller sizes of modulated, continuous writing with different tools.
- The writing composition by the author for her writing practice of each akhar in chain-compositions, written with different tools and ink hues has been a deliberate composition style (Figure 10 to Figure 19)
- This later helped select the most appropriate letter shapes that were further digitized in Tayasui app (an iOS app) for churning out form possibilities with letters (Figure 12 and 13, section 3.2).
- The baseline grid of the horizontals in the notebook retains the left to right flow of each letter construction and the simulation/ repetitions help create a modular letter composition for each letterform (Figure 10).
- In each composition of individual letterforms; a predisposed distribution of letters written with different tools is a deliberate choice in the practice.

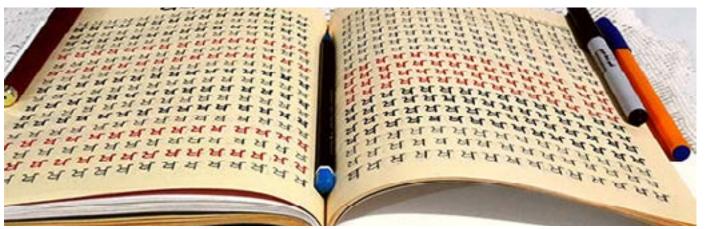


Figure 10. Practice spread of the Gurmukhi akhar \(\mathbf{t}\) (pronounced kha'khaa: \(\mathbf{t}\)\) in continuous, modular grid and executed with pencil and ink-based tools as part of lk Onkar passion project.

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- 10. Conclusions
- 11. References
- 12. Contact Details

### **Culture-Form Associations**

**Individual Letterform Chains: Synthesis and Analysis** 

Each letterform's horizontal manuscript-style composition has a co-relation with script-based and laguage -based based associations embedded in the written Punjabi script forms – the same has been articulated as individual descriptions to present the design synthesis of each gurmukhi akhar that provides form possibilities for beginnings of a type design project for future (Fig. 11).

Punjabi is a tonal language with three tones. These are indicated in writing using the voiced aspirates consonants (gh, dh, bh, etc.) and the intervocalic h. This comes across for few letterforms.

The practice has helped retain the correct methods of stroke formations and modulations, nature of the structure and composition of parts of letters, their joineries, etc (Figure 11a and 11c).



Figure 11. Practicing Gurmukhi akhar ਕ (pronounced ka'kaa: ਕਾਕਾ (11a); a page from a Janamsakhi that is decorated in the provincial Kashmiri style of manuscript illustration. Courtesy: sikhmuseum.com (11b); Practicing Gurmukhi akhar ਖ (pronounced kha'khaa: ਖੁੱਖਾ), (11c)

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- 11. References
- 12. Contact Details

### Categorization in the Ik Onkar Series

These manuscript-kind dense compositions in writing practice represent a connection of the letter's form and it's sound image. This made the design practice a meditative, process-centric activity to fine-tune form-content relationships and receive insights about the cultural associations with Punjabi language (verbal and written meanings). Most among the 35 akhars belong to two categories; prominence of one may be more dominating than the other.

Following four categories emerged in the meditative writing practice:

#### • Shared Features [SF]:

In writing (the letter formation) as well as sound-wise, there are few letterforms in Gurmukhi that resemble those in the Devanagari script; making this a category of Shared Features [SF]. For instance, 'Ga'gaa'  $/ \sigma$  resembles Devanagari  $\sigma$  (Figure 12).





Figure 12. Writing Practice of 'Ga'gaa' / ज resembles Devanagari ग

### • Conflict Features [CF]:

In addition, there are few letters in Gurmukhi that are visually same as those in Devanagari, but differ in sound. Both sound and form-wise, it's harder to recall and retain their correct sound image and hence, the form while writing. This second category has been observed as 'Conflict Features' [CF]. For instance, 'Sa'saa' / म resembles Devanagari म and 'Ka'kaa' / च that resembles Devanagari र (Figures 13 and 14).

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## Gurmukhi Manuscript - Style Writing

Ik Onkar Passion Project Development by Dr. Nanki Nath SoD, MIT World Peace University, Pune

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- 10. Conclusions
- 11. References
- 12. Contact Details





Figure 13. Writing Practice of 'Sa'saa' / म that resembles Devanagari म





Figure 14. Writing Practice of 'Ka'kaa' / ब that resembles Devanagari र

### • Expressive Forms [EF]:

The manuscript style written compositions of few other sets of letters make understand the significance of visual expressions in the letter formations. For instance, gurmukhī. the fifth letterform (akhar) in "haa'haa" / 'h' as in home. The wit of ਹਾਹਾ: both in visual form and pronunciation represents an equal emphasis over both syllables that are pronounced so that when is the happy-go-lucky: ਹ -- ਹਾਹਾ spoken there is a puff of air felt when the hand is held in front of the lips. The Romanized spelling of Haahaa is phonetic and may also appear spelled as Haha (Figure 15).

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Figure 15. Writing Practice of 'Ka'kaa' / ब that resembles Devanagari र

#### Aesthetic Forms [AF]:

A binary opposite to such sets are those individual letter set chains that communicate a distinct aesthetic and letter construction stylizations. For instance, the fourth letterform (akkhar) in  $\pi$  is a stylized & condensed  $\pi$  of the Devanagari script. The knot of the Devanagari  $\pi$  has been pulled down to resemble an exaggerated tear drop terminal in the gurmukhī  $\pi$  (Figure 10). This transformation of the knot to a teardrop terminal that al most touches the baseline with the stem of  $\pi$  is indicative to a novice too that there's some distinction be tween these similar looking type forms. Another beautiful and striking letterform is that of  $\pi$  / Elfl / Ee'rhee e' as in 'energy' (Figure 16).



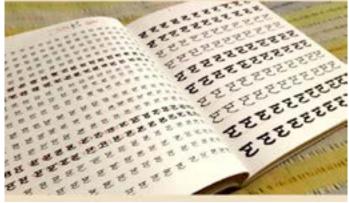


Figure 16. Writing Practice of & / Ee'rhee: sharp, energetic, disciplined in structure.

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- 7. Categorization in the Ik Onkar Series
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- 9. Digitizing Few Selective Akhars
- 10. Conclusions
- 11. References
- 12. Contact Details

### The Personality Mapping

Ik Onkar Model formulation

Four Categories and the 31 Gurmukhi Akhars: the basic parts and functions

Out of 35 akhars, a total of 31 akhars could be mapped with respect to EF, AF categories / groupings (on x-axis) and SF, CF categories / groupings (on y-axis).

Purpose behind a grouping is to extract similarities and differences. Hence, the categories have been named as bipolar units of FORMS and FEATURES (Figure 17).

- FORMS: involve letter structures as a whole.
- FEATURES: involve parts that make the whole.

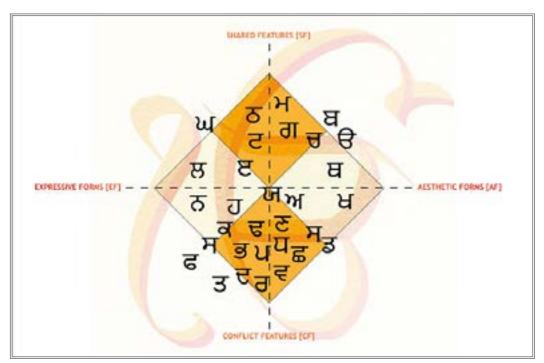


Figure 17. Ik Onkar Gurmukhi mapping model

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- 8. The Personality Mapping
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- 10. Conclusions
- 11. References
- 12. Contact Details

### Insightful leads with respect to Type Design

- FORMS: The letterforms that are enclosed within the rhombic boundaries of both Form categories are those that is only within either of these categories. The ones on boundries of the rhombic edges also belong to either of the Features categories.
- For instance, ব, ৱ, ৱ akhars become one set for form explorations in display. They share a common feature of the knot/ closed counters in different parts of their letter anatomical constructions.
- However, there are some forms that are purely either expressive (ਲ,ਨ) or aesthetic ones (ੳ, ਬ) and (ਥ, ਖ).
- FEATURES: There are some striking, visually dynamic letterforms that are at the intersections of both features and forms making them represent duality in form and language, meaningfully (শ, ਘ) and (হ, ज, ਚ)

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- 10. Conclusions
- 11. References
- 12. Contact Details

### **Digitizing Few Selective Akhars**

The writing practice sheets gave the most balanced written letterforms for each of the 31 akhars explored as an extension to the personality-mapping model; with the aim to evolve display forms from letter shapes practiced (Figures 10 to 19). Following are the beginnings of the first three akhars explored with display features and three-dimensional structural facets (Fig. 19). The main letter colours and the background are a deliberate choice to match the yellow/ old-feel look of the papers in notebooks that represent writing practice and compositions per akhar. These have been digitally executed and rendered for specific textured effects by using iOS app: Tayasui (see selective first phase explorations, Fig. 19).

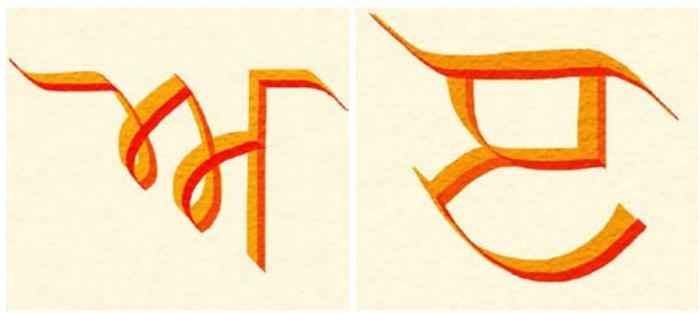


Figure 18. Beginnings: three-dimensional display character design for Ik Onkar series

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- 12. Contact Details



Once it is joined, it gets the shape of a bangle; with the holder's help, the bangle will be heated again.

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- 8. The Personality Mapping
- 9. Digitizing Few Selective Akhars
- 10. Conclusions
- 11. References
- 12. Contact Details

### **Conclusions**

The passion project started with an objective to learn Punjabi language and how to write the letterforms for improving written language needs to communicate with other fellow Punjabi friends and family members.

However, the manuscript-style and the effortlessly meditative practice of chain compositions gave the project a much-needed and distinct type design context. Indigenous, yet multi-functional script kinds – Gurmukhi in this project and long-term research study open up new possibilities to design typefaces/forms that narrate a cultural essence, philosophy and meaning in an emotive, personalized ways. The personalisation adds to new kind of experiments with both FORMS and FEATURES as part of the Ik Onkar Model.

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- 9. Digitizing Few Selective Akhars
- 10. Conclusions
- 11. References
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- **10. Conclusions**
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Handwritten copies of Guru Granth Sahib ji

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#### **Additional Credits**

- Figures 10 -19: Courtesy of Nanki Nath Personal Archives of Manuscript-style Gurmukhi letterforms Writing Practice
- Figures 18 -19: First-phase glyph explorations for selective Gurmukhi letters from the personality mapping model of Fig. 17

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