

Manik

মানিক

PART I —
RESEARCH

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Manik মানিক

*A Multiscript Typefamily of Expressive
& Dynamic humanistic forms inspired
by Vernacular Bengali Writing.*

Intro- -duction

This Part of the dissertation forms the resaerch that leads to developement of my typeface ‘Manik’. It explores the evolution and challenges of contemporary Bengali typography. Through historical, aesthetic & technical analysis, this research examines the history of Bengali script, its typographic development, and the deviations from vernacular chirography.

Eversince I was young, India’s rich visual culture have been captivating me. Growing up in a small town in North-East India, I found my escape in reading wonderfully illustrated comics/magazines like *Sandesh* or *Indrajal*. And this inquisition born out of the mundane boring life in a small city in the pre-internet era of the early 2000s led me to a deep passion and interest for reading. Without much of my knowledge, I was drawn closer to typographic designs, leaving a strong impression on me. Although I had studied Architecture for my Bachelor, I finally found myself studying Typedesign in EsadType, Amiens in September of 2023.

India has undoubtedly one of the most rich multilingual heritage and like everyone around me, I grew up learning more than 3 languages but the strong passion for Bengali literature outgrew every other. One distinct memory from my childhood is the impatient wait for the Book fairs held annually in my city. I remember questioning myself ‘*Why the Bengali books have such diverse and expressive letterings for the covers, yet the inside text is always in the same style?’*. Even after 20 years, this is still a relevant question and also the starting point for my Project.

For the first chapter, I will try to understand the history of Bengal with a focus on how the Bengali script developed to its current state with the orthographic practices present today. As I move to the second chapter, I will make a detailed study of how Bengali type design developed to its current state with a focus on the text faces. This also help me to draw parallels of the available latin fonts and the lack of availability and experimentation in the modern digital fonts in Bengali. Along with Bengali it is also important to reapproach the latin design so that two can co-exist within the same framework of a typographic design. The third and final chapter will identify the problems and the reasons behind them.

I will also examine the vernacular typographic landscape for coming up with a new diverse typeface that justifies the nuances of the Bengali chirography.

About Bengali

Bengal is a historical geographical, ethnolinguistic and cultural term referring to a region in the eastern part of the Indian subcontinent at the apex of the Bay of Bengal.



↑ Fig.1. Language Movement of 1952, Photo taken on a student protest rally, February 1952. It is commemorated by UNESCO as International Mother Language Day, as part of global efforts to preserve linguistic identity.

Bengalis, are an Indo-Aryan [1] ethnolinguistic group originating from and culturally affiliated with this region of South Asia. They are the third-largest ethnic group in the world, after the Han Chinese and Arabs [2]. The majority of Bengali population resides in Bangladesh and the Indian states of West Bengal, Tripura [3]. The global Bengali diaspora has well-established communities in the Middle East, Pakistan, Myanmar, the United Kingdom, the United States, Malaysia, Italy, Singapore, Maldives, Canada, Australia, Japan and South Korea. [Fig.2]

The term Bengali is generally used to refer to someone whose linguistic, cultural or ancestral origins are from Bengal. In my case, my family originally migrated from East Bengal (now Bangladesh) in the aftermath of the Bengal partition to settle in Tripura, a northeastern state in India. The Bengali language is a very sentimental and integral part of the culture that I grew up in. Literature in Bengali is a key part of this identity that all Bengalis take immense pride in. This Study is an inquiry into the development of Bengali typography specifically in the context of body text, in contrast to the rich cultural heritage in vernacular writings.

1. Indo-Aryan peoples are a diverse collection of peoples speaking Indo-Aryan languages in the Indian subcontinent.
2. The World Factbook, also known as the *CIA World Factbook*, 2022
3. www.worlddata.info/languages/bengali.php Retrieved 27 November, 24

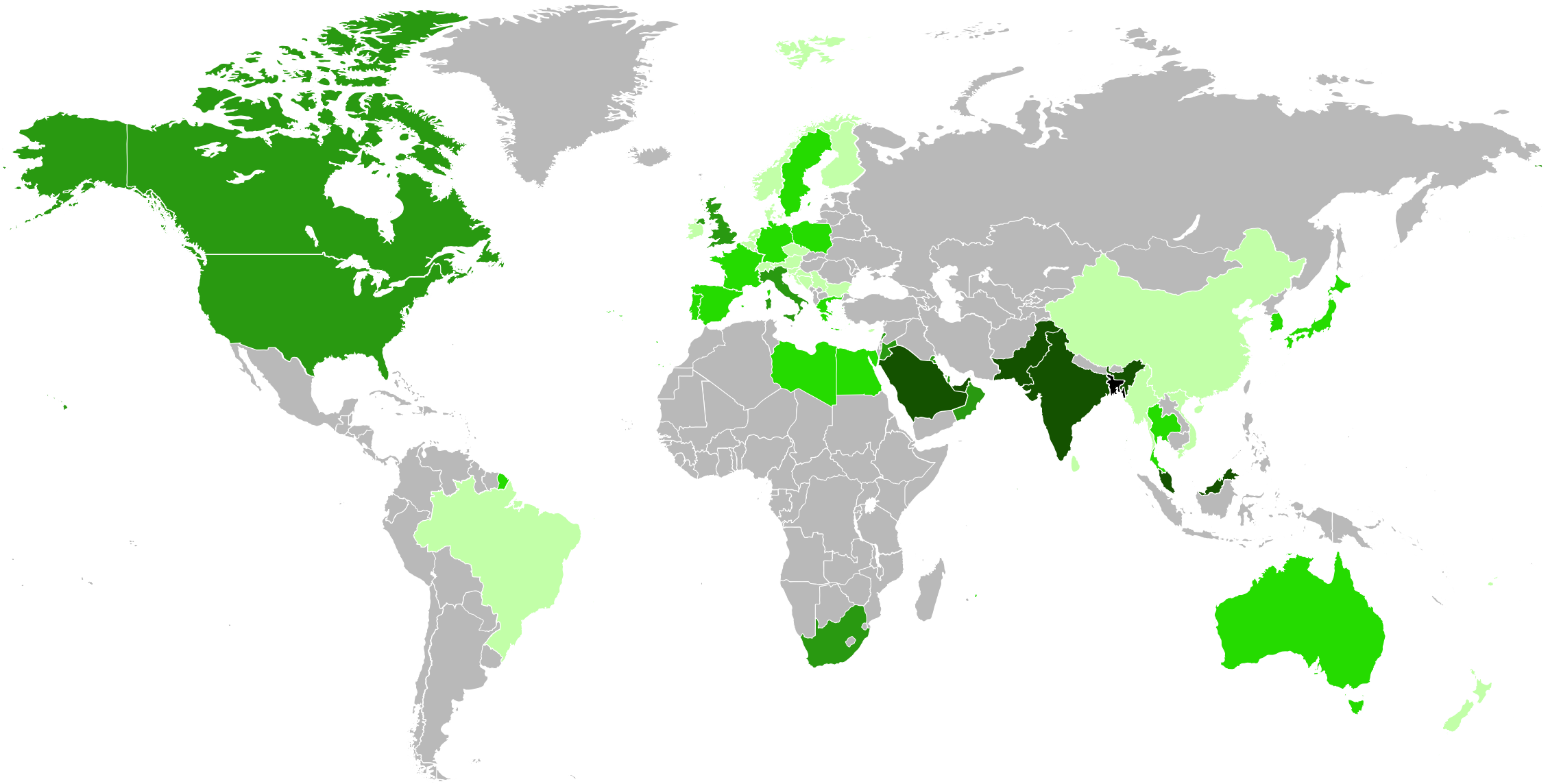


Fig.2. Map of the Bengali diaspora in the world, 25 November 2021; Population density increases as the colour changes from Light to Dark.
Source: Wikimedia Commons.

A Brief History of Bengal

A Legacy of Cultural Confluence

Bengal has long been a meeting ground of civilizations, shaped by Buddhist, Hindu, Islamic, and European influences. Its position along major trade routes fostered a rich cultural and artistic heritage that evolved over centuries [4].

Buddhism thrived under the *Pala dynasty* (8th–12th century CE), making Bengal a center of learning, with institutions like *Nalanda* and *Vikramashila* attracting scholars from across Asia [5]. Later, Hindu rulers like the *Senas* contributed to temple architecture and literary traditions, as seen in the *Kantajew Temple* and Sanskrit texts like Sandhyākara Nandi's *Ramacharitam* [6]. The arrival of *Turkish and Afghan* rulers in the 13th century, particularly under *Bakhtiyar Khalji* [Fig.3], introduced Persian and Arabic influences, shaping Bengal's distinct Indo-Islamic identity [7].

European traders—*Portuguese, Dutch, French, and British*—arrived by the 16th century, drawn by Bengal's famed *muslin textiles*, described in *Ralph Fitch's travel accounts* (1580s).

3



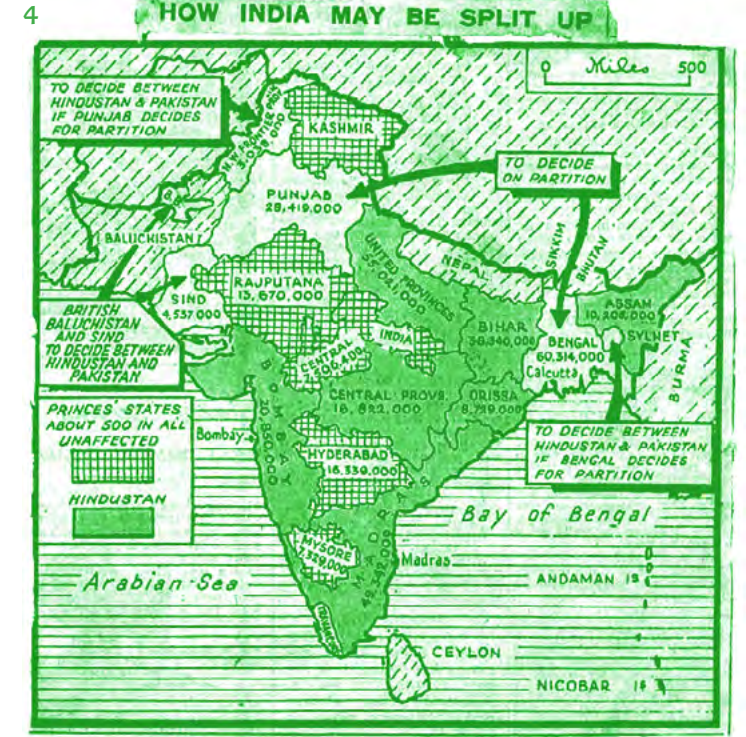
4. R. M. Eaton, *The Rise of Islam and the Bengal Frontier, 1204–1760*. University of California Press, 1993

5. D. N. Jha, *Ancient India: In Historical Outline*, Manohar Publishers, 1979

6. P. Chatterjee, *The Nation and Its Fragments: Colonial and Postcolonial Histories*, Princeton University Press, 1998

7. J. F. Richards, *The Mughal Empire*, Cambridge University Press, 1996

8. Subrata Dasgupta, *The Bengal Renaissance: Identity and Creativity from Rammohun Roy to Rabindranath Tagore*, Permanent Black, 2007



Colonial Era , Partition of Bengal to Present Day

British rule in Bengal began with the East India Company's dominance after the 1757 Battle of Plassey, leading to economic exploitation and political control. Calcutta (now Kolkata) became British India's capital and a center for trade, administration, and education. The *Bengali Renaissance* [8], led by figures like Raja Rammohan Roy and Rabindranath Tagore, spurred social and literary reforms. Bengal played a key role in India's independence movement, notably resisting the 1905 Partition, which was reversed in 1911. However, during independence in 1947 [Fig.4], Bengal was permanently divided into West Bengal (India) and East Pakistan (now Bangladesh).

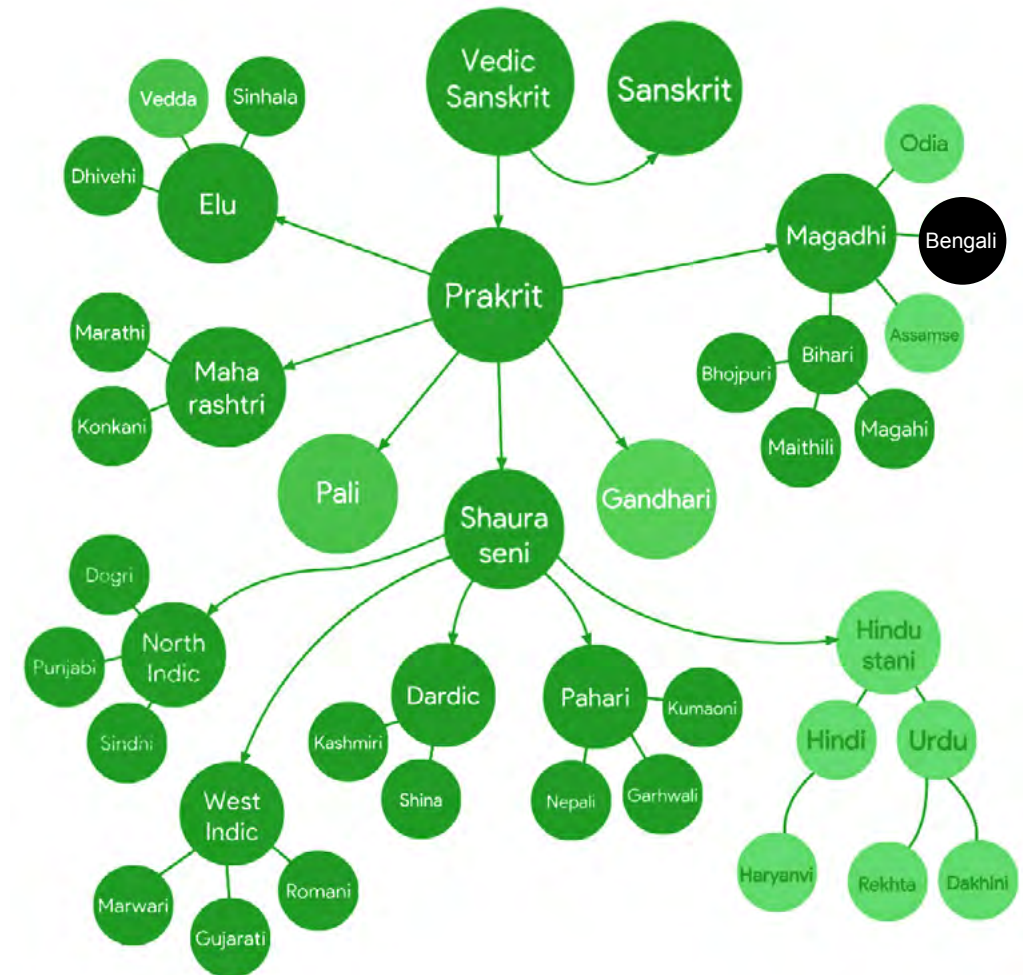
Fig.3. Bengal coinage of Bakhtiyar Khalji (1204–1206 CE). Struck in the name of Mu'izz al-Din Muhammad, dated Samvat 1262 (1204 CE).

Fig.4. Excerpt from the Daily Herald of June 4, 1947 showing the map of the partition of India

Linguistic History

An important and unifying characteristic of Bengalis is that most of them use Bengali as their native tongue, which belongs to the Indo-Aryan language family [Fig.5]. It is also the most widely spoken of the 22 official languages of India, after Hindi. Indeed, 7.1 % of Indians speak it. With about 226 million native and about 300 million total speakers worldwide, is the 5th most spoken language by native speakers in the world. It is also the 7th most spoken language by the total number of speakers.[9]

Bengali along with two other cognate languages, Assamese and Oriya, as well as Magadhi, Maithili and Bhojpuri in the south-east zone forms a linguistic group. Their immediate source can be traced back to the Magadhi Prakrit or Eastern Prakrit which was brought to this area from Magadh (or Bihar) and the language of Gauda-Banga with other eastern languages developed from this through Magadh Apabhramsa, Genetically Bengali is derived from Indo-Aryan or the Indic sub-branch of the Indo-Iranian branch of the Indo-European family of languages [10]. Bengali have a historic legacy of borrowing vocabulary from languages such as Persian and Sanskrit [11], modern borrowings primarily come from the English and some loan-words from Portuguese and Turkish as well.



9. Mohammad DaniulHuq & Pabitra Sarkar, *Bangla Language*. Bangla-pedia: the National Encyclopedia of Bangladesh (Online ed.), Asiatic Society of Bangladesh, 2012.

10. Resource Centre for Indian Language Technology Solutions - Bangla, www.isical.ac.in

11. Sarah Anjum Bari, *A Tale of Two Languages: How the Persian language seeped into Bengali*, The Daily Star, Bangladesh, 12 April 2019.

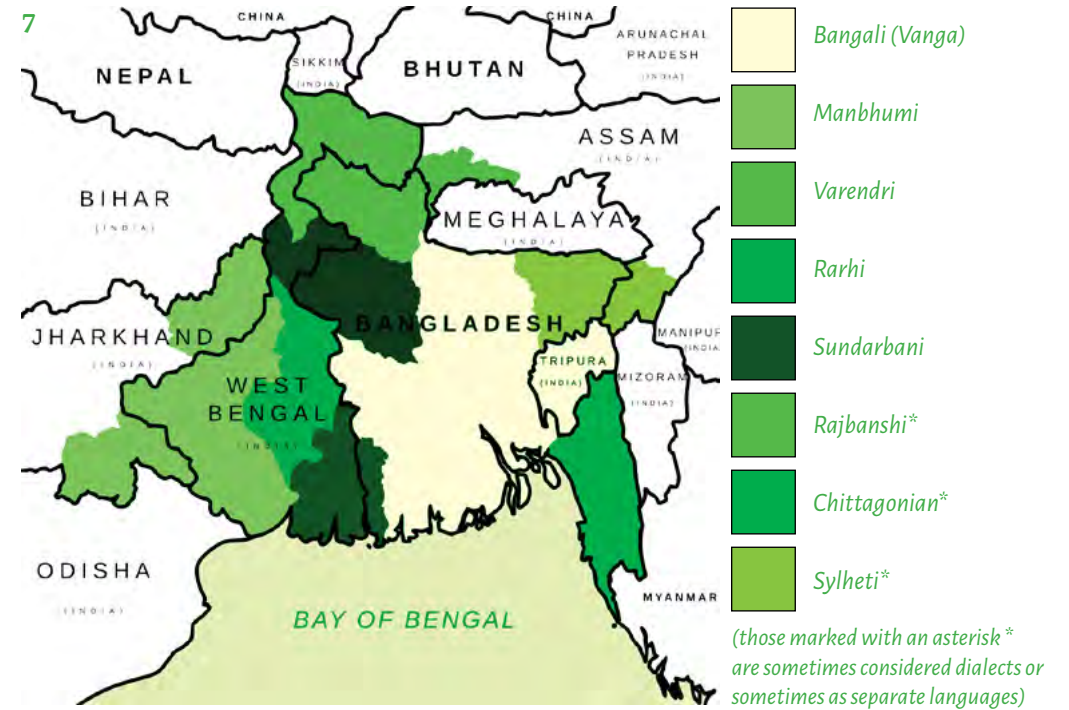
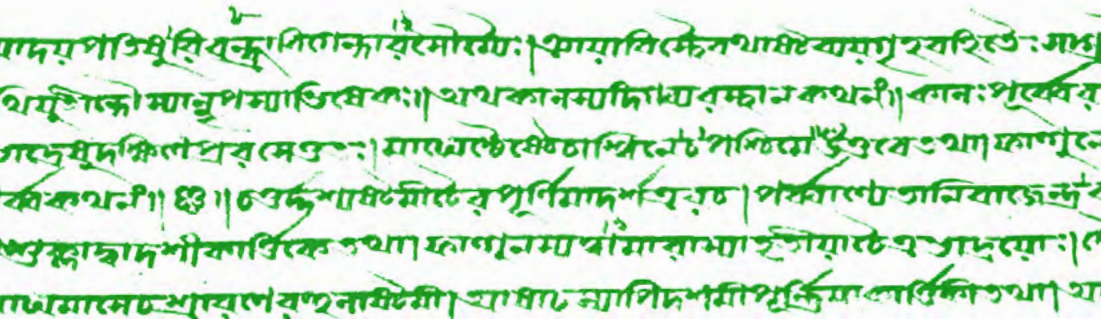
Fig.5. The Indo-Aryan Language Family multimodal graph. India.in.pixels. August 12, 2021

The evolution of the Bengali language into three stages:

Old Bengali dates back to around 650 A.D. when priests and scholars widely used Sanskrit in literary works in Bengal. However, this is a bit of a dark area in the history of Bangla literature, there are very few traces of literature from this time. The oldest text ever found is Charyapada [Fig.6]. It is a collection of mystical poems of revelation based on Buddhism, thought to have originated between the 8th and the 12th centuries.

Middle Bengali developed during the 14th century when the Muslim invasions established the Sultanate of Bengal and Bengali was the official court language of the region. It soon became the vernacular language of Bengal [12]. However, it was still very different from the modern-day Bengali. In the 16th century, the Mughals took over Bengal. The rich Persian language they brought with them began to influence the language.

Modern Bengali took shape from the dialect spoken in the Nadia region of Bengal around the time of the Battle of Plassey in 1757. Various forms of the language are in use today and provide an important force for Bengali cohesion. These distinct forms can be sorted into three categories [13]. The first is Classical Bengali (সাধু ভাষা Sádhu Bhasá), which was a historical form restricted to literary usage up until the late British period. The second is Standard Bengali (চলিত ভাষা Cólitô Bhasá or শুদ্ধ ভাষা Suddho Bhasá), which is the modern literary form, and is based upon the dialects of the divided Nadia region (parti-



tioned between Nadia and Kushtia), used today in writing and in formal speaking. The third and largest category by speakers would be Colloquial Bengali (আঞ্চলিক ভাষা Añcôlik Bhasá or কথ্য ভাষা Kôththô Bhasá). These refer to informal spoken language that varies by dialect from region to region [Fig.7].

12. AKM Golam Rabbani, *Politics and Literary Activities in the Bengali Language during the Independent Sultanate of Bengal*, Dhaka University Journal of Linguistics, 7 November 2017.

13. Suniti kumar Chatterjee, *The Origin and Development of the Bengali language, Vol- 1*, George Allen and Unwin London, New Edition, 1970.

Fig.6. Parts of the Charyapada, a collection of ancient Buddhist hymns which mention the Bengalis, in display at the Rajshahi College Library.

Fig.7. A map of Bengal (& some districts of Assam & Jharkhan) which shows the dialects of the Bengali language.

The Bengali Script

A linguistic analysis

The Bengali alphabet is used throughout Bangladesh and eastern India (Assam, West Bengal, Tripura) also known as Bengali-Asameese script, and is one of the most widely-used writing systems in the world. [14]

Bengali script is a cursive script that has its origin in the Brahmi script like the majority of Indic scripts. It is an Abugida (alphasyllabary) comprising 12 vowels, 10 of which have a dependent form, plus 33 consonants supplemented by repertoire extensions for 3 more sounds by applying the nukta diacritic to characters [Fig.8]. It is so-called unicameral writing, that is to say, it does not distinguish between capitals and lower cases. The letters run from left to right and spaces are used to separate orthographic words. Bengali punctuation marks, apart from the downstroke danda(।), the Bengali equivalent of a full stop, have been adopted from Western scripts and similar use. [15]

Unlike in Western scripts (Latin, Cyrillic, etc.) where the letter forms stand on an invisible baseline, the Bengali letter forms instead hang from a visible horizontal left-to-right headstroke called মাত্রা *matra*. The presence and absence of this *matra* can be important. For example, the letter ta ত and the numeral ৩ 3 are distinguishable only by the presence or absence of the *matra*, as is the case between the consonant cluster tra ত্র and the independent vowel e এ, also the letter ha হ and Bengali Ôbogroho হ (~ô) and vowel o ও and consonant cluster ta ত. The letter forms also employ the concepts of letter-width and letter-height (the vertical space between the visible *matra* and an invisible baseline).

Bengali is also considered to be a complex script and requires some character reordering and glyph processing for proper display on layout software, and this will be discussed in Chapter 2. The term complex script [16] refers to any writing

14. Simon Ager, *Omniglot: a guide to writing systems*.
www.omniglot.com

15. *Bangla language*. Asiatic Society of Bangladesh, 2003

16. *Complex scripts and shaping engines*, [https://learn.microsoft.com/en-us/globalization/reference/universal-shaping-engine] Retrieved 27 november, 2024

Vowels

অ	আ	ই	ঈ	উ	ঊ
a	aa	i	ii	u	uu

ঋ	ূ	এ	ঐ	ও	ঔ
r	vocalic r	e	ai	o	au

The transliteration of the letters follows the character names established by the Unicode consortium.

Consonants

ক	খ	গ	ঘ	ঙ	চ	ছ	জ
ka	vocalic r	ga	gha	nga	ca	cha	ja

ঝ	ঞ	ট	ঠ	ড	ঢ	ণ	ত
jha	nya	tta	ttha	dda	ddha	nna	ta

থ	দ	ধ	ন	প	ফ	ব	ভ
tha	da	dha	na	pa	pha	ba	bha

ম	য	র	ল	শ	ষ	স	হ
ma	ya	ra	la	sha	ssa	sa	ha

Vowel Signs/Vowel Matras

া	ি	ী	ু	ূ	্
-aa	-i	-ii	-u	-ri	-uu

ে	ৈ	ো	ৌ
-e	-ai	-o	-au

Fig.8.

Bengali script, basic alphasyllabary and attaching vowel signs.

Evolution of Bengali Script

The evolution of the Bengali script is a historical journey deeply rooted in the Brahmi script [Fig.11], one of the oldest writing systems in India. This transformation spans several centuries, beginning in the 3rd century BCE and continuing into the modern era, shaped by cultural, political, and linguistic developments in South Asia. A deep look into this transformation can give us a clear understanding of the roots and the current form of the script, this in turn will help us evaluate the current typographic image of Bengali.

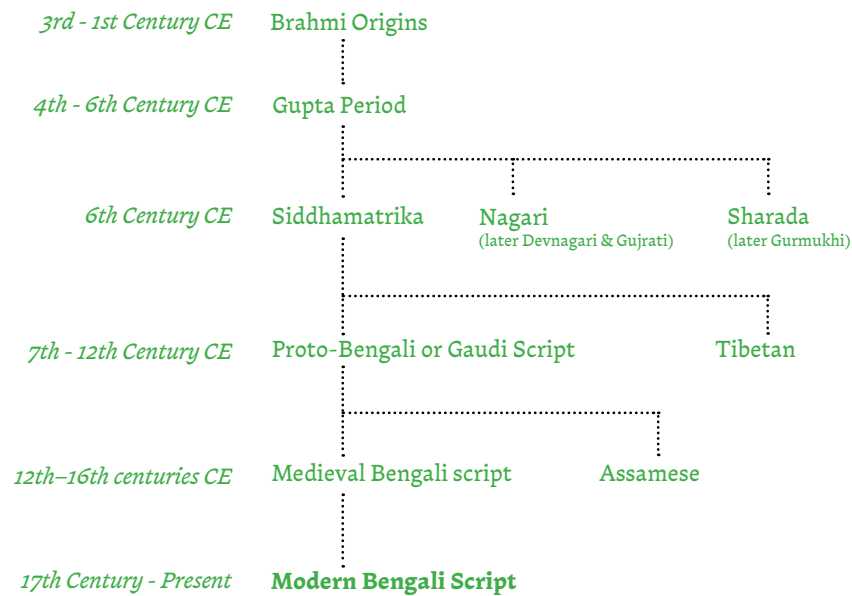
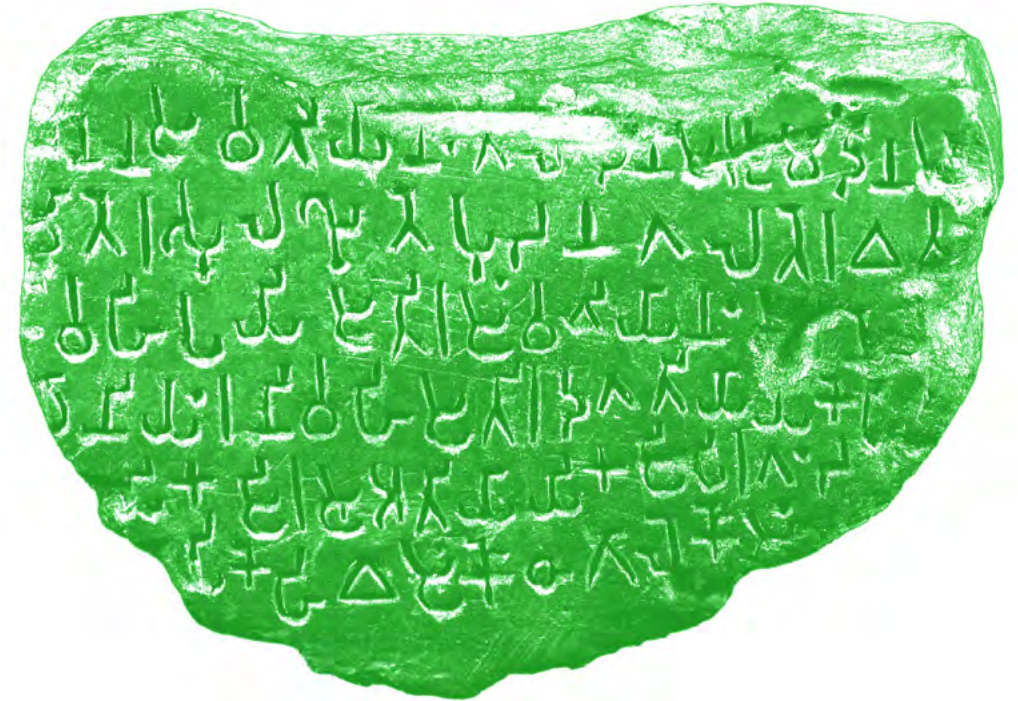


Fig.11. Stages in evolution of the modern Bengali Script from Brahmi.

Brahmi Origins (3rd Century BCE - 1st Century CE)

The Bengali script has its origins in Northern Brahmi, which was used across India during the Mauryan Empire under Emperor Ashoka. The earliest examples of Brahmi inscriptions in Bengal are found in places like Mahasthangarh (Mauryan period)[Fig.12], making it the region's oldest evidence of writing [18]. Artifacts from Noakhali and Chandraketugarh also show Brahmi inscriptions.

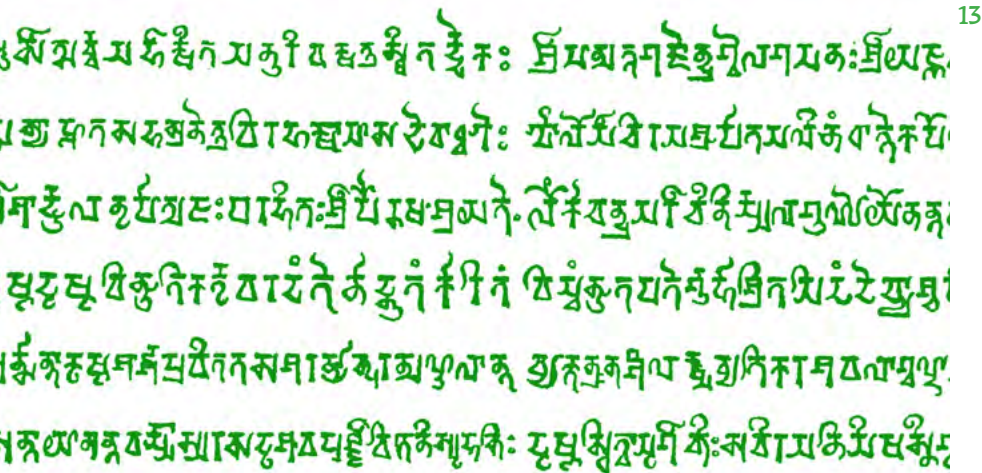


18. JG Buhler, *Indian Paleography*, English Translation by JF Fleet, published as an appendix to the Indian Antiquary, 1904

Fig.12. Mahasthangarh Brahmi Inscription of Asoka, 3rd century CE, Archeological survey of India

Gupta Period (4th - 6th Century CE)

During the Gupta dynasty, a period often considered a golden age for Indian arts and culture, the Brahmi script underwent significant changes. As evident from the Gupta inscriptions, the script often displays a flowing style of writing [Fig.13] compared to the angular shapes of earlier Brahmi, which laid the foundation for future developments in Eastern India. The script developed a more cursive style, better suited for writing on palm leaves, and began to show the first signs of the modern Bengali script's distinct curves [19].



19. R.D. Banerji, *The Origin of the Bengali Scripts*, University of Calcutta, 1917.

20. Suniti Kumar Chatterji, *The Origin and Development of the Bengali Language*, Calcutta University Press, 1926.

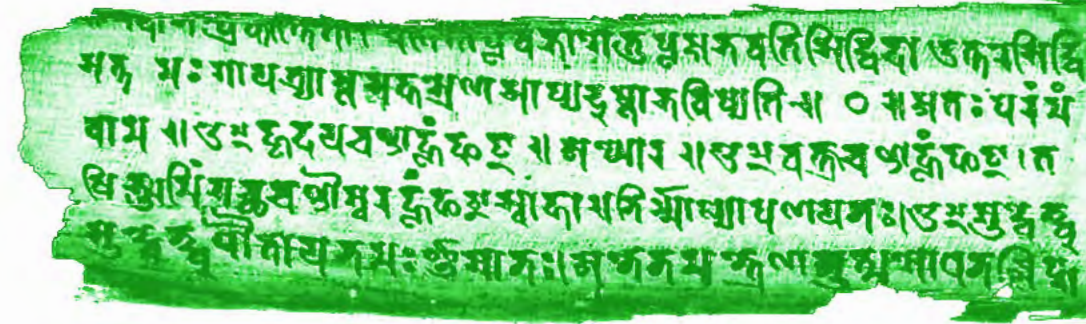
21. Romila Thapar, *A History of India: Volume 1*, Penguin Books, 1966, pp. 255-260

- Fig.13. Sanskrit inscription in Gupta scrip attributed to king *Anantavarman*, variously dated between 450 CE to late 6th-century in the Barabar Caves in Bihar, Asiatic Society of Bengal
- Fig.14. A 828 CE *Paramesvaratantra* Sanskrit palm leaf manuscript, Late Gupta script, Nepal, Cambridge University Library
- Fig.15. Colophon of *Yogaratanamala* - year 39 of Govidapala(12th Century CE) - The Palas of Bengal Plate 38a, Rakhaldas Bandyopadhyay

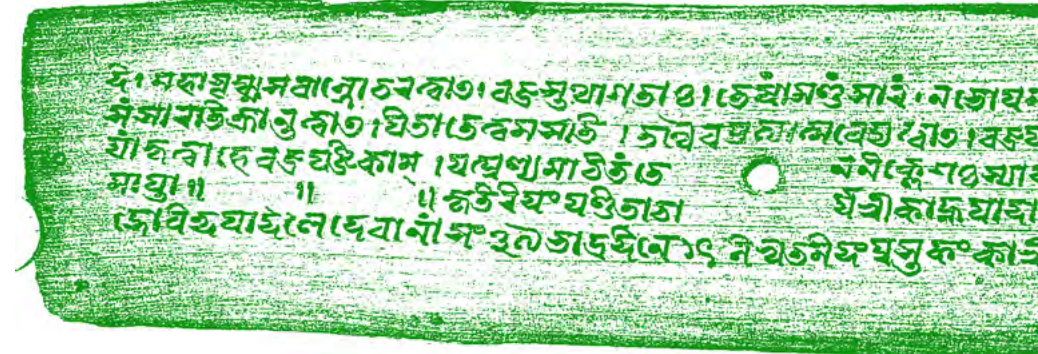
Proto-Bengali or Gaudi Script (7th - 12th Century CE)

As the Gupta influence waned, the Brahmi script in Eastern India through Siddham script(also Siddhamatrika)in the later half of the 5th and 6th Century CE till the 9th Century CE[Fig.14], evolved into what is known as the Gaudi script or proto-Bengali. This script used extensively during the Pala and Sena dynasties, is evident in various Buddhist manuscripts and inscriptions [20]. The Charyapada, discussed earlier, is one of the oldest examples of this script. Significant changes from the Gupta script to the Gaudi script is simplification of angular ornate letters to more rounded and fluid forms and a more organized system of vowel marks[Fig.15]. During the Gupta period, Brahmanical and Buddhist texts were written predominantly in Sanskrit, but as the Gaudi script emerged, it began to be used for Pali and Prakrit as well, reflecting the growing vernacularization of writing in Eastern India [21].

14



15



Medieval Bengali script (12th–16th centuries CE)

The Medieval Bengali script marks a significant phase in the evolution from Gaudi to the more distinct, recognizable Bengali script used today. It continued the trend toward rounded, fluid letterforms inherited from the Gaudi script. However, by this period, these forms were becoming more consistent and standardized. The prominent horizontal line (matra) became fully developed (connected) in this period, distinguishing Bengali from its predecessors like Siddham and Gaudi, where the matra was still emerging [22].

During this period, Bengali manuscripts (often written on palm leaves or paper) played a crucial role in the standardization of the script. The Bhakti Movement with religious texts and songs from Vaishnava poets like Chandidas and Vidyapati were often written in Bengali [23]. Additionally, 14th-century works like the *Shreekrishna Kirtana* [Fig.16] and *Mahabharata* in Bengali [Fig.17] are crucial references showing this transformation from Gaudi but still retaining a diagonal connection of letters from the headline.

By the 16th century, the Medieval Bengali script had developed into a distinct regional script [Fig.18] with more round and fluid characters and a simpler connection of letters to the headline, separating it from Assamese and Odia scripts.

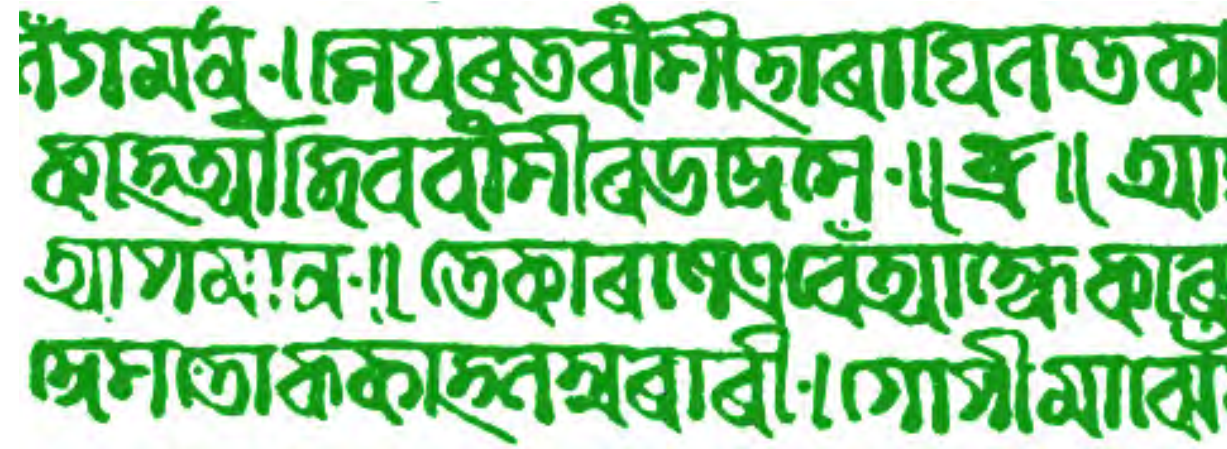
22. A.H Dani, *Indian Palaeography*, Clarendon Press, 1963, pp. 135-145.

23. Sukumar Sen, *History of Bengali Literature*, Sahitya Akademi, 1997, pp. 25-35.

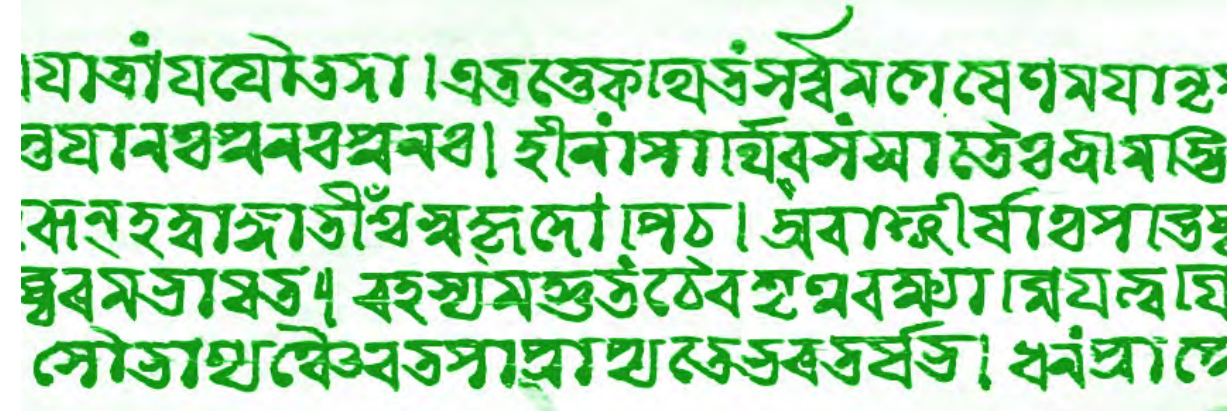
Fig.16. *Srikrishnakirtana*, by Boru Chandidas. These verses written in the pre-Chaitanya era of the later half of 14th century CE is believed to be one of the most significant works of Bengali literature, Bangladesh national Gallery Source: <http://blog.rarh.in>

Fig.17. *Mahabharata Umamahesvarasamvada*, 14th Century, National Archive of Nepal in Kathmandu, Kenji Takahashi

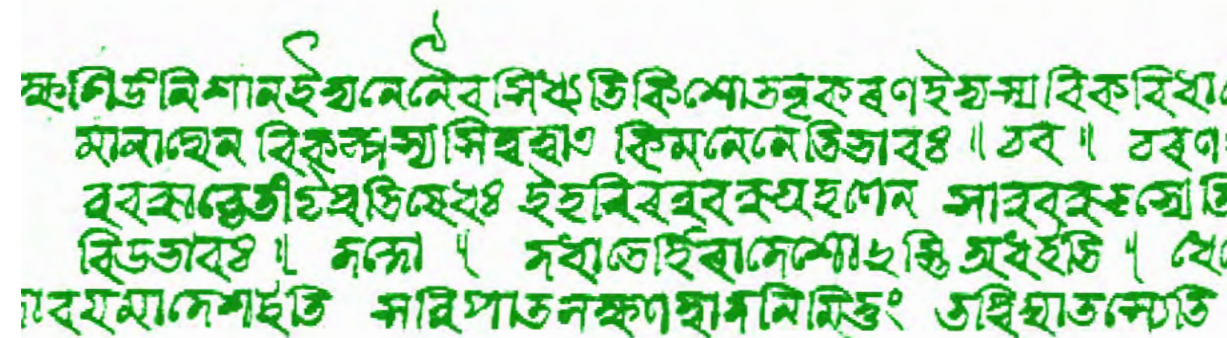
Fig.18. *Katanravrttipanjika* manuscript, 1502, Bibliothèque nationale de France. Département des Manuscrits. Sanscrit 561



16



17



18

Modern Bengali Script (17th Century - Present)

By the start of the 17th Century, the Bengali script had already undergone significant changes and was starting to look like what we know now as the Bengali alphabet.

Throughout the 17th, 18th and 19th majority of the literary works and manuscripts were from the Bhakti movement and Sanskrit texts related to Shaivism, Vaishnavism, Tantric texts and historic epics by great poets like Kalidasa [Fig.19], but there are also many examples of official documents like land deeds [Fig.20], accounting books, official transcripts etc.

Studying them carefully shows an important distinction—the headline (Matra) becomes more wavy and connected, making the script more cursive, fluid and expressive [Fig.21] [Fig.22], which sets it apart from all the other Indic scripts. This trend matured to its fullest in the 18th century [Fig.23] [Fig.24]. The letters are more harmonic in proportion with a clear ductus while maintaining a nice ink consistency. The wavy headlines guide the eye from each letter to the next. The increasing use of good-quality paper also influenced this change [24].

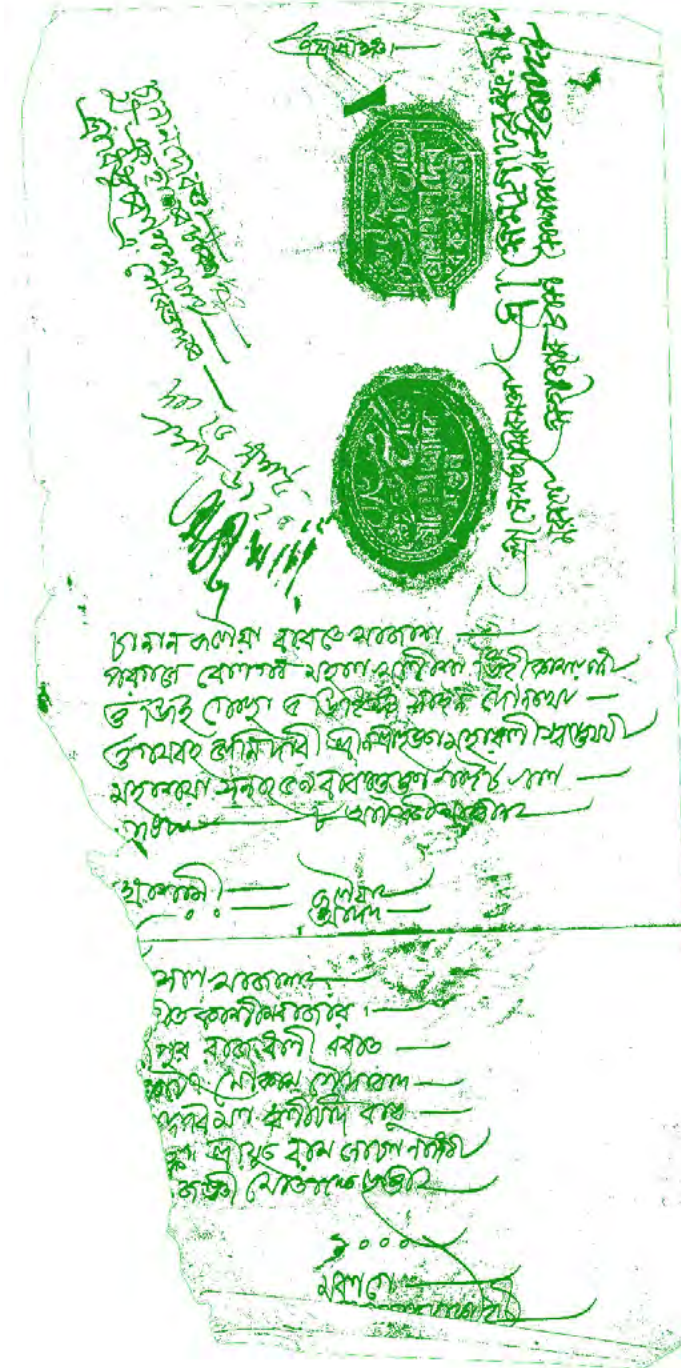
19

দুবীক্ষণাৎ খলু যুগ্মৈকৈ স্থানলভাবনলভাবিত্ব ॥ যাবদেতা স্বাখামাত্রং প্রাপ্তম
 হিন্ম সম্বন্ধসমীক কথ্যমানম্ভাবি একৈকি। জেনমোমালিগ্রাঙ্গমুপবিষে
 নু সাহোজবাসিনেহো। ইতি ব্রহ্মসংহন নাটয়া। যনু পিছসহিন্ডভ্রল
 এসিহুগ্ন তেনএনহিসক্রিগকুণ্ড ষম্মোভবিস্বাদি। শিঙ্গু সাহিবমীগ্রা
 মাহবমোযং মদ্রথালি।

24. Dinesh Chandra Sen, *Scripts of Bengal*, Asiatic Society, 1935, pp. 112-117.

Fig.19. *Abhijnanasakuntala*, by Kālidāsa, scribed in Bengali, 1631, Bibliothèque nationale de France. Département des Manuscrits. Sanscrit 657

Fig.20. An official land deed from the old Kashimbazaar, 1852, Endangered Archives Programme, British Library



কবচং নিত্যং ॥ শ্রীমৎকর্তৃবাচ ॥ শ্রীমদ্বেদবিপ্রবক্ষ্যামি ককা
 শ্রীমদ্বেদবিপ্রবক্ষ্যামি ককা ॥ শ্রীমদ্বেদবিপ্রবক্ষ্যামি ককা ॥
 শ্রীমদ্বেদবিপ্রবক্ষ্যামি ককা ॥ শ্রীমদ্বেদবিপ্রবক্ষ্যামি ককা ॥

21

- Fig.21. *Kavacasamgraha*, Kālikāntha Sarman (scribe), 1750, Kislak Center for Special Collections, Rare Books and Manuscripts, Web, Rāmamālā Library 768
- Fig.22. *Mahabharata*, 1791, Folio page 25, Cudāmani Vanikya and Rāmaprasāda Vanikya, Kislak Center for Special Collections, Rare Books and Manuscripts, Web, Rāmamālā Library 8063
- Fig.23. *Vishnupurana*, 18th Century, Bibliothèque nationale de France. Département des Manuscrits. Sanscrit 498
- Fig.24. *Kavikalpadruma dhatupatha*, by Vopadeva, 18th Century, Bibliothèque nationale de France. Département des Manuscrits. Sanscrit 550

শ্রীমৎকর্তৃবাচ ॥ শ্রীমৎকর্তৃবাচ ॥ শ্রীমৎকর্তৃবাচ ॥
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22

24. Sukumar Sen, *Bengali Printing and Publishing in the 18th Century*, University of Calcutta, 1954, pp. 22-25

শ্রীমৎকর্তৃবাচ ॥ শ্রীমৎকর্তৃবাচ ॥ শ্রীমৎকর্তৃবাচ ॥
 শ্রীমৎকর্তৃবাচ ॥ শ্রীমৎকর্তৃবাচ ॥ শ্রীমৎকর্তৃবাচ ॥
 শ্রীমৎকর্তৃবাচ ॥ শ্রীমৎকর্তৃবাচ ॥ শ্রীমৎকর্তৃবাচ ॥

23

শ্রীমৎকর্তৃবাচ ॥ শ্রীমৎকর্তৃবাচ ॥ শ্রীমৎকর্তৃবাচ ॥
 শ্রীমৎকর্তৃবাচ ॥ শ্রীমৎকর্তৃবাচ ॥ শ্রীমৎকর্তৃবাচ ॥
 শ্রীমৎকর্তৃবাচ ॥ শ্রীমৎকর্তৃবাচ ॥ শ্রীমৎকর্তৃবাচ ॥

24

In 1778, Charles Wilkins successfully made the first movable type in Bengali. *A Grammar of the Bengali Language* by Nathaniel Brassey Halhed was the first Bangla printed book [24] using this. The Bangla letters became stereotyped with the introduction of the printing press and the typeforms being rationalized with European printing methods, this will be discussed in greater detail in Chapter 2.

With the colonial occupation in Bengal, a lot of interest in learning the Bengali language and Grammar can be seen and also for understanding the culture from an administrative point of view [25]. This is supported by many scribes making writing lesson books [Fig.25] and grammar books which were a reference for the early European printers for making movable type in Bengali. In support of this, there were many scribes commissioned by the European administrators to maintain accounts of contracts with the local Bengali landlords and businessmen [Fig.26], mainly serving as administrative records. These references helps in obtaining a good understanding of the Bengali chirography [26].



25. Sisir Kumar Das, *A History of Indian Literature, Vol- 2*, Sahitya Akademi, 1991, pp. 222-225

26. Chirography is the art or study of handwriting or penmanship. It refers to the style and technique of writing by hand, often with a focus on the form and legibility of the script.

Fig.25. Pages from *Leçons de bengali, Principes ou Vocabulaire bengaly*, Octobre 1774, Bibliothèque nationale de France. Département des Manuscrits. Indien 739; Bengali consonant sounds and vowel marks in vowel cluster.

Fig.26. Spread from *Secrétaire Bengali, vol.1*, 1779, Bibliothèque nationale de France. Département des Manuscrits. Indien 725,



10.

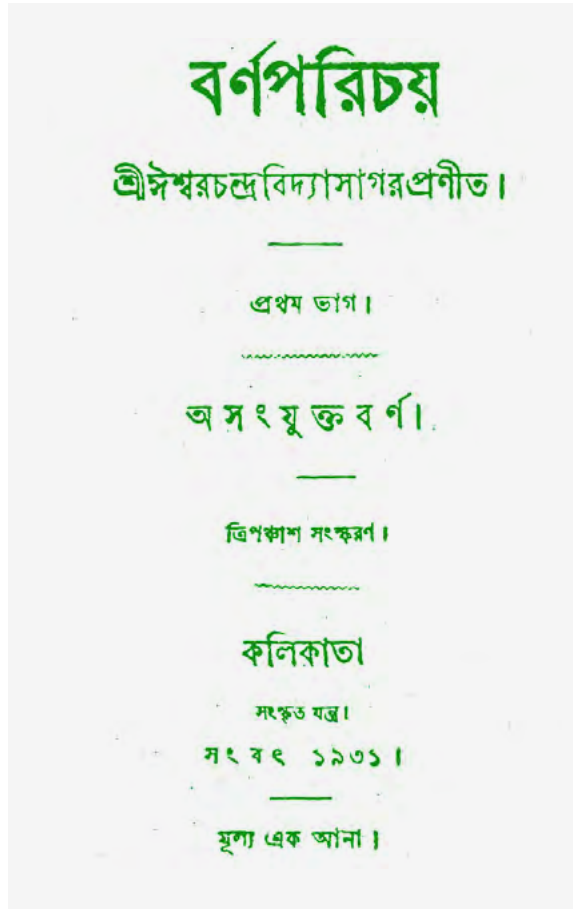
পরমপ্রজন্ম স্বাস্থ্য জন্মদেবাময়তা
 অমাত্যমহো চক্র মহাশয় তাচরনু জগৎসু
Dr. Du-petit fils of Angers, France on 31st June 1871

সেবকায় হসক স্বাস্থ্যমহর দায়প্রোষস্য
 শ্রুতামা সতসহস্র নিবেদনস্ব আশে মহাশয়
 তাচরন সুচরু স্বান অহরায়াদেব স্বরভেদী
 তাহাতেই একতরুর অহিক পাশ্বিকের লক্ষণ
 মহাশয়ের আশ্রয়বন্দ পশুচরুয়া সেবাটির বেত্তরা
 ক্ষমতাস্বনাম মহাশয়ের শ্রবণগণকরণিতার
 সমাগর স্বাস্থ্য চেষ্টার মর্মে বড় বেদনা পার্শ্বনাম
 আমিনাচর ফিকার আমিনুনামহরে একজন
 সংস্থাদে গাণিন্য মঙ্গলম্ব অচমাক্তেও সম্মেদ
 বেগন বিধা সেমনন্য সেজহুকে সপ্তাঙ্ক
 একেমে বিকট হাইল্ড পচরনামনা কিছু মনগোলে
 হাইল্ড মহাশয়ের চরম দরগদ ফকর হই স্বাস্থ্য
 নিবেদন স্বাস্থ্যম হাই তাবথ ২০ মাস

11.

পরমপ্রজন্ম স্বাস্থ্য জন্মদেবাময়তা
 অমাত্যমহো চক্র মহাশয় তাচরন হুগলে
Dr. Du-petit fils of Angers, France on 31st June 1871

সেবকায় হসক স্বাস্থ্যমহর দায়প্রোষস্য
 শ্রুতামা সতসহস্র নিবেদনস্ব আশে
 মহাশয়ের স্বাস্থ্য স্বিতায় স্বান নিযতাবাধকরণেই
 তাহাতেই এছাড়াযানের দানগতক মঙ্গল বিবেদে
 বহুকাল হইল মহাশয়ের সেবাটির কোনসমাচর
 পার্শ্বনামী স্বাস্থ্য ক্ষমনাদী নিমিত্তে অক্ষয়কে
 অপর এমন মর সমাগর বচির সকল স্বাস্থ্য
 বাচ্যাআছে স্বাস্থ্যমহর নাহি আম কণীয়া
 থাকীতপালনা একমাত্মজন ফকিয়া তাহরস্থানে
 তিনহাজার কেী ফকরকিয়া মোকম্বাসেনদহচাথারদ
 মরতে সাতই অথহায়ে মোকম্ব পৃস্থানকরণাম মহাশয়
 অশীর্ষকদ ফরলেন জেন তানয তানয দেশে অশীর্ষা
 পোই ইহা স্বাস্থ্য নিবেদনকরণাম হই
 তাবথ ২০ ফকর ফকনু এবং ফকনু



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27. Subrata Dasgupta, *The Bengal Renaissance: Identity and Creativity from Rammohun Roy to Rabindranath Tagore*, Permanent Black, 2007

Fig.27. Title page of 1931 edition of *Barnaparichay*, First published by Vidyasagar in 1855, considered as “The Most Influential Primer of Bengal”.
Source: bn.wikipedia

Fig.28. [A]. Rabindranath in his study at Santiniketan. [B]. Letter dated 19 January, 1928 written by Tagore. This slanted cursive structure shows a more dynamic nature of the letter-forms due to the speed of writing, resulting in the absence of Matra in many characters.

The Bengali Renaissance

The Bengal Renaissance (19th–early 20th centuries) was a period of intense social, cultural, and intellectual reform in Bengal, which saw a revival in the arts, literature, and education. Bengali script became a key medium for new literary works, journalism, and reformist texts, particularly due to the efforts of key figures like Ishwar Chandra Vidyasagar. His work focused on simplifying, standardizing Bengali characters and grammar [Fig.27], ensuring consistency in spelling and usage across educational and literary texts. Vidyasagar along with reformers like Madan Mohan Tarkalankar were instrumental in creating modern Bengali typography, which facilitated the production of printed materials and textbooks, solidifying a standard form of the script [27]. The use of the standardized script allowed for the dissemination of the ideas of later reformers like Rabindranath Tagore [Fig.28], Bankim Chandra Chattopadhyay, and Kazi Nazrul Islam, promoting modern Bengali prose and poetry to new heights.

28

[A]



[B]

বিশ্বকবি আমাদের চেহারা থেকে
 আমাদের মনের মধ্যে কিছু লীন হৈছে।
 আমরা জীবনকে/ মনে হলে লিখা
 চাইয়া কি দিলে মূর্খ তাঁর চৈতন্যিকা

শ্রী রবীন্দ্রনাথ ঠাকুর

১ জানু
 ১৯২৮

The Bengal School of Art

The Bengal School of Art, was established in the early 20th century, at the Kala Bhavan in Shantiniketan (Brainchild of Rabin-dranath Tagore). It was an influential art movement that aimed to revive traditional Indian art forms as a response to British colonial influence. Led by Abanindranath Tagore, the school rejected Western academic styles and sought inspiration from India's classical, Mughal, and folk art traditions [28]. The movement became part of the broader Bengal Renaissance, blending cultural revival with nationalist sentiments. The Bengal School of Art played a key role in the revival and promotion of Bengali calligraphy and lettering arts, treating script not just as a medium of communication but as an art form. Artists like Abanindranath Tagore [Fig.29], Nandalal Bose [Fig.30] Gaganendranath Tagore, Jamini Ray integrated Bengali script into their artwork, infusing traditional calligraphy with a modern aesthetic [29]. They used the script as decorative elements in paintings, giving the Bengali language visual prominence.

Later artists like Qayyum Chowdhury and Satyajit Ray carried forward this legacy.

29



30



28. Partha Mitter, *The Triumph of Modernism: India's Artists and the Avant-Garde, 1922-1947*. University of Chicago Press, 2007, pp. 45-49.

29. Yashodhara Dalmia, *The Painted World of the Bengal School: A Reconstruction of Indian Modernism*, Oxford University Press, 1999, pp. 107-109.

Fig.29. Abanindranath Tagore's *Krishna: The Boatman* (1895-1897), inspired from Mughal miniature painting. Blow-up of the Bengali calligraphy stylized like Arabic.

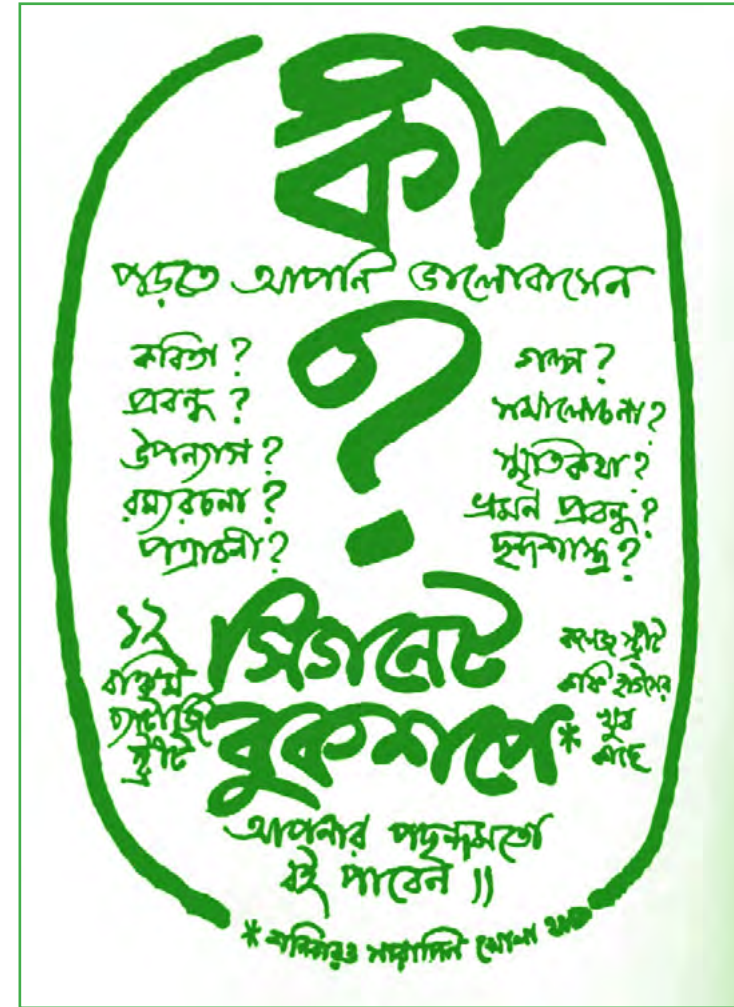
Fig.30. Nandalal Bose, *Untitled*, 1954, Ink and pencil colour on paper. In the Bengali note accompanying the postcard illustration, Nandalal Bose had written how he could hear a dhaki play festival drums nearby.

Qayyum Chowdhury used expressive Bengali calligraphy in his paintings, blending script and image to create striking visual statements. Chowdhury's designs for numerous Bengali books and publications have left a lasting influence on contemporary Bengali calligraphy, merging modern graphic design with traditional script styles [Fig.31].

Satyajit Ray, aside from his work in film, was also a prolific graphic designer, incorporating Bengali lettering into Advertisements [Fig.32], book covers [Fig.33], posters [Fig.34] and magazines [Fig.35], bringing typographic innovation to modern Bengali design. Notably, Ray designed the iconic Bangla title card for his films [Fig.36], which showcased his hand-drawn lettering and calligraphic skills [30]. His work has inspired many Bengali designers and calligraphers who followed.

These and many more artists from the Bengali school elevated Bengali script beyond textual use, making it a key element in both traditional and contemporary art.

31



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30. Anjum Chowdhury, *Visual Narratives in Bengali Art: The Influence of Script*. Bengal Foundation Press, 2011, pp. 67-70.

Fig.31. Blowup of few Book cover samples with Qayyum Chowdhury's distinct calligraphy.

Fig.32. In this advertisement designed for Signet Bookshop, Ray makes full use of his calligraphic skills, learnt from Binodbehari and Nandalal at Santiniketan, to create a design which directly addresses the readers, asking them what they wish to read.

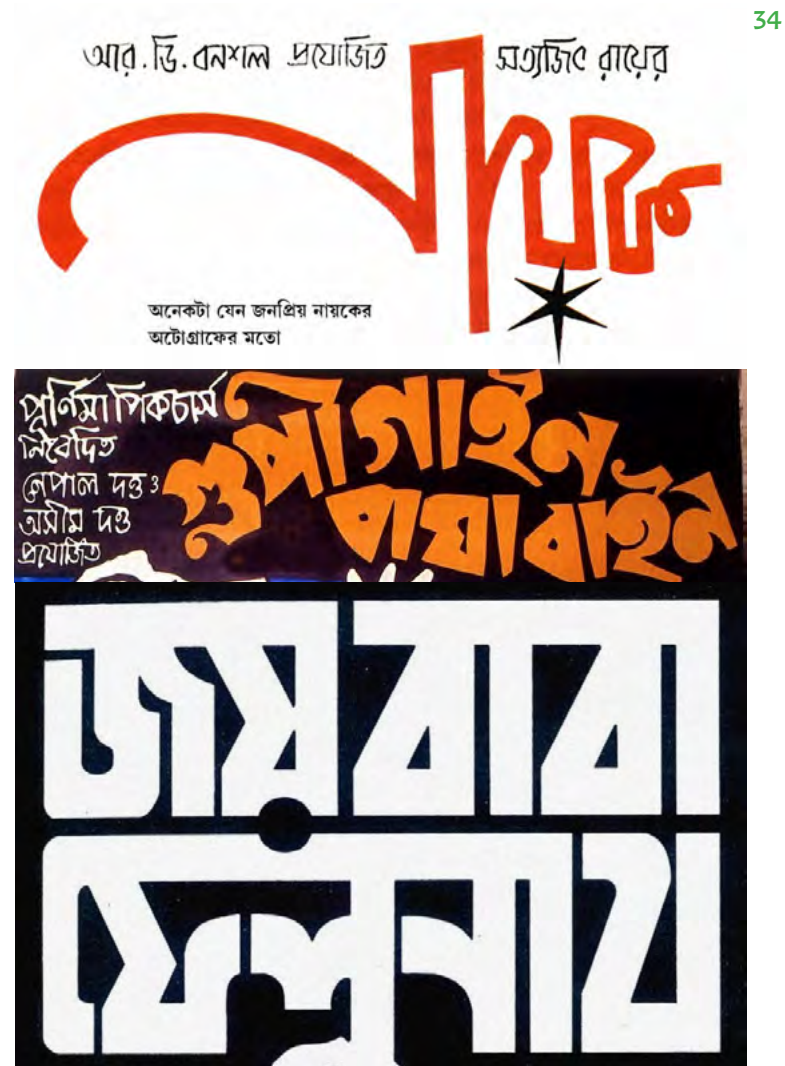


Fig.33. Few book covers by Satyajit Ray exploring Lettering (LEFT) Cover for Achintakumar Sengupta's *Parampurush Sri Sri Ramakrishna*, Signet Press, (TOP RIGHT) Cover for self-authored *Feluda & Co.* (BOTTOM RIGHT) Lila Majumder's Children's novel *Tong Ling*

Fig.34. (TOP) Lettering for the poster of his film *Nayak: The Hero*, 1966. (MIDDLE) Poster designed by Satyajit Ray for his film *Goopy Gyne Bagha Byne*, 1969. (BOTTOM) Poster for *Joy Baba Felunath: The Elephant God*



Fig.36

Satyajit Ray painting the opening credits to *Joy Baba Felunath: The Elephant God* in Varanasi, 1979.



Fig.35. Pictographic lettering for the title design of *Sondesh*, a children's magazine of which Satyajit Ray is also the editor.

Bangla Typography

To understand & critique contemporary Bengali typography & the way in which printed characters evolved into forms closer to those of Charles Wilkins, it is necessary to examine the introduction of printing in Bengal & its subsequent developments.

Introduction of Movable Type in Bengal

In the last chapter, I gave a brief history of the Bengali script and the context in which the Bengali characters were shaped. But it is important to understand that the written manuscripts in Bengali show rich variations of forms and style as it is common for handwritten texts to be attributed to more regional variations in the ligatures, conjuncts and even scribing styles. On the contrary, to understand and critique contemporary Bengali typography and how the printed characters got to a more rationalized forms, we have to look at the advent of printing in Bengal and its subsequent developments.

Almost 250 years ago, in 1778, the publication of Nathaniel Brassey Halhed's *A Grammar of the Bengali Language* marked the inception of the printed Bengali Character reproduced from pre-fabricated letterforms. This book, printed in the press of John Andrews at Hoogly with the first movable type in Bengali, is attributed to Charles Wilkins(1749 – 1836).

Early efforts

Before Wilkins' successful creation of the first Bengali movable type, several attempts were made to print the Bengali script, though none came close to producing a functional movable type system. Early examples, such as Athanasius Kircher's *China Illustrata* (1667) and David Mills' *Dissertationes selectae* (1743), featured Bengali script in European books, often through copperplate engravings or block prints rather than movable type [31]. One notable exception and the first serious attempt before the publication of Halhed's Grammar was in 1773 by William Bolts, a Dutch-born German adventurer who had worked for the East India Company, commissioned the English punchcutter Joseph Jackson to create a Bengali type based on drawings Bolts had made from Bengali manuscripts [32]. After being deported from Kolkata in 1768 due to tensions with the British authorities, he pursued his printing ambitions in London.

At the same time, Halhed, studying Sanskrit, Persian, and Bengali in Kolkata, was eager to print Bengali characters for his translation of *A Code of Gentoo Laws* [33] and became aware of Bolts' efforts. In the preface to *A Grammar of the Bengali Language*, Halhed acknowledged Bolts' work but noted that the Bengali font was never completed. Bolts had sought financial backing to finalize his "Proposal for Introduction of Printing in Bengal" [34] in a letter to William James, but his strained relations with the British government in India led to a denial of support. Additionally, his attempt was criticized for his inadequate calligraphic skills and insufficient knowledge of the language, which hindered the creation of a successful cursive Bengali type [Fig.37] [35]. Although the character set is limited and faces issues with standardizing forms—requiring either deep knowledge of the script or guidance from native readers—the typeforms are well-drawn and nuanced. They capture the calligraphic quality and fluidity of the Bengali script. This incomplete and ultimately unsuccessful attempt offers valuable insight into the challenges faced by early pioneers in vernacular typesetting and printing in Bengali language.

31. Madhu Sharma, *Script and Colonialism: The Evolution of Bengali Print*. Oxford University Press, 2010, pp. 45-47.

32. Reed, Talbot Baines, *A History of the Old English Letter Foundries* (London, 1887), pp. 315, 320-321.

33. The Gentoo Code (also known as *A Code of Gentoo Laws* or *Ordinations of the Pundits*) is a legal code translated from Sanskrit (*vivadar-navasetu*) The translation was funded by Warren Hastings as a method of consolidating company control on the Indian subcontinent.

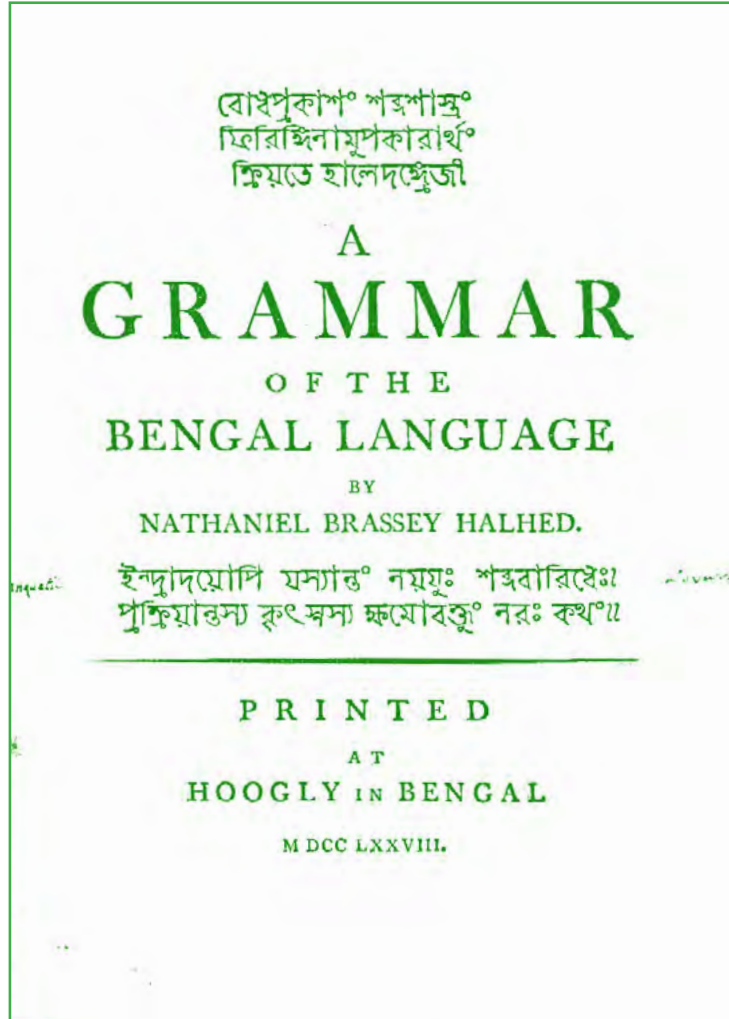
34. William Bolts, *Considerations of Indian Affairs etc., vol II, part II*, London 1772-75, pp. 285

35. Fiona Ross, *The Evolution of Printed Bengali Characters from 1778 to 1978*, London 1988, pp.170

Fig.37. Blowup of the characters casted by Joseph Jackson's foundery in London from the sketches provided by William Bolts

37





36. Halhed, Grammar, p.2.

Fig.38. Title page of Nathaniel.B. Halhed, *A Grammar of the Bengal Language*, (Hoogly, 1778), 1st printed book from the Fort William press featuring Charles Wilkins's 1st Bengali fount.

Fig.39. Closeup of the main consonant characters used in Wilkin's first font .

Charles Wilkins

Five years after this trial by Bolts, on the instruction of Warren Hastings, Charles Wilkins successfully made a type for Halhed's *A Grammar of the Bengal Language* [Fig.38].

Wilkins' first Bengali typeface was not directly influenced by scribal hands, as the printed lines in Halhed's Grammar differ from manuscript versions. However, the manuscripts Halhed collected provided key insights into letterforms, character frequency, kerning, and spacing. Wilkins used this information to establish foundational principles for Bengali typography. Halhed's Grammar preface shows his interest in how Bengali script was written and taught. Wilkins' understanding of Bengali letterforms, shaped by how he learned the script "divested of every superfluity" [36], informed his design of a simpler Bengali typeface than that of the traditional scribal hand. This was also easier to translate into metal type [Fig.39].



The typeface deviates from traditional handwritten Bengali by joining strokes in ways that contradict customary stroke sequences, yet it retains a calligraphic feel through contrasts in stroke thickness and diagonal stress. Its open counters, consistent spacing, and regular oblique strokes create a harmonious look, while its large size improves legibility, likely intended for students and reflecting Wilkins' limited punchcutting experience. As Wilkins gained experience in printing, his skills in Bengali typography improved significantly. On November 13, 1778, the Governor-General submitted Wilkins' application to the Council for the establishment of an East India Company press [37], where Wilkins served as Superintendent. One of the earliest examples from this press, recently discovered in Halhed's papers at the British Library, was printed with Wilkins' first font [Fig.40]. This form exhibits a higher level of typographic quality than that seen in his earlier Grammar, demonstrating the consistent and well-designed nature of the typeface.

বেদানন্দ

ইন্দুক মন পূর্ণান্না মজন্দরের বদ্রোবস্ত্র তোমাকে মকবর হইল বদ্রোবস্ত্র মজন্দরের আমানত ও দেয়ানত বাস্তি ও দকান্তি থাকিয়া পূজালোককে আপন লোক মনকে বাস্তি বাস্তিয়া আবাদ ও উবদুদ বর ওজ্ঞ কবিবে জে পূর্ব হইতে আবাদি অধিক হয় সবকারের মালগুজাৰি মাফিক বদ্রো বস্ত্র তাহার কিন্তুবাস্তি আপন দস্তখতে আপন পেষকারের দস্তখতে জে মত দস্তেৰে দিয়াছ যাহ বমাহ বর ওজ্ঞ দাখিল কবিবে দ্বি মাঙ্গল ও শ্বদ বাস্তি ও গয়বহ আবোয়াব পূজাৰ স্থানে লইবেনা আসল ও আবোয়াব সবকারের মাফলি লাগাদি মন জে আমলে আমিয়াছে তাহার মত ও মূল উহসিল কবিবে তাহা হইতে জে যাদা কিছু লইবেনা সাবেক আমলের মনয়াত বাকি পূজা স্থানে লইবেনা সবকারের শ্বদ মতে মাফলি ইজারদারেবা হাজিৰা পূজা স্থানে বে ওজ্ঞৰি জে বাকি মকাবিলি কবিয়া দিবেক তাহা ও মূলকবিয়া জেখানে শ্বদ মত হয় দাখিল কবিবে জমিন ও বাগাত ও ডালাব ও দেবস্তর ও বুজোস্তর ও মহোস্তরান ও আয়মা ও মদদমাশ ও পিবপাল ও ফকিবান ও লাখোবাজ ও দেহাত ইত্যবাব হফুরের শ্বদ মত বিনা বাজেয়াস্ত কবিবেনা এব হফুরের শ্বদ মত বিনা দ্বি কাহাকে দিবেনা আপন সবহদের পুলবাস্তি মাফিক ইত্যবাব বর ওজ্ঞ কবিবে তাহাতে গাফিল হও জে লোকমান হয় তোমার জিহ্বা আপন সবহদের সাহবাহ নিঘা বানিতে এমত খবরদার থাকিবে জে মসাহফিৰ লোক খাতিৰ জমাতে আমদ ও বস্ত্র করেচোর ডাকাতিকে আপন সবহদে জায়াগা দিবেনা ৬ নাকবেন জদি কাহার মালিয়ত চুৰি কিয়া নুট জায় চোর ও ডাকাতিকে বজনিস মাল সমেত পয়েদা কবিয়া মালিককে মাল ও চোর ও ডাকা তিকে হফুরে পশ্ছাইয়া দিবে বাজেজমা মাডোচা ও গয়বহ সবকারে মানা ও বদ্রোবস্ত্র মফুরা হইয়াছে পূজা স্থানে লইবেনা পূজালোক জে টাকি কিন্তু বাকি দাখিল কবিবেক তাহার দাখিলা এব আখিৰে মলে হিসাব বহা কবিয়া মালিয়ানা দিবে নজর ও মনামিশু ও বেহোয়াৰি পূজা স্থানে লইবেনা এব কাহাকে ও দিবেনা জদি মালগুজাৰি বাকি পড়ে তাহার আদাজ জমিদাৰি শ্বকম বিফয় কবিয়া সবকারে দাখিল কবিবে এই সকল দফাতে ডাকিদ জালিবে ইতি

37. IOR: H/207 Home Miscellaneous Series; Extract of Bengal Revenue Consultations, 13 Nov, 1778, pp. 463-474.

38. Fiona Ross, *The Evolution of Printed Bengali Characters from 1778 to 1978*, London 1988, p. 65

Fig.40. Blank printed with Wilkins 1st typeface

The Grammar also includes an engraved reproduction of a Bengali petition [Fig.41] alongside its printed version, which highlights the distinction between calligraphy and typography. The copperplate engraving accurately reflects the original manuscript, differing primarily in the formation of vowel signs. The version printed from type follows the calligraphic layout, including end-of-line rules, though the inter-word spacing differs. However, the character shapes in the type bear little resemblance to those in the engraved manuscript [38]. The type used on page 209 seems to be a second incomplete typeface [Fig.42], different from the one used for the rest of the Grammar. The 2nd being smaller, having a strong headline and more uneven texture. Two more fonts were known to be designed and executed under Wilkins. The 3rd, around 1800 and the 4th did not appear until 1811 in the first book printed in Europe in Bengali Characters [Fig.43].

Wilkins' Bengali types were not initially designed to provide the local population with vernacular texts. Instead, his task was to create types for teaching foreigners to read Bengali, a language in which he had only basic proficiency. Halhed's Grammar reflects this goal, as indicated by the phrase "ফিরিঙ্গিনামুসকারার্থ" (for the benefit of foreigners). However, subsequent Bengali fonts demonstrate the lasting influence of A Grammar of the Bengal Language on Bengali typefounding. The phoneme shapes used in this work set the foundation for future fonts and played a key role in the development of printed Bengali characters.

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আমার জামিনার পরগনে কাকডোন
 তাহার দুই গুম্বা পরিয়া শিকিণ্ডী ইয়াছে
 সেই দুই গুম্বা পরগনী ইয়াছে চাকলে একরপূরের
 দুই হরেকুম্বা চৌধুরি আজ রায় জবরদস্তী দখল করিয়া
 ভোগ করিতেছে আমি মানসুজারির শরবরাহতে
 মারাণ্ডিতেছি ওয়েদওয়ার জে শরকার ইহতে আমি
 ও এক চোপদার শরজমিনতে পহুচিয়া ভোরজেনকে
 তলব দিয়া নইয়া আদানত করিয়া হকদারের হক দেনায়া
 দেন ইতি শন ১১৮৫ শনি তারিখ ১১ শিবন

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Bb

Translation.

BENGALI GRAMMAR.

তুমি এক রকুর্ভে আমার গলা বন্ধন করিয়া আমাকে মশরীরে সেই
 রাতার নিকট লইয়া যাও এবং তাহাকে কহ যে তুমি যে ব্যক্তির
 মস্তকের ত্রন কহিয়াছিল তাহাকে আনিয়াছি তোমার সাহায্যে তাহার
 মস্তক ছেদন করিয়া দিব । ইহা শুনিয়া রাতা যদি কবুল করেন
 তবে তৎক্ষণাৎ আমার শরীর হইতে মস্তক পৃথক করিয়া দিবা ।
 যদি মস্তক না লইয়া আর কোন কিছু চাহেন তাহা আমি আয়োজন
 করিয়া দিব ॥

*Do you, having bound my neck with a rope, take me personally
 into that King's presence, and say to him ; " The person about
 whose head you spoke, him I have brought unto you ; in your
 presence I will cut off his head. On hearing this, if the King
 should approve of it, that instant cut off my head from my
 body ;"—but if he, not having taken my head, should require any
 other thing whatsoever, that having made ready, I will give
 unto him.*

279. When the verb যাইতে is conjugated with the Conjunctive
 Past Participle, the compound verb has very much the same
 force as an English verb followed by the words off, or away ;
 as, লইয়া যাও carry off, in the foregoing passage, and in
 লইয়া গিয়া in the following one.

Example.

কিন্তু তুমি আমাকে রাতার নিকট লইয়া গিয়া আমার বিদ্যার
 পরিচয় দেও ।

*But do you, having carried me away into the King's presence,
 try my medical skill.*

- Fig.41. Engraving of the Bengali cursive hand by Wilkins; Halhed, Grammar, plate facing p. 209
- Fig.42. Second font of Bengali types produced by Wilkins; Halhed, Grammar
- Fig.43. Wilkin's 4rth font: Bengali text; Haughton, Rudiments of Bengali Grammar

Second Wave: The Missionaries in Bengal

Serampore Mission Press

The largest contribution to the development of Bengali vernacular typography during the nineteenth century was made, albeit unintentionally, by the missionary bodies who were active in India during this period. Printing in Bengali had started in 1778, yet printing for the Bengali native population was neglected and slow. 22 years after that, in 1800, The Missionary Press at Serampore began its work against these odds. The Serampore Mission Press played a pivotal role in bringing numerous Indian languages and scripts into printed form, which had previously been neglected by the Honourable Company's Press.

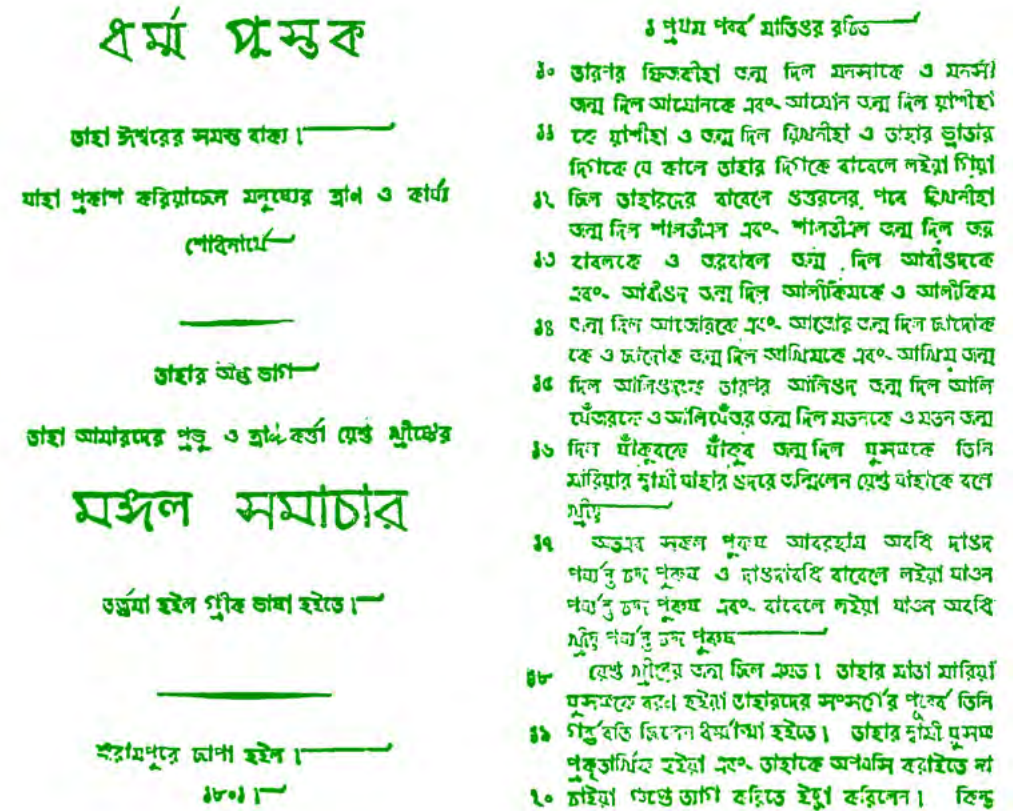
The mission's primary goal of spreading Christianity in India required mastering the vernacular languages and printing the Scriptures in local scripts. William Carey, who arrived in Kolkata in 1793 under the Baptist Mission's auspices, joined forces with Joshua Marshman and William Ward [39] in 1800 to establish a printing press in the Danish settlement of Serampore. Under Ward's supervision, the press began printing on March 5, 1800, and its first book, *Dharma Pustak: Mangal Samachar*, was published in 1801, using a typeface cast in Kolkata by Panchanan Karmakar [Fig.44].

39. William Ward apprenticed to a Derby printer and bookseller Dreyry, established a business as a printer, and was for some time editor of the Hull Advertiser. He later joined the Baptist mission Comitee in 1798, answering his call to help William Carey in his Mission in India. He sailed for India in 1799.

40. Fiona Ross, *The Evolution of Printed Bengali Characters from 1778 to 1978*, London 1988, pp. 111-114.

41. *Memoir Relative to the Translations* (1808), pp. 18-19.

Fig.44. First Serampore Bengali font by Panchanan Karmakar: *Dharma Pustak; Mangal Samachar* (Serampore, 1801)



While the 1st Serampore type was not a significant improvement over the 3rd font of Wilkins, Panchanan Karmakar's contribution to early Bengali punchcutting was substantial [40]. Although neither Halhed nor Wilkins mentioned any native punchcutter, artisan or smiths in their process of making the first Bengali type, it can be very well assumed that such a daunting task would have been impossible to complete, especially in such a small time frame without the involvement of native skill. And this often forgotten skilful punchcutter is Panchanan. The missionaries later commented: "Soon after our settling at Serampore, the providence of God brought to us the very artist who had wrought with Wilkins in that work, and in a great measure imbibed his ideas. By his assistance we erected a letter foundery; ...carry forward the work of type-casting, and even of cutting the matrices, with a degree of accuracy which would not disgrace European artists." [41]

Panchanan's first major project at the Serampore Mission was creating a Devanagari typeface for William Carey's Sanskrit grammar, requiring 700 separate punches. To assist him, Panchanan trained an apprentice, Manohar, who later became his son-in-law and successor as the master typefounder, working for more than 30 years at the Mission [42].

The missionaries continued developing new type designs that significantly improved Bengali typography. Their refusal to settle for just one typeface per non-Latin script set an important precedent for the growing number of typefoundries in the Indian subcontinent. After 1820, the Serampore Mission produced two notable Bengali text faces. The earlier of the two, used in the *1829 Dharma Pustak* (Bengali Bible), marked a step towards achieving an optimal type size for both economy and legibility, with improved consistency in stroke weight and appealing diagonal stress for a dynamic effect. The rounded "blob" details on characters like অ, ই, ক, ত, ন etc added vibrant points of interest. Experimentation was encouraged, leading to a modified version of this, seen in the *1832 Dharma Pustak; Antabhog (New Testament)* [Fig.45]. This version featured a redesigned

১৪ পর্বে।

আমাকে তোমরা এঅবধি আর দেখিতে পাইবা না।

১৪ পর্বে।

[১] পরে মন্দিরহইতে যিহূদয় প্রস্থানকরণময়ে তাঁহার শিষ্যেরা সে ঘরের গাঁধি তাঁহাকে দেখাইতে আইল। [২] সে দময়ে যিহূদ তাহারদিগকে কহিলেন তোমরা এ সকল কি দেখে না তোমারদিগকে মত্কা আমি বলি যাহা ভাঙ্গা যাইবে না এ মন প্রস্তর প্রস্তরের উপরে থাকিবে না। [৩] তারপর যিহূদ জিতবুরুপর্ষভের উপরে বনিলে তাঁহার শিষ্যেরা তাঁহার নিকটে গুপ্তে আসিয়া বলিল আমারদিগকে কহ যে এ সকল বিষয় কখন হইবে ও তোমার আসিবার চিহ্ন এবং জগতের শেষের চিহ্ন কি হইবে। [৪] যিহূদ প্রত্যুত্তর করিয়া তাহারদিগকে কহিলেন সাবধান কোন মনষ্য যে তোমারদিগকে না ভীতায়

ষণা করিতে হইবে তার পর শেষকাল হইবে। [১৫] অতএব যে বিনাশকারি বস্তুর বিষয়ে দানিয়েল আচাৰ্য্য কহিল যে জন পাঠ করে সে বৃদ্ধক। [১৬] তোমরা সে বস্তু পথিত্ব স্থানে স্থাপিত যখন দেখে তখন যাহারা যিহূদাহুদেশে আছে তাহারা পর্ষভে পলাউক। [১৭] যে জন ঘরের ছাতের উপরে থাকে সে ঘরহইতে কোন বস্তু লইতে না নামুক। [১৮] যে কেহ ক্ষেত্রে থাকে সে আপন বস্তু লইতে না ফিরুক। [১৯] কিন্তু যাহারা গভবতী ও যাহারা সে কালে স্তনপান করায় তাহারদের সন্তাপ হইবে। [২০] ও প্রার্থনা কর যে তোমারদের পলায়ন বর্ষাকালে কিয়া শাবত দিনে না হয়। [২১] কেননা যেমত জগতের আরম্ভাবধি এ কাল পর্যন্ত হয় নাই এবং কদাচও হইবে না এমন বড় দঃখ সেকালে হইবে। [২২]

১৮। ১৯ পর্বে।

মোশহেতে রচিত আদিপুস্তক।

দেখ করিল কিন্তু অবরাহাম তখনও যিহূদের নে কহিল দেখ আমার প্রভুরা আপনাদের নামের ঘরে প্রবেশিয়া রাত্রি আশ্রয় করুন ও আপনাদের পাদপ্রক্ষালন করুন পরে শ্রান্ত কালে উঠিয়া পথে প্রস্থান করিবেন তাহাতে তাঁহারা কহিলেন যে না কিন্তু আমরা রাত্রি রাত্রিতে শ্রবাস করিব। [৩] পরে লোট তাহারদিগকে বিশ্বর আগ্রহ করিল তাহাতে তাহারা তাহার ঘরে তাহার নিকটে আইল। পরে সে তাহারদিগের কারণ ভোজ্য প্রস্তুত করিল ও বেখমির রুটি পাক করিল ও তাহারা তাহা খাইল। [৪] কিন্তু তাহারদিগের শয়নের পূর্বে নগরের মনুষ্যেরা অর্থাৎ সন্দোমের মনুষ্যেরা আবেলবুদ্ধ সকল অঙ্কলের সকল লোক ঘর খেলিল। [৫] পরে তাহারা লোটকে ডাকিল ও তাহাকে কহিল যাহারা অন্য রাত্রিতে তোমার নিকটে আসিয়াছে সে লোকেরা কোথা তাহারদিগকে আমায়দিগের নিকটে বাহির করিয়া আন যে আমরা তাহারদিগকে দেখি। [৬] পরে লোট দ্বারের বাহির হইয়া তাহারদিগের নিকটে গেল ও আপনাদের পরেতে দ্বার রুদ্ধ করিল। [৭] পরে বলিল হে আমার ভাইরা এমন সংহার করিবা পরে তিনি বলিলেন যদি পরিত্যাগ করিয়া করিও না। [৮] দেখ অজ্ঞাতপুরুষ

The missionaries continued developing new type designs that significantly improved Bengali typography. Their refusal to settle for just one typeface per non-Latin script set an important precedent for the growing number of typefoundries in the Indian subcontinent. After 1820, the Serampore Mission produced two notable Bengali text faces. The earlier of the two, used in the *1829 Dharma Pustak* (Bengali Bible), marked a step towards achieving an optimal type size for both economy and legibility, with improved consistency in stroke weight and appealing diagonal stress for a dynamic effect. The rounded "blob" details on characters like অ, ই, ক, ত, ন etc added vibrant points of interest. Experimentation was encouraged, leading to a modified version of this, seen in the *1832 Dharma Pustak; Antabhog*

42. M.H. Khan, *Printing in Bengali Characters*, I, pp. 379-380 and II, pp. 466 and 467

Fig.45. *Dharma Pustak; Antabhog (New Testament)*, Serampore, 1832

Fig.46. *Dharma Pustak (Holy Bible in Bengali)*, Serampore, 1832

(New Testament) [Fig.54]. This version featured a redesigned 'o' better raphala positioning, and refined vowel subscripts, resulting in more even text colour. However, while this version appeared neater, it deviated from traditional Bengali calligraphy and indigenous punchcutting styles, aligning more with European typographic ideals.

The typeface used in the 1832 *Dharma Pustak* (Holy Bible in Bengali) [Fig.46] shows the significant progress made by the Serampore Mission Press over three decades. Smaller than its predecessor discussed above, this typeface abandons diagonal stress in favour of a more consistent design, characterized by thick headline strokes and an even baseline. The thick downstrokes of certain characters, like Ba 'ব' and Ka 'ক', provide balance and contribute to its clean, crisp appearance.

The Serampore typefoundry also improved its metal heading types. By the 1830 *Ramayan* [Fig.47] edition, the missionaries had replaced the crude titling font seen in earlier works, such as the 1801 *Mahabharat*, with a more refined and smaller heading type. This new face more closely resembled handwritten Bengali forms, and the use of woodcut titles in later prints suggests a growing awareness of the differences between the contemporary handwritten script and the printed forms produced by punchcutters. Between 1801 and 1832, the Serampore Mission Press published over 212,000 volumes in 40 languages [43], reflecting the missionaries' focus on producing large quantities of material for the indigenous population. While their translations faced criticism, the quality of their typography remained largely unquestioned. The missionaries prioritized speed, economy, and readability in their imprints rather than refining type design. Although improvements were aimed at enhancing legibility or reducing costs, advancements in text face design were modest given the long time span and the reputation of the Serampore Type Foundry.

Overall, their Bengali imprints display mediocrity in design, driven by necessity rather than typographic excellence. Nonetheless, their achievements in printing were significant.

43. George Thomas, *Missionary Typography in Bengal: The Serampore Press and the Spread of Print Culture*. Routledge, 2011, pp. 58-61.

Fig.47. [A]. Small Bengali heading in the title page of *Ramayan*, Serampore, 1830
[B]. Enlarged section of the inside text with the small cut heading.

47

[A]

THE
RAMAYUN ;
TRANSLATED INTO BENGALEE.
By KRITTEE-BAS.
BOOK I.
SECOND EDITION.
বাল্মীকিকৃত
রাঘায়ণ
কৃত্বিবাসঃ কর্তৃক গোড়ীয় ভাষায় রচিত
দ্বিতীয়বার ছাপা।
প্রথম কাণ্ড।
SERAMPORE: ঐরামপুর
1830. ১৮৩০।

[B]

রাঘায়ণ ।

শ্রীকৃষ্ণচন্দ্রায় নমঃ ।

অথ আদ্যাকাণ্ডমভিলিখ্য

গোলোক বৈকুণ্ঠ পুরী সভাকার ৭
নগ্নীসহ তথায় আছেন গদাধর ॥
তথায় অদ্ভুত বৃক্ষ দেখিতে সুচারু ।
যাহা চাই তাহা পাই নাম কল্পতরু ॥
দিবা নিশি সদা চন্দ্র সূর্যের প্রকাশ ।
তার তলে আছে দিবা বিচিত্র আবার
নেতপাট সিংহাসন উপরেতে জুলি ।
বীরাসনে বসিয়া আছেন বনমালী ॥
মনেই প্রভুর হইল অভিনাষ ।
এক অংশ চারি অংশে হইব প্রকা
শ্রীরাম ভরত আর শত্রুঘ্ন লক্ষ্মণ ।
এক অংশ চারি অংশে হইল নারায়
লক্ষ্মীনার্ভি সীতা দেবী বসেছেন বামে ।

The Baptist Mission Press

The *Calcutta Baptist Missionary Society*, founded in 1817 by William Yates, Eustace Carey, and John Lawson, sought independence from the Serampore Mission Press and established its own press in 1818. Despite early opposition from the Serampore Brethren, William Pearce set up the printing office using Bengali type initially sourced from Serampore. As demand grew from organizations such as the Calcutta Bible Society and the Calcutta School Book Society (founded 1817), the Baptist Mission Press acquired types and materials from various sources, including Figgins [44] and other type foundries.

Recognizing the need for self-sufficiency, the press soon established its own type foundry, with Lawson applying his punchcutting skills to supervise the production of new fonts. In 1826, the press published a Specimen of Printing Types containing seven Bengali typefaces, most of which were produced at the press's own foundry. These fonts displayed distinctive designs, with differences that went beyond the usual modifications for size adjustments. The Bengali types created or acquired by the Calcutta Baptists, especially specimen nos. I [Fig.48], II [Fig.49], III, and IV, reflect an intentional effort to bridge the gap between Bengali handwriting and printed typography—a gap that had been initially overlooked by the Serampore Mission [45]. The letterforms in these fonts adhered closely to the stroke sequences of traditional penned forms, showing a strong connection to Bengali calligraphy, in contrast to the ones from Serampore as well as Baptist Mission Press V and VI, which require the pen to be lifted prior to the formation of the upright stroke, in fact the vertical stroke is an upstroke. These two styles are illustrated in [Fig.50], where A can be described as a 'constructed' letterform, and B and C are written letterforms in that they do not contravene the customary stroke sequence of the penned hand.

44. Vincent Figgins, British Typefounder, was an apprentice with Joseph Jackson, creator of Pica Bangali, discussed later in the chapter

45. Fiona Ross, *The Evolution of Printed Bengali Characters from 1778 to 1978*, London 1988, pp. 70, 143

Fig.48. *Bengalee No. I*; Specimen of Printing Types in Use at the Calcutta Baptist Mission Press. This design is attributed to Kalikumar Ray.

Fig.49. *Bengalee No. II*; Specimen of Printing, Large fount' designed to print spelling tables for the Calcutta School Book Society.

Fig.50. Structural differences due to the penning sequence of the letter-forms

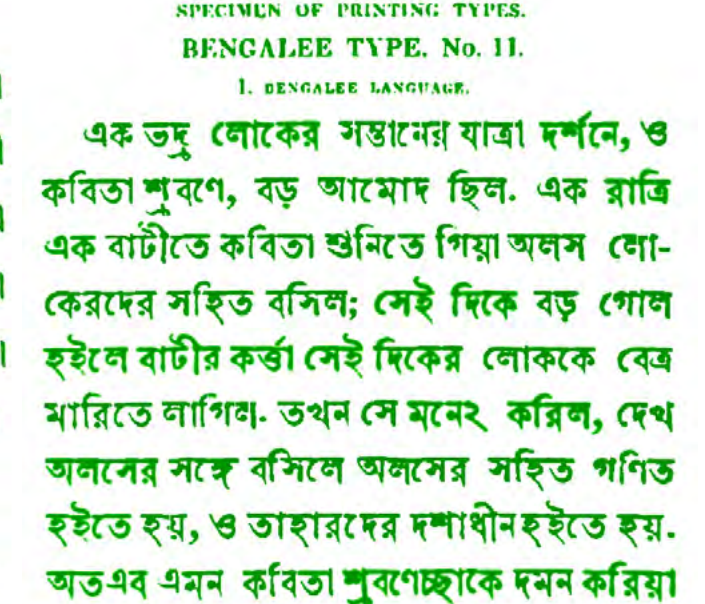


48



50

A



49



B



C

The most striking and innovative of the Bengali typefaces produced by the Baptist Mission typefoundry is Bangalee No. III [Fig.51], which breaks away from the standard horizontal headline typical of Bengali printed characters. Instead, it incorporates a curved stroke reminiscent of handwritten forms, creating a dynamic and fluid effect enhanced by a change in stroke direction as described in [Fig.50]. The conjuncts are designed as individual sorts, maintaining a consistent depth with other characters, resulting in a well-balanced overall typeface.

Despite its unique curvilinear design and careful construction, Bangalee No. III did not gain widespread use. This may be attributed to uneven printing quality, likely caused by loose printing or poor justification in casting, which led to an inconsistent appearance on paper. Additionally, the poor positioning of subscript vowel signs required more generous line spacing, making the typeface impractical for regular text use.

শ্রীশ্রীপরমেশ্বরো জয়তি ।

এতদেশি বিষয়ি নোকেরা স্বকীয় ভাষার মুদ্রকপে লিখনে ও শব্দার্থবোধে ও নানা দেশীয় বিবরণ জানে পায় অনেক অপটু হিলেন। তাঁহার কারণ এই যে সংস্কৃত অসংস্কৃত নোকের বিগের মুদ্র লিখন ও শব্দার্থবোধ দুইট এবং বালক কানাবধি স্ব শিক্ষকের নিকট মুদ্র লিখন পাঠনাড়ি হইলে ও তৎসংস্কার বশতঃ নোকেরা মুদ্র লিখনাদি ক্ষম্য হইতে পারেন পূর্বে তাহা ও অতুল্য হিন এবং বঙ্গ ভাষাতে দেশ বিভাগ বিবরণার্থে কোন পুস্তক ও রচিত হিন না সুতরাং এতদেশীয়েরা মুদ্র লিখন ও শব্দার্থবোধ ও অন্য দেশবৃত্তান্ত জানে অপটু পায় এবং জঘাঙ্ক সদৃশ হইয়া অথকরী কিকিদিদ্যোপার্জন দ্বারা ধনোপার্জন করিয়া কাল ক্ষেপ করিতেন।

এবং এতদেশীয় পণ্ডিত কর্তৃক মুদ্রিত পুস্তক ও পুচলিত হিন না যে শুভমুদ্রিত পুস্তক বর্ণানুসারে তাঁহার মুদ্র লিখনাদিতে ক্ষমাতাপন্ন হইলেন। পরে শ্রীগুরু ইন্দ্রধায় নোকেরা মুদ্রিত পুস্তকের পুচার করিলে ও এতদেশীয়েরা তৎপথপুস্ত হইয়া কামনাবধিক নানাবিধ রতমঞ্জরী বিদ্যাসুন্দর কামশাস্ত্র পুচার করিয়া বালকের-

এক কষক মরণ
আমার দুষ্কা
লে, তাহার অ
য়া গুপ্ত ধন পা
ন স্থানে ধন
য়া কছেন নাই;

Fig.51. *Bengalee No. III*; Specimen of Printing. Calcutta Baptist Mission Press. On the right is a magnification of the text sample.

46. Richards, *Missionary Print Culture in Colonial Bengal*, p. 102

Bishop's College Press

Another notable press and typefoundry associated with a missionary institution was the one established by Bishop's College, founded by Bishop Thomas Fanshawe Middleton at Sibpur in 1820. The College's first printer, Henry Townsend, arrived from England in 1823 with a press, types, and other printing materials, setting up a printing house committed to producing high-quality vernacular imprints, regardless of their content or purpose. This approach, unlike other mission presses that focused exclusively on religious materials, was passed down to Townsend's successors, becoming a defining feature of the Bishop's College Press [46].

Early Printing by Locals

At the birth of printing in Bengali, the growth and setting up of indigenous foundries and native press were very sluggish as it required a vested interest from the British Company, influencing the Political and religious settings. But it caught up in the later half of 19th Century with a most prominent example of Girish Vidyaratna Press (1856 - 1866) whose imprints exhibit the characteristics of Bengali type design peculiar to Indigenous designers.

Despite the often-overlooked contributions of native artisans like Panchanan Karmakar, Manohor Karmakar, and Krishnachandra Karmakar, Bengali typefaces crafted locally differed significantly from those produced by foreign residents in Bengal. Foreign-designed types exhibited a more rigid, constructed look, unlike the fluidity of traditional Bengali calligraphy as showed in [Fig.50]. This distinction arose from differences in design models, tools, and materials. Local craftsmen, influenced by decorative manuscripts but constrained by metal and a lack of experience in steel punchcutting, often adopted European type norms. Additionally, foreign clients, familiar with Charles Wilkins' fonts, preferred established, standardized designs. Girish Vidyaratna Press found success emulating the chirographic metal style of Kalikumara Raya, created for the Baptist Mission Press [Fig.54].

Early native type foundries mirrored European approaches, creating a gap between handwritten and printed forms. Though the intent was initially to mimic calligraphy, Bengali printed type gradually evolved into an art form distinct from traditional lettering. Pioneers like Charles Wilkins and William Carey, with limited typefounding knowledge, faced considerable challenges due to the complexities of Bengali phonology. For native founders, casting and composing Bengali script proved even more challenging than the Latin alphabet. Then there was also the problem of standardisation of alphabets and sorts, which was addressed in two very prominent works by the founders of Sanskrit Press [48], Madanamohan Tarkalankar and Iswar Chandra Vidyasagar, being Sishusikhya [Fig.55] and Varnaparicaya [Fig.27] respectively. Vidyasagar had contributed extensively in standardising the consonants and classifying several sorts into conjuncts, which are still in

হুৰ্ভেত্ত তমসাবরণ এখন সকলকে সমানভাবে আচ্ছন্ন
করিয়াছে। এখন চেষ্টার তেজ নাই, উত্তোগে সাহস
নাই, মনে বল নাই, অপমানে ঘৃণা নাই, দাসত্বে অকুচি
নাই, হৃদয়ে প্রীতি নাই, প্রাণে আশা নাই; আছে
প্রবল ঈর্ষা, স্বজাতিদেষ, আছে হুর্বলের 'যেন তেন
প্রকারেণ' সর্বনাশ-সাধনে একান্ত ইচ্ছা, আর বলবানের
কুকুরবৎ পদলেহন। এখন তৃপ্তি ঐর্ষ্য-প্রদর্শনে, ভক্তি
স্বার্থ-সাধনে, জ্ঞান অনিত্যবস্তুসংগ্রহে, যোগ পৈশাচিক
আচারে, কর্ম পরের দাসত্বে, সভ্যতা বিজাতীর অহুকরণে,
বাগ্মিত্ব কটু-ভাষণে, ভাষার উৎকর্ষ ধনীদেব অত্যন্ত
চাটুবাদে বা জঘন্ত অশ্লীলতা-বিকিরণে। ৬।২৪০

practice today. This 'simplified' character set, which was used to typeset his works, became known as the 'Vidyasagar sort' [49].

Initially, typefoundries and presses in Bengal operated within the same establishments. However, as Kolkata became a key printing hub in South Asia, independent indigenous foundries emerged, supplying presses with Bengali type, typically using a 510-character set. Although the quality of typefoundry products has improved over the past two centuries, the design of Bengali types for text has remained largely unchanged.

48. Founded in 1847; there were several Sanskrit Presses at this time.

49. Benoy Bose, *Iswar Chandra Vidyasagar* (Delhi, 1965), p. 147; see also Asok Sen, *Iswar Chandra Vidyasagar and his elusive Milestones* (Calcutta, 1977), pp. 23-28, 148

Fig.54. Type sample of Girish Vidyaratna Press

[১৮]

ক্ষুধিত জনে ভোজন করাইবে।
বিবাদ করা ভাল নয়।
কাহারও গায় হাত তুলিও না।
শুশীলকে সকলে ভাল বাসে।
কদাচ মিছা কথা কহিও না।
কাহার কিছু চুরি করিও না।
কথায় কথায় শগৰু করিও না।

পিতা মাতার সেবা কর, তাঁহার
বাধা কহিবেন তাহাই করিবে। গুরু
লোকের উপদেশ অবহেলা করিও
না। সাহার তোমার একপাঠী তাহা
দের সহিত কখন কলহ করিও না
কাহাকেও কষ্ট কথা কহিও না।

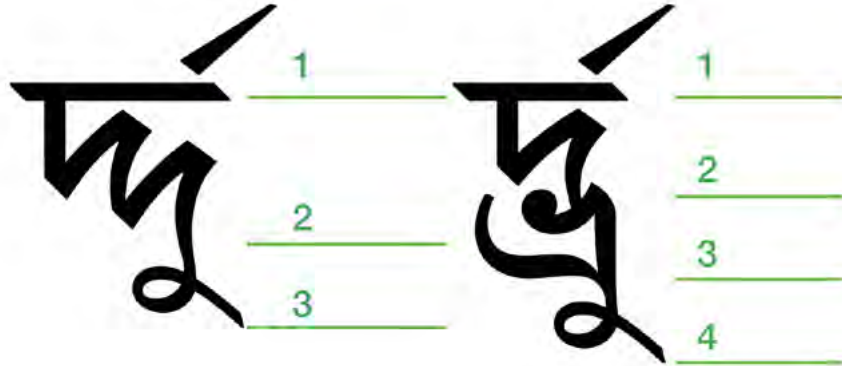
সকলকেই ভাল বাসিবে ও ভাল
কথা কহিবে, যে জন যে কথায় যত
পাঁড়া পায় তাহাকে তেমন কথা
কহিবে না। কাণাকে কাণা, খোঁড়া

[১৯]

খোঁড়া বলিও না, তাহা বলিলে তাহার
মনে দুঃখ পাইবে। পড়িবার সময়ে
আর দিকে নম দিও না। যিনি তোমা-
কে শিক্ষা দেন সাবধানে তাঁহার কথা
মনে রাখিবে, এবং তিনি যে বিষয়ে
নিবেদন করেন কদাচ তাহা করিও না।

মেঘ হইতে জলধারা পড়িতেছে,
এখন ঘরের বাহিরে যাইব না। আমার
গা ও পা ভিজিয়া যাইবে, শীত করিবে
এবং অবশেষে কক কাসী হইয়া বড়
পাঁড়া পাইব। মেঘের ভিতর হইতে
আলো বাহির হইয়া আমার চক্ষে
নাগিতেছে, জানালায় কপাট দি।
উঃ! মেঘের ডাকে কান কাটিয়া যায়।
আলো বাহির হইতেছে আবারও
বুঝি বেশ ডাকে, চক্ষু বুজিয়া থাকি,
কান ঢাকিয়া রাখি এবং মাঝের কুঠ

56



50. S. K. Ray, *The Story of Typography in Bengal*, Seagull Books, Kolkata, 1990.

Fig.55. Bengali text; *Shishushikhsya* (Kolkata, 1864)

Fig.56. The figure shows two consonant conjuncts with vowel mark uMatra on bottom and Reph attachment on top, creating 3-4 tier stacking shown with Linotype Bengali

Problems in Bengali Handset Metal Type

No definitive character set had been established for Bengali composition, and even simple texts required several hundred sorts. The time and cost of engraving so many punches limited the variety of weights and sizes, and hence also the variety in styles. Wilkins' first Bengali fount was reduced to 170 sorts by reusing common components, while later indigenous designs expanded the set to over 500 sorts, including frequent conjuncts and combinations with raphala.

The joining nature of the script did not pose as great a problem as the three to four-tier nature of the writing system [Fig.56]. The difficulties this system imposed were overcome to some extent by reducing the so-called x-height of the basic consonants, and setting half-bodied, or quarterbodied, characters above or below these to attach vowel signs and compose conjuncts not available as one sort. The fit was often far from satisfactory and the process was cumbersome for the compositor [50]. The half-bodied characters and the difficult kerning characters also necessitated a large amount of interlinear spacing. Composing was therefore a complex and time-consuming business, in term, making it more costly and difficult to set up a new press.

Rise Of Linotype Bengali

Introduction of Machine-set Linotype Bengali

Sires Chandra Majumdar of Sri Gouranga Press, proprietor of Ananda Bazar Patrika, spearheaded the implementation of Bengali on a Linotype machine. In the 1930s, Indian newspapers sought to shift from slow flat-bed presses to faster rotary presses. However, vernacular printing faced challenges as stereotyping, required for these presses, put immense pressure on the delicate kerns and interlocking features unique to Indian vernacular foundry types. The design of the initial Linotype Bengali typefaces [Fig.57] was closely tied to the casting scheme, making it hard to separate the two. Despite technical

Shortcomings of the Linecaster

The Linotype linecaster, designed for Latin scripts, revolutionized typesetting by combining type casting, setting, and justifying in a single operation, significantly speeding up the process. However, it faced limitations with non-Latin scripts like Bengali as it was primarily designed for Latin. Due to mechanical limitations, the character set had to be reduced to 90 sorts, and the kerning, vowels and the placing of subscript and superscript marks could not be achieved. [Fig.59] shows the deficiencies of the Linotype typesetting in Bengali script, compared with Bengali handwriting. The main issues arose with vowel signs like ি (i) and ি (ii), which could not kern, and subscript vowel markers like ু (u) which couldn't be positioned correctly. To address the significant reduction in the character set, only the most common conjuncts were assigned to the keyboard, while the rest were created using components called half-forms [52]. This approach led to text that often differed significantly from handwritten Bengali and earlier foundry type, as most Bengali conjuncts deviate from the shapes of the original consonants. Traditionally, conjuncts are formed by subscribing one consonant to another, but with Linotype, this wasn't possible, as half-forms could only be placed side by side. [Fig.60] shows conjunct 'ntra' created with half-forms, in comparison with the traditional shape.

চীন যুদ্ধ বিরতির
সিদ্ধান্ত নিয়েছে

59

[A]

চীন যুদ্ধ বিরতির
সিদ্ধান্ত নিয়েছে

[B]

As Fiona Ross pointed out: 'the new technology signified that the mass production of printing vernacular literature had become commercially viable, but the cost in typographic terms amounted to the greatest divergence from handwritten Bengali character since Charles Wilkins and a future readership unable to recognize orthodox letterforms' [53].

মন্ত্রী মন্ত্রী
৬০ ত্র = ত + র ত্র = ন + ত্র

52. A half-form is usually a reduction of the initial element of a consonant conjunct, with no space on the right, to place against the following glyph that could be a letter or another half-form.

53. Fiona Ross *The Evolution of Printed Bengali Characters from 1778 to 1978*, London 1988, p. 377

Fig.59. Comparison of hot metal Linotype Bengali [A] and digital photocomposition Linotype Bengali [B], where the problems of kerning and superscripts alignment were solved.

Fig.60. Example of conjunct ntra build up with components in hot-metal typesetting



প্রথম কাজ আরম্ভ করিয়াই উলাপুর গ্রামে পোস্ট-
মাস্টারকে আসিতে হয়। গ্রামটি অতি সামান্য।
নিকটে একটি নীলকুঠি আছে, তাই কুঠির সাহেব
অনেক জোগাড় করিয়া এই নূতন পোস্টআপিস [A]

প্রথম কাজ আরম্ভ করিয়াই উলাপুর গ্রামে পোস্ট-
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অনেক জোগাড় করিয়া এই নূতন পোস্টআপিস [B]

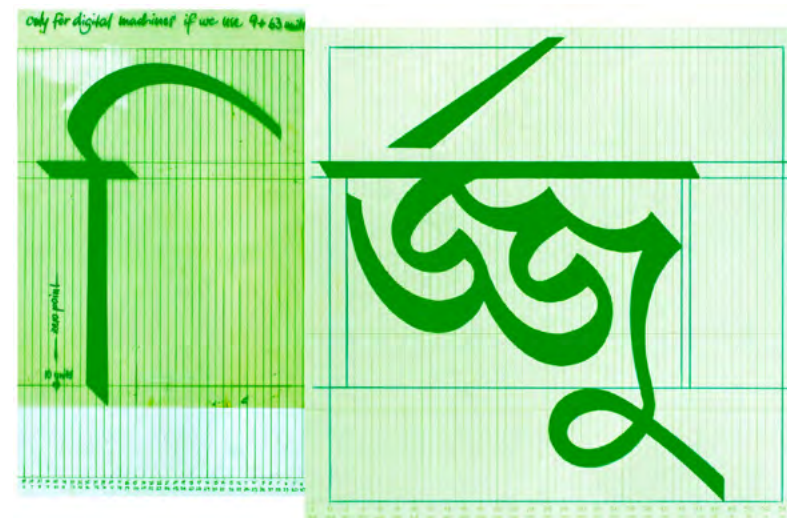
57. Note by Tim Holloway enclosed with some drawings sent to Linotype for frisket cutting on 10 February 1981. F. Ross, *The printed Bengali character*, p. 207

- Fig.64. Front page of the daily Anandabazar Patrika typeset on Linotron 202, 4 June 1983. Non-Latin TC, DTGC
- Fig.65. Linotype Bengali justified text, samples, 36 pt. 1991. Non-Latin TC, DTGC.
- Fig.66. [A]. Finished inked letter-drawing on film for vowel sign *i* of Linotype Bengali; on the back the 54 units grid; ca. 1980. Non-Latin TC, DTGC.
[B]. Inked letter-drawing on paper for Linotype Bengali by Tim Holloway, 1979. Non-Latin TC, DTGC

ative freedom than previous technologies but was still limited by technical constraints. All characters had to be drawn on a 54-unit grid within the em-square, with an additional 9 units reserved for kerning. However, this kerning allowance was insufficient for ি (vowel signs *i*) [Fig.64] and িী (vowel signs *ii*). To address this, the ি (ikar) was offset by 9 units in addition to the kerning. As Tim Holloway explained, characters ব (ba) and ত (ta) were used as spacing guides for the rest of the alphabet, ensuring a balanced look between ‘ব...ব’ and ‘ত...ত’ [57].

Anandabazar Patrika began using the new typeface in the spring of 1981 [Fig.65]. The ABP group was pleased with the outcome, though the difference from the previous hot-metal Bengali No. 2 was so significant that it can be considered an entirely new design.

One of the most significant differences in the new typeface, compared to the previous hot-metal version, is the redesign of the vowel signs. The hooked ascender of the ikar (ি) benefits from the generous kerning possible in photocomposition, and the aakar (িী) was restored to its traditional form with an upstroke above the headline. This upstroke is consistently applied across all characters with a similar right-hand structure, including the loop of the iikar (িী), which was designed to connect with the upstroke, mimicking a common calligraphic practice [Fig.66].



The Scope for A New Design

Aiming for Diversity

There is a clear lack of diversity in the available Bengali text typefaces in terms of the design language, as the design for Bengali text has been very homogenised over the last 4-5 decades. On the contrast, the vernacular world has always been diverse and rich with different stylistic expressions of the writing and lettering, mainly used in display context [Fig.67]. So the main question that arises from the designer's perspective is 'How to design an original and new design for Bengali text typeface when an entire generation has essentially been exposed to only one style?'

This is also the right time to question what is originality. In my opinion, it doesn't always have to be always drastically different in terms of the design language only. The lack of variety may have also arisen from technological limitations till post-script and subsequently lack of active involvement of the native population in designing Bengali. This cultural nuance could have been exaggerated by the lack of standardisation in the script itself, especially in the case of conjunct characters and how the vowel marks attach to the main glyphs. This drastically changes the texture of the text composed. After Linotype Bengali became popular among the major publication houses, a whole trend of clone fonts in its model appeared.

According to Vaibhav Singh [58], the development of typesetting software in India has largely been driven by IT and engineering departments with a focus on technical solutions, often sidelining design and typography considerations [59]. As a result, the industry tends towards cloning designs, as economic factors often take priority over typographic quality and research.

58. Dr. Vaibhav Singh is an independent typographer, typeface designer and visiting Research Fellow in Typography & Graphic Communication at the University of Reading, working in Indic scripts

59. Email to the author, 9 August 2014, R. Olocco, *Linotype Bengali and the digital Bengali typefaces*, UOR, 2014, p. 19



Fig.67.

Hand painted signages in Bowbazaar Street, Kolkata 1945

The era of Clones

A glance at the font libraries of major Indian typesetting software vendors [Fig.73][Fig.74] reveals a noticeable imbalance: there is a large variety of display typefaces, but very few designed for continuous text. On closer inspection, it's surprising how similar these few Bengali text typefaces are, all resembling the digital Linotype Bengali. The same could be said for the text typefaces in use in Bangladesh. Type Designer Jacob Thomas [60] says, “virtually every Bangladeshi book and newspaper that’s been printed over the last thirty years has used a clone of Fiona Ross and Tim Holloway’s 1981 ABP Linotype Bengali design”[61]

For the argument, I’m selecting Shree Lipi 550(C), Summit Geetanjali (D) and SutonnyMJ(E) for a comparative analysis. I have also shown Figgins Pica(A), representative of Pre-1930 foundry faces to compare it with Linotype Bengali(B). [Fig.68] Shree Lipi 550 was the first typeface made by Modular Info-Tech back in the 1990s. Summit Geetanjali comes in the Indica Unicode Type kit software By Summit. SutonnyMJ is the most widely-used typeface in Bangladesh, designed by Mustafa Jabbar of Bijoy Keyboard.

Overlapping these shows how close they are.[Fig.69] Apart from minor shifts in the weight and some minor adaptations, it is indistinguishable from each other. By doing the same for Linotype Bengali and SutonnyMJ gives us a very clear picture of how even the proportions are almost identical [Fig.70]. On a very close look though, we can see the curves are not harmonized as compared to Linotype. Moreover most of them have serious issues from overlapping glyphs, poor glyph shaping to major inconsistencies in the conjuncts. The same results can be achieved by analyzing many other digital typefaces available on the market as licensed fonts or free fonts.

A কেহ বা মনে করেন আমি শুদ্ধমাত্র
 B কেহ বা মনে করেন আমি শুদ্ধমাত্র
 C কেহ বা মনে করেন আমি শুদ্ধমাত্র
 D কেহ বা মনে করেন আমি শুদ্ধমাত্র
 E কেহ বা মনে করেন আমি শুদ্ধমাত্র



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60. A Swedish-American type designer who grew up in Bangladesh, currently living in Dhaka. He specialized in Bengali script. Bangla Type Foundry, banglatypefoundry.com

61. Jacob Thomas, *Linotype Clones in Bangladesh*, banglatypefoundry.com

Fig.68. Comparison of Figgins Pica(A) Linotype Bengali (B), Shree Lipi 550 (C), Summit Geetanjali (D) and SutonnyMJ(E). It is indisputable that C, D and E are clones of Linotype Bengali.

Fig.69. Overlapped characters of Linotype Bengali, Figgins Pica, Sutonny MJ and pre 1981 Foundry Type Specimen.



Fig.70.

Overlapped characters of Linotype Bengali in blue and SutonnyMJ in red

Homogenized Bengali text

Amidst the wide variety of hand-painted signs, wall slogans, and lively public spaces with rich lettering traditions, it is a hard-hitting realisation that almost all of the printed text (irrespective of the medium of paper quality) is set in Linotype or one of its look-alike.

Not only the products of ABP group but all the rest of the newspapers, magazines, posters, public signs, marketing brochures, postcards, maps, etc printed in the Bengali script are all set in a descendent of the Linotype Bengali [Fig.71]. This lack of variety is a burden from the past decade as, due to technical limitations, everything was printed in the same fashion, thus people's lack of discrimination in the book shops between different kinds of publishing. 'Typefaces are semiotic markers. We do not want the same fonts for a publicity brochure, a film poster, a scientific journal and a popular novel. [...] Bengali metal types and calligraphy (as evident in cards, publicity and book covers) had reached a high stage of development during the last century as did illustrations. [...] However, the growth of large media meant standardization of fonts and appearances. This was true of the days of Bengali Linotype. With the advent of computerized composition this problem has been accentuated, with copyright violations and the homogenized look of publications. The semiotic value is all but lost, misleading buyers and readers' [62]

An entire generation has seen nothing but one text face.

62. Swapan Chakravorty, professeur at Jadavpur University. Email to the author, 26 August 2014. R. Olocco, Linotype Bengali and the digital Bengali typefaces, UOR, 2014, p.p.58

শাউরাপাণির আরাধনার এই নিবন্ধটি
দিনেন কালীর থাকলে। এসেছে ছাত্রা নির্মিত
একাদিক কালীমন্দির আরও ছড়িয়ে রয়েছে
কলকাতাসহ বাংলার নানা প্রান্তে। এর মধ্যে
বীহু সর্বোত্তম সলঙ্গ ডাকঘরে কালীবাড়ি,
মহোৎসবপুর্বে মনোহর সর্দারের কালীমন্দির,
উত্তরবঙ্গে ভবানী পাঠকের মন্দির ইত্যাদির
নাম সর্বাধিক উল্লেখযোগ্য। যোগেন্দ্রনাথ মিত্র
ও শ্রীচন্দ্র মিত্রের লেখা এই সব তথ্যাদির
উল্লেখ পাচ্ছি বাবু বাবু। শ্রীচন্দ্রের লেখা থেকে
এও জানা যাচ্ছে, বিশ্বনাথবাবুর জন্মটিই নদিয়ার গাঢ়ভাঙাঘাটে।
আর পরবর্তীতে তার মূল খাটি বিষ্ণুকুলগড়েও মহাসমারোহে দুর্গা এবং
কালীপূজা হ'ল, রীতিমতো মন্দির গড়ে। ওঁরদ্বারা সে সবের আর কোনও

সম্পর্কটা ফের এক বার প্রকট
হয়েছিল অনেকগুলি দশক
পেরিয়ে এসে।



এও জানা যাচ্ছে, বিশ্বনাথবাবুর জন্মটিই নদিয়ার গাঢ়ভাঙাঘাটে।
আর পরবর্তীতে তার মূল খাটি বিষ্ণুকুলগড়েও মহাসমারোহে দুর্গা এবং
কালীপূজা হ'ল, রীতিমতো মন্দির গড়ে। ওঁরদ্বারা সে সবের আর কোনও

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জ্যোতি বৈঠকের আগেই
ক্যাশক্রি প্রদর্শন 'ইভিয়া'র

৩৭০ বাতিল অবৈধ নয়
ভোটের নির্দেশ সুপ্রিম কোর্টে

একদিন
এগিয়ে চলার সঙ্গী

ভোট পরবর্তী হিংসার রণক্ষেত্র গোয়াট ও খানাবুলা, গ্রেপ্তার ১২

রাজ শপথ মোদির নবনির্বাচিত সাংসদদের প্রথম সারির কয়েকজন মন্ত্রীও পথনির্দেশিকা মমতা



এখন আপনার রান্নাঘরে পাবেন
শাহী পনিরের আসল নবাবী স্বাদ।

বহু বছরের পরীক্ষা আর প্রচেষ্টার ফল এভাবেই নতুন শাহী পনির মশলা।
এর রেসিপিতে আছে 18টি বিস্তৃত সোটা মশলা গুঁড়োর অনবদ্য মিশ্রণ যা
আপনার শাহী পনির ডালনায় এসে সেয় এক অতুলনীয় নবাবী স্বাদ।
একবার রান্না করে দেখুন-আর সবার প্রাণভরা প্রশংসা পান!

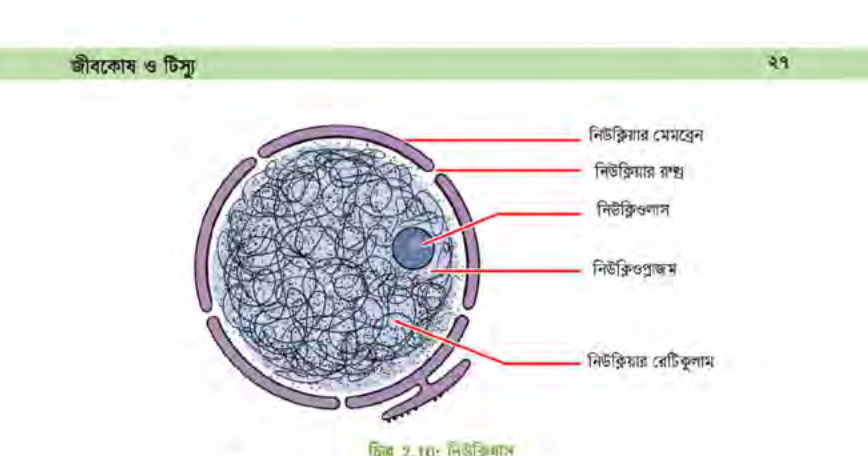
EVEREST
শাহী পনির মশলা

No artificial colours of Flavours
100% Natural

EVEREST
Shahi Paneer Masala

ফুধিত পাষণ
বিভূতিভূষণ মুখোপাধ্যায়

লোকটি বাঙালি কি গুজরাটি বোঝা শক্ত। যদি গুজরাটি হয় তো নিশ্চয় বহুদিন কলকাতায় থেকে
বাঙালির ভাষা, সাহিত্য, সংস্কৃতি প্রায় নিখুঁতভাবে আয়ত্ত করেছে; যদি বাঙালি হয় তো বহুদিন
গুজরাটে থেকে ডাটিমা-গুজরাটিদের স্তম্ভিত ব্যবসা-বুদ্ধিতে পরিপক্ব। এর মধ্যেও, কেমন একটা
মৌলিক উদ্ভাবনী শক্তির পরিচয় পাওয়া গেল, তাতে আমার নিজের অনুমানটা বাঙালিদেরই দিকে।
সেবার নিখিল ভারত সাহিত্য সম্মেলন হল আমেদাবাদে। নিমন্ত্রিত হলাম, ডাবলাম একটু আগে
গিয়ে শহরটা ভাল করে দেখে নিই, ভারতের “কমার্শিয়াল ক্যাপিটাল” বলে দাবি করে, তারপর
সম্মেলন সেবে পশ্চিমাঞ্চলটা যতটা সম্ভব দেখেগুলো বাড়ি ফেরা যাবে। দুটো দিন হাতে রেখে, তিনদিন
আসে ভোরে গিয়ে স্টেশনে নামলাম।
একেবারে নতুন পরিবেশ, তাই দূর ভ্রমণে অনভ্যস্ত, হালকা বেডিং আর স্যুটকেসটা নামিয়ে পায়ের
কাছে রেখে অনভিজ্ঞ দৃষ্টিতে এদিক-ওদিক চাইছি, দেখি, হাত দশেক তফাতে ভিড়ের মধ্যে একজোড়া
চোখ যেন আমার মুখের ওপর আটকে রয়েছে; দৃষ্টিতে আগ্রহের ভাব সুস্পষ্ট। ডাকব কিনা ভাবছি,
লোকটি আপনিই ভিড় ঠেলে উপস্থিত হল; প্রশ্ন করল, ‘সম্মেলনের ডেলিগেট?’
বললাম, ‘হ্যাঁ, দু’দিন আগে এসে পড়লাম। ক্যাম্প নিশ্চয় এখনও খোলেনি, দু’দিনের জন্যে একটা
ডাল হোটেল... নতুন জায়গা, পূর্বে কখনও আসিনি...’
‘বুঝেছি। হোটেল, গাইড, যেমনটি বুজছেন। আমেদাবাদ আবার নতুন-পুরনোয় মেশানো জায়গা
তো। আসুন।’



2.2.3 নিউক্লিয়াস বা কেন্দ্রিকা (Nucleus):
জীবকোষের প্রোটোপ্লাজমে নির্দিষ্ট পর্দাঘেরা ক্রোমোজোম বহনকারী সুস্পষ্ট যে বস্তুটি দেখা যায় সেটিই
হচ্ছে নিউক্লিয়াস। এর আকৃতি গোলাকার, ডিম্বাকার বা নলাকার। সিভকোষ এবং লোহিত রক্তকণিকায়
নিউক্লিয়াস থাকে না। নিউক্লিয়াসে বংশগতির বৈশিষ্ট্য নিহিত থাকে। এটি কোষে সংঘটিত বিপাকীয়
কার্যাবলিসহ সব ক্রিয়া-বিক্রিয়া নিয়ন্ত্রণ করে। সুগঠিত নিউক্লিয়াসে নিচের অংশগুলো দেখা যায়।

(a) নিউক্লিয়ার ঝিল্লি (Nuclear membrane)
নিউক্লিয়াসকে ঘিরে রাখা যে ঝিল্লি, তাকে নিউক্লিয়ার ঝিল্লি বা কেন্দ্রিকা ঝিল্লি বলে। এটি দুই স্তর
বিশিষ্ট। এই ঝিল্লি লিপি ও প্রোটিনের সমন্বয়ে তৈরি হয়। এই ঝিল্লিতে মাঝে মাঝে কিছু ছিদ্র থাকে,
যেগুলোকে নিউক্লিয়ার রশ্মি বলে। এই ছিদ্রের ভিতর দিয়ে নিউক্লিয়াস এবং সাইটোপ্লাজমের মধ্যে কিছু
বস্তু চলাচল করে। নিউক্লিয়ার ঝিল্লি সাইটোপ্লাজম থেকে নিউক্লিয়াসের অন্যান্য বস্তুকে পৃথক রাখা
এবং বিভিন্ন বস্তুর চলাচল নিয়ন্ত্রণ করে।

(b) নিউক্লিওপ্লাজম (Nucleoplasm)
নিউক্লিয়ার ঝিল্লির ভিতরে জেলির মতো বস্তু বা রস থাকে। একে কেন্দ্রিকারস বা নিউক্লিওপ্লাজম বলে।
নিউক্লিওপ্লাজমে নিউক্লিক এসিড, প্রোটিন, উৎসেচক ও কতিপয় খনিজ লবণ থাকে।

(c) নিউক্লিওলাস (Nucleolus)
নিউক্লিওপ্লাজমের মধ্যে ক্রোমোজোমের সাথে সংলগ্ন গোলাকার বস্তুকে নিউক্লিওলাস বা কেন্দ্রিকাণু
বলে। ক্রোমোজোমের রংগ্ৰাহী অংশের সাথে এরা লেগে থাকে। এরা RNA ও প্রোটিন দিয়ে তৈরি হয়।
এরা রাইবোজোম সংশ্লেষণ করে।

Fig.7.0. Homogeneity in Bengali text across all kind of publica-
tions using Linotype Bengali or some derivative.

Digital Bengali typefaces of the last decade

Over the last decade, there were significant improvements in the Bengali typefaces available for use in regular text. Fig.71 lists some of them with the designers, foundry it was published and the published date respectively. Most of them were able to solve the requirements for rendering the complex script through opentype features and character limitations were no longer a problem. But still fresh new takes on the script (for contrasted typefaces especially), which strays away from the linotype model in terms of concept or the drawing is very rare. With growing interest in Indic type design, we have seen very well-drawn faces from some of the international foundries and works from Indian type foundries like Indian type foundry, Ektype and Universal Thirst are commendable.

On the other hand, a closer look at the font libraries of some of the popular local typesetting vendors like Shreelipi [63] [Fig.72] and Indica Unicode[64], or font vendors like Lipighor [65] shows a diverse range of unicode and ANSI fonts, often influenced by calligraphy or sign-painting traditions [Fig.73]. Although these fonts in most cases lack the typographic quality, as the focus is more on quantity over quality but are interestingly indicative of the native readers perspective towards cursive and more expressive letterforms. This also proves the question of readability and familiarity of the cursive structure. So, studying this display fonts and the vernacular letterings, sign paintings and the cursive handwriting, with an in-depth typographic research, with considerations for use in small size for better legibility may be a solution of creation of a new Bengali text face.

63. Indic typesetting software; a multi-script font package and keyboard handler by Modular InfoTech Ltd.

64. A typesetting software offering various keyboard layouts and Indic fonts compatible with Microsoft and Apple operating systems developed by the Delhi based company, Summit.

65. Popular Bengali font foundry established in 2018.

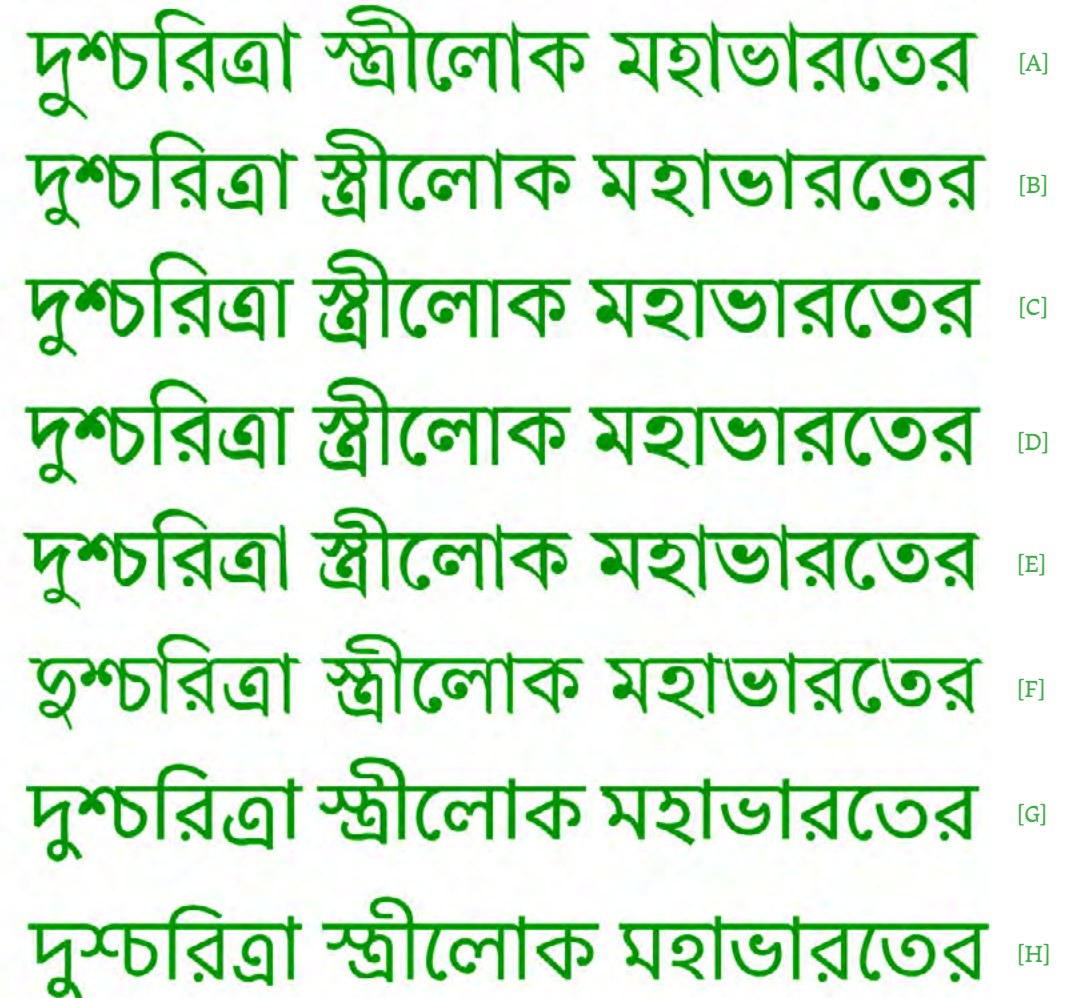


Fig.71. Some of the Bengali typefaces released in the last decade.

[A] Tulika Bengali Jyotish Sonowal Indian Type Foundry, 2012	[D] Noto Serif Bengali Juan Bruce, Universal Thirst, ITF & Monotype, 2019	[G] Sarvatrik Joana Ranito, Kalapi Gajjar Universal Thirst, 2021
[B] Adobe Bengali Neelakash Kshetrimayum Adobe Originals, 2014-17	[E] Tiro Bangla John Hudson, Fiona Ross Tiro Typeworks, 2020	[H] Graphik Bangla Arya Purohit, Commercial Type, 2024
[C] Aikya Neelakash Kshetrimayum Brand New Type, 2015	[F] Noort Bengali Juan Bruce Typetogether, 2021	

শ্রী 1552	ভারত আমার দেশ. সকল ভারতীয় আমার ভাই ও বোন. আমি আমার দেশকে ভালবাসি, এবং আমি ভার
শ্রী 1553	ভারত আমার দেশ. সকল ভারতীয় আমার ভাই ও বোন. আমি আমার দেশকে ভালবাসি, এবং আমি ভার সমৃদ্ধি এবং
শ্রী 1554	ভারত আমার দেশ. সকল ভারতীয় আমার ভাই ও বোন. আমি আমার দেশকে ভালবাসি, এবং আমি ভার সমৃদ্ধি এবং
শ্রী 1555	ভারত আমার দেশ. সকল ভারতীয় আমার ভাই ও বোন. আমি আমার দেশকে ভালবাসি, এবং আমি ভার সমৃদ্ধি
শ্রী 1557	ভারত আমার দেশ. সকল ভারতীয় আমার ভাই ও বোন. আমি আমার দেশকে ভালবাসি, এবং আমি ভার সমৃদ্ধি এবং বৈচিত্রময়
শ্রী 1558	ভারত আমার দেশ. সকল ভারতীয় আমার ভাই ও বোন. আমি আমার দেশকে ভালবাসি, এবং আমি ভার সমৃদ্ধি
শ্রী 1559	ভারত আমার দেশ. সকল ভারতীয় আমার ভাই ও বোন. আমি আমার দেশকে ভালবাসি, এবং আমি ভার সমৃদ্ধি
শ্রী 1597	ভারত আমার দেশ. সকল ভারতীয় আমার ভাই ও বোন. আমি আমার দেশকে ভালবাসি, এবং আমি ভার
শ্রী 1560	ভারত আমার দেশ. সকল ভারতীয় আমার ভাই ও বোন. আমি আমার দেশকে ভালবাসি, এবং আমি ভার সমৃদ্ধি
শ্রী 1561	ভারত আমার দেশ. সকল ভারতীয় আমার ভাই ও বোন. আমি আমার দেশকে ভালবাসি, এবং আমি

হৃদয়ের চঞ্চলতা বন্ধে ব্রতী হলে
জীবন পরিপূর্ণ হবে নানা রঙের ফুলে।
কুঞ্জটিকা প্রভঞ্জন শঙ্কার কারণ
লগুভগু করে যায় ধরার অঙ্গনা

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হৃদয়ের চঞ্চলতা বন্ধে ব্রতী হলে
জীবন পরিপূর্ণ হবে নানা রঙের ফুলে।
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লগুভগু করে যায় ধরার অঙ্গনা।
ক্ষিপ্ত হলে সাহু হবে বিজ্ঞানে বলে

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- Fig.72. A page from the Modular Infotech's Shree Lipi software's bengali font catalog
- Fig.73. Alinoor Shoukhin by Md. Alinoor Islam from Lipighor library, inspired by cursive writing.
- Fig.74. Niladri Rongtuli, display font inspired by sign painting styles by Niladri Shekhar Bala from Lipighor Library.

Availability of different weights & styles

Most of the typefaces in Bengali hardly consists of more than two weights. Although a change can be seen with the newer releases but still its very rare to have different widths or styles for a complete typefamily befitting editorial purposes. *Anek Bangla* (2022) [Fig.75] from Ek Type is a beautiful example breaking this norm.

Proposing Bengali italics is as oddly Eurocentric as applying terms like ‘serif,’ ‘sans-serif,’ or ‘roman’ to Bengali typography. This approach disregards Bengali’s unique typographic history, imposing a foreign tradition onto it as terms like “serif,” “sans-serif,” and “roman” in the Bengali context. However, a reactionary purism that aims to remove all outside influence overlooks the natural cross-cultural exchanges that enrich many traditions. Italics, for example, have become integral to Bengali typefaces today, adding depth and expression to text. While italics (তির্যক) are not a traditional element of Bengali typography, they are increasingly common in mainstream Bengali publications, such as *Biswabharati University Press*, *Bangla Academy* dictionaries. However, current italics are typically simple oblique forms of regular text [Fig.76], making them difficult to distinguish and affecting readability and aesthetics. Developing a distinct, stylistically differentiated italic form could improve both legibility and the visual harmony of Bengali text. Addressing this problem, Jacob Thomas on his *Bengali Italics?* blog suggests that, “a curvilinear headline/matra seems very appropriate for Bengali italics and a simpler rounded urani ascender which doesn’t curve upward at the terminal, and similarly simpler raphalas” [Fig.77] [66]. It would be interesting to look closely at handwriting samples for this cursivity.

66. *Bengali Italics?*, Jacob Thomas, Bangla Type Foundry, March 29, 2016, [https://banglatypefoundry.com/bengali-italics/]

Fig.75. *Anek Bangla* released in 2022. This project is collaboratively designed & engineered by Ek Type, It is a multi script type family in 10 scripts with multiple widths and weights, Bengali designed by Sulekha Rajkumar.

যেহেতু সদস্য রাষ্ট্রসমূহ জাতিসংঘের সহযোগিতায় মানবাধিকার	যেহেতু সদস্য রাষ্ট্রসমূহ জাতিসংঘের সহযোগিতায় মানবাধিকার	যেহেতু সদস্য রাষ্ট্রসমূহ জাতিসংঘের সহযোগিতায়
যেহেতু সদস্য রাষ্ট্রসমূহ জাতিসংঘের সহযোগিতায় মানবাধিকার	যেহেতু সদস্য রাষ্ট্রসমূহ জাতিসংঘের সহযোগিতায় মানবাধিকার	যেহেতু সদস্য রাষ্ট্রসমূহ জাতিসংঘের সহযোগিতায়
যেহেতু সদস্য রাষ্ট্রসমূহ জাতিসংঘের সহযোগিতায় মানবাধিকার	যেহেতু সদস্য রাষ্ট্রসমূহ জাতিসংঘের সহযোগিতায় মানবাধিকার	যেহেতু সদস্য রাষ্ট্রসমূহ জাতিসংঘের সহযোগিতায়

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76 যেহেতু মানব অধিকারের প্রতি অবজ্ঞা
[A] যেহেতু মানব অধিকারের প্রতি অবজ্ঞা
যেহেতু মানব অধিকারের প্রতি অবজ্ঞা
[B] মানুষের বিবেক লাঞ্ছিত বোধ করে এ

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একটি সাইমনের জগল
Regular
একটি শাইমনের জগল
Italics

Fig.76. [A]. Tiro Bengali Regular and Italics by Tiro Typeworks.
[B]. Galarda by Black Foundry

Fig.77. Cursive Italic exploration By Jacob Thomas, Bangla Type Foundry, March 29, 2016

Vernacular letterforms

Looking at vernacular letterforms offers valuable insights into originality, drawing from posters, book covers, shop signage, 90s comic books, and older editorials. A dominant feature is the use of cursive forms, often avoided in early foundry types due to the difficulty of cutting wavy headlines in metal type. In handwriting and calligraphy, however, this fluid structure enhances readability and expression. Another key style is bold, blocky letters for titles and book covers, influenced by linocut and papercut techniques, popularized by the Bengal School of Art as a counterpart to German Expressionism. Editorial layouts from the 1960s and 70s combined hand-lettered titles with metal type, creating dynamic compositions—later replaced by standardized Linotype-style typefaces in the digital era. Comparing these varied forms with today's editorial typography, the uniformity feels rigid and uninspired. Addressing the gap between vernacular type, chirography, and conventional typefaces could lead to fresh, original designs.

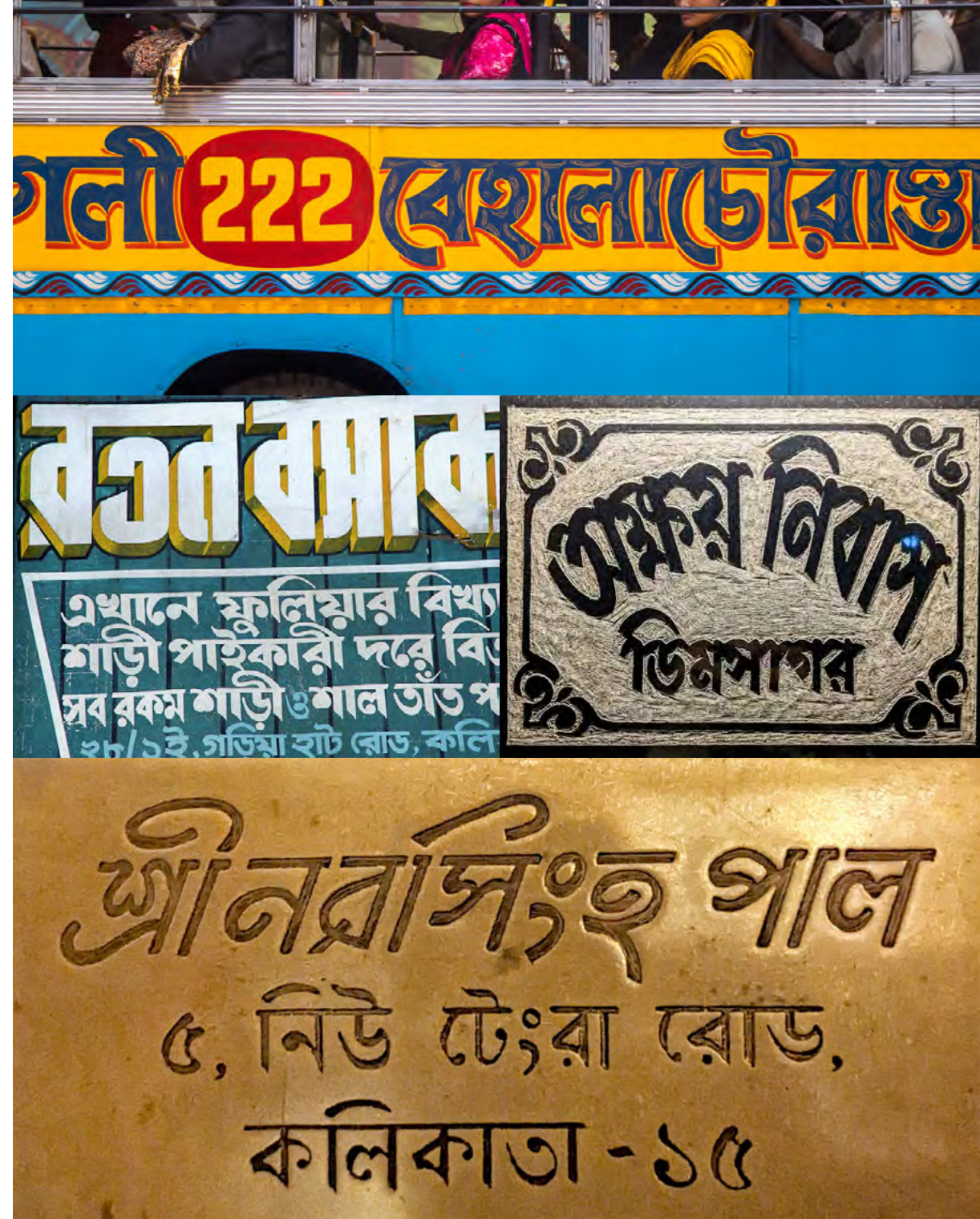


Fig.78. An assortment of vernacular lettering and signages ranging from lettering on public buses, shop sign, stone placards for house signage etc.



সেদিন রাতে বেশ মেজাজে এসে
 অনেক কাটা কাটা স্বপ্ন দেখলাম।
 এরাি খার ছিঃখরাি জগার লয়া



কালো মাড়ি চেপে অনেক দূর
 কোথাও চলে গেছি। মিঃ চ্যাঃ



মেঘ বৃষ্টি আলো
 সুনীল
 গাঙ্গোপাধ্যায়ের
 স্মৃষ্টি উপন্যাস

আজকের আঁধার রূপে ও
 তাত্ত্বিক আঁধার বর্ষমানদের
 পটভূমিকায় একালের প্রেম ও
 একালের জটিল জীবনের
 শিল্পসুন্দর ছিঃচিত।

শান্তিদেব ঘোষ
 মৃত্যুজিৎ রায়ে
 তিমিরবরণে ॥ রূপদর্শী,
 অমিতান্ত চৌধুরী
 মৃগাল সেন
 ঐকণ মজুমদার
 বসন্ত চৌধুরী ॥ সৃষ্টি মিত্র
 হেমন্ত মুখোপাধ্যায়
 নীহাররঞ্জন শ্রুস্ত

দেশ
 বিনোদন সংখ্যা
 ১৩৭৭

শার্লক হোমস কে ছিলেন?
 স্যার আর্থার কনান ডয়েল সৃষ্ট শার্লক হোমস চরিত্রটি নিহত
 কম্পনা? নাকি এর পিছনে রয়েছে কোন রহস্যময়ের মানুষে?
 এই কৌতূহলোদ্দীপক রচনাটি সেই রহস্যাতরালের মানুষেটিকে
 কেপ্ত করেই রাঁচিত।

মনে পড়ে
 শ্রীমতী
 আশুযবাল্লা দেবীর
 স্মৃতিচারণ

বাংলা সাহিত্যে সেরে
 শিল্পোন্নয়নী দাসীর পর আর
 কোন অভিনেত্রীর উপভোগ্য
 স্মৃতিপত্র আমবা পাইনি।
 এই রচনাটিতে মিলবে শব্দে
 একটি ঘটনাবহুল জীবনের
 রোমাঞ্চকর কাহিনীই নয়
 মিলবে রক্তচাপের একটা
 অবিদ্যমানীয় যুগের অন্যথা
 আলোচনা।

দেবনারায়ণ শ্রুস্ত
 ডঃ শুরুদাস ভট্টাচার্য
 সবিতরত দত্ত
 জ্যোতির্ময় বসুয়ায়
 সুপ্রধার ॥ রাজনবালা
 অজয় বসু ॥ মতি নন্দী
 চুনি গোস্বামী ॥ চিরঞ্জীব
 প্রদীপ ব্যানার্জি
 পুষ্পেন সুরবগর
 শচীন ভৌমিক
 সন্নিচ চৌধুরী এবং
 আরো এনেকিয় স্নান্যবান
 রচনায় সমৃদ্ধ।

আড়াই পাতার পুস্তক এই পত্র
 আবেশপীত সংখ্যাটির সাথে হবে মাত্র
 তিন টাকা। রোজপত্র থেকে টাক ৪-১০

Fig.79.

Collage of Book Covers, Comic book Covers, Graphik novel & Movie poster.

Fig.80.

Cutouts from Desh Magazine, 1971 edition

বিহীন
 গুণ্ডামের দিলে
 ঝিলমিলতল
 মিল
 মায়ের
 দুর্ভাগ্যিনী
 দুর্ভাগ্যিনী

দাওলেঘর

বোকা

গঙ্গা

প্রবী

দ্বিতীয় স্তর

অব
আবী

অপ্ত

স্বপ্ন
বাধাবাহিনী

খানো
সেই

ডায়েরি

দরশন

নিধি
আদর্শ

অমানুষ

নগর
দর্শনে

৩৩২

চরচর

স্বপ্ন

তাহাদের
স্বপ্ন

আমাদের
অন্ধকার

স্বপ্ন

Fig.81. Collage of bengali movie titles over the years since 1950's

Conclusion

At the conclusion of this research, I find myself at a compelling intersection between expressive, culturally rooted forms in Bengali and the need for a functional approach to an ongoing challenge. This study has deepened my appreciation of the free-spirited essence of the Bengali script, enriched by centuries of cultural synthesis, and strengthened my understanding of designing a biscriptual type system that balances a robust Latin with a nuanced Bengali.

I had the opportunity to interact and conduct interviews with contemporary Bengali designers and publishing houses exploring the current landscape of Bengali typography and the importance of biscriptual systems in modern communication. A key insight was the limited diversity of typefaces suited for different publication needs in Bengali—a limitation shaped by western perspective and technological constraints. This historical perspective has highlighted that today's evolving font technologies present a timely opportunity to revisit and redefine the ideal printed form of Bengali characters. This can mean bringing the typeforms closer to vernacular chirography, a very unorthodox approach to some or potentially incorporating a secondary slanted script in Bengali to play a similar role as Italics does for Latin in a typographic system.

I hope this work will be a valuable resource for Bengali type designers and graphic designers alike, and bring a new perspective on the possibility of Bengali typography.

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Designed by

Arnab Chakraborty
EsadType 2023-2025

Typeset in

Manik Text, Italic, Poster

Paper used

Keaykol Recy Particle 100 gsm
Clairefontaine grained color drawing
paper - dark green

Printed at

École supérieure d'art et de design
d'Amiens (Ésad Amiens) Spring 2025

Manik

PART II —
DESIGN PROCESS

মানিক
Manik

[Arnab_Chakraborty]

মানিক
Manik

মানিক

[EsadType 23-25]
ÉSAD Amiens

Manik মানিক

*A Multiscript Typefamily of Expressive
& Dynamic humanistic forms inspired
by Vernacular Bengali Writing.*

শ্রীশ্রীদুর্গাশরণাম

↑ Reads *Shree Shree Durga Sharanam* which translates to “Praise to Goddess Durga”. This is an tribute to the traditional way of starting a book or manuscript by praising and dedicating the work, by writing the name of a God or Goddess in the Manuscript writing traditions of Bengal.

PART II:
DESIGN PROCESS

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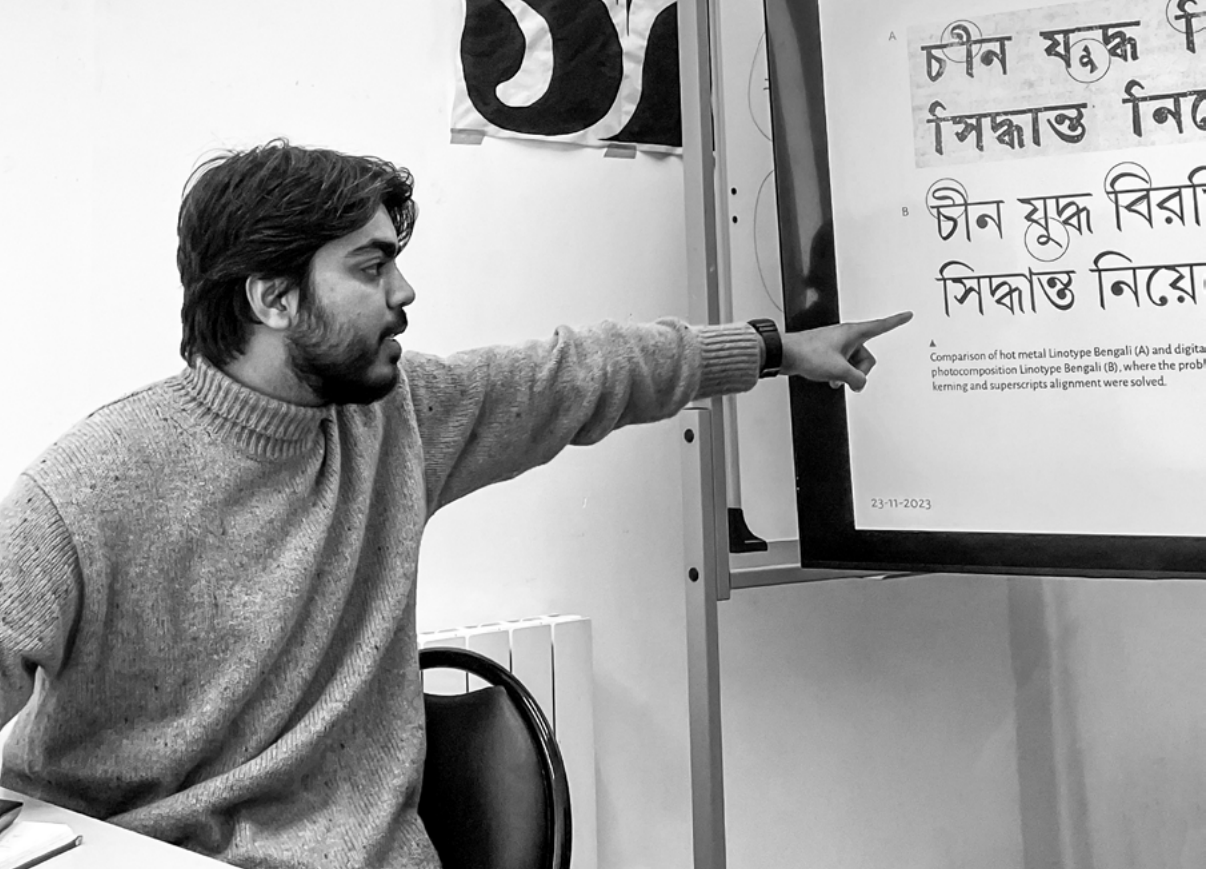
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Intro- -duction

This Part of the dissertation picks up from the reseach of previous part to explore my design developement process for the typefamily. It takes a more practical approach, through adressing the important problems that I identified in the first part.

I joined the EsadType program with a proposal for a multiscript family that explores expressivity in Bengali letterforms and translates into a equivalent latin design. But as I researched more with the guidance of my teachets in the program, I started questionning deeper the need for such a design. I asked myself *'what does expressivity really means?'* I had always been intrigued by vernacular letterforms around me and as I started to put my references of movie posters and book covers by Satyajit Ray, of which I was fond of all along, I soon figured out what a opportunity this can be. The problem of homogeneity in Bengali text typefaces were always there in my subconsciousness, but with more historical research, it became clear that the answer for diversity can be figured from all these vernacular souces. I realised that I want to design a functional type that is dynamic like the handwritten text. This was the expressivity that I wanted to explore. In doing so I can also break away from the rigid letterforms prevelent in text typefaces. Song interesting, right?

Well, drawing the typeface wasn't a easy one. Although few months into the program, I knew what I was looking for, but how to achieve that was completely a new challange. I had to learn how to pragmatically approch the problem and translate the ideas into a drawing. Drawing a multiscript was also a challange. And as per advices, I undertook experimenting and drawing both the scripts in parallel, sometimes independent or other times influenced by each other. At times I felt really lost but thanks to the guidance and support of my teachers and colleagues, I survived through. Manik is still a long way from completion, but now at the end of my EsadType programme I can comfortably say that I am satisfied with the solution. And here's the process that lead me to this point.



Aa ক

Manik Text Light

Aa ক

Manik Text Medium

Aa ক

Manik Text Regular

Aa ক

Manik Text Bold

Aa ক

Manik Text Semibold

Aa ক

Manik Italic

Aa ক

Manik Text Extrabold

Aa ক

Poster

↑ Presenting my initial research on 23rd November, 2023, EsadType, Amiens

A New Aesthetic For Bengali

‘How to design an original & new design for Bengali text typeface when an entire generation has essentially been exposed to only one style?’ [1]

Lack Of Diversity in Text

With an indepth look at the current scenerio of Bengali typography, I decided to answer the most relevant and overarching question, that of diversity for the text sizes. As the Bengali type market is oversaturated by the Linotype lookalike typefaces, the more intersting phenomenon is that the bengali readers have also grown largely accustomed to reading with this style of letters, making them somewhat desanitized towards the homogeneity present in bengali text. This can be understood by a fictional situation for Latin, where every book, newspaper, poster and other print media would be dominated by Caslon. I feel this is very unfair to the Bengali readers to not have a different voice with different designs, which vary aesthetically from this Linotype model, for different types of publication.

It is also an interesting problem to address. The Bengali readers have very little incentive to change the text as they have been exposed to this very rigid shapes over two centuries of printed type. But they are also posed with this rich heritage of vernacular type in forms of lettering for posters, wall signages, letters on public transport and so much so that the typical handwriting forms are very much different then this printed type. Although it can be argued that the cursive handwriting is usually different than the printed characters for almost every script including Latin, but this is a fact that almost all the official documents till a decade ago was handwritten instead of prints. We Bengalis are so used to reading a more fluid cursive style and as contrary to Latin, the nature of Bengali script itself is cursive. So it can be argued that the cursive structure is not a downgrade on legibility , but its merely a habitual preference to choose a ‘Linotype’ like structure for text.

With these knowledge, I dived into looking for a new aesthetic for the Bengali text as my first focus for my typeface.

1. Jacob Thomas, Bangla Type Foundry, [<https://banglatypefoundry.com/linotype-clones-in-bangladesh/>], Retrieved 06 Feb, 2025

Looking For a Dynamic Textute

My first challenge was to question what is originality in a text type. A very obvious choice was to look on to the handwritten manuscripts from late 18th Century – 19th Century to trace back the structure of Bengali letterforms. Although deciphering the structures needed an overall understanding of history of the script as many letters vary widely depending on the region the scribes were from in Bengal. I sampled letters from manuscripts like *Kavacasamgraha*(1750) [fig.1], *Mahabharata*(1791) [2] to name a few, to understand the ductus of the letters. A very important document that helped me further was the *Principes ou Vocabulaire Bengaly* [fig.2], a Bengali writing book that I found in the archives of Bibliothèque nationale de France.

2. To learn about more of these manuscript references please refer to p... of the Part I: Research.

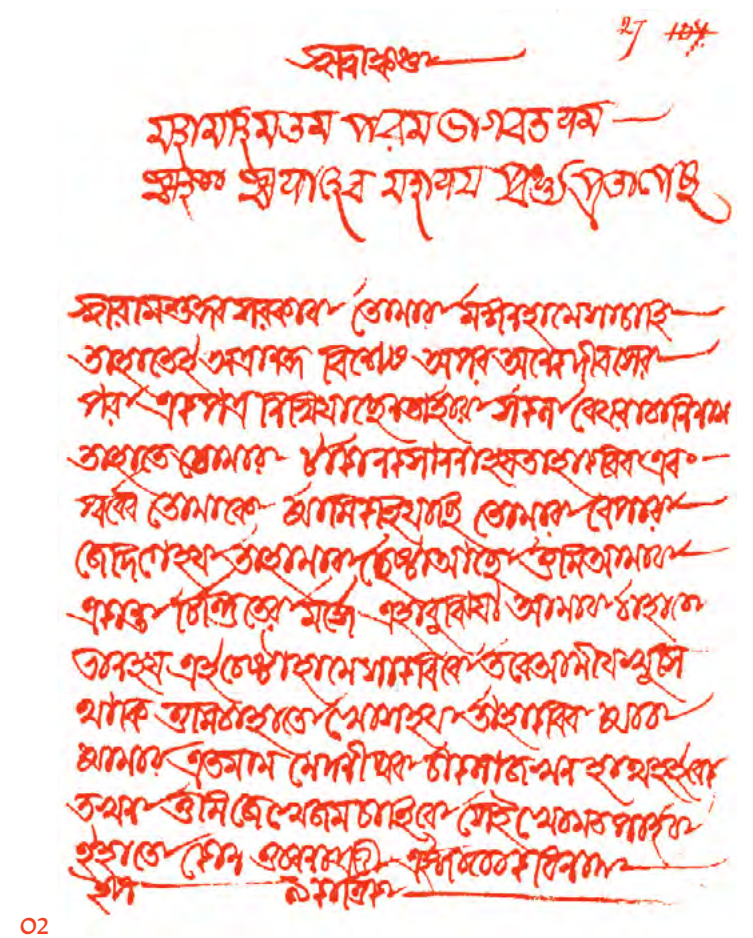
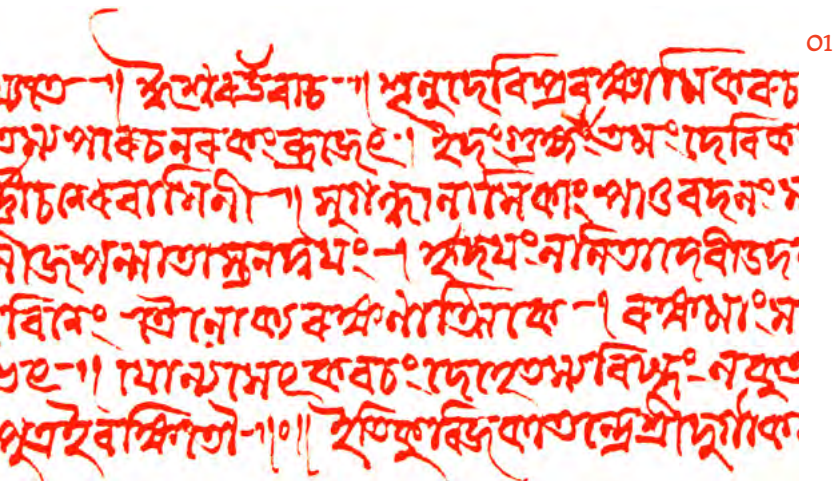


Fig.1. Excerpts from *Kavacasamgraha* by Kālikāntha Sarman (scribe), 1750, Kislak Center for Special Collections, Rare Books & Manuscripts, Rāmamālā Library 768
Fig.2. Page from *Principes ou Vocabulaire Bengaly*, 1801, Bibliothèque nationale de France. Département des Manuscrits. Indien 739

While looking at the manuscripts, I noticed how the letters are fluid and vary in forms depending on their position and the letter cluster. The cursivity of the structures results in many differences in the ductus, especially for letters like — স (sa), ষ (ssa), ক (ka), জ (ja), ই (ii) & ট (tta) [fig.3].

স স সুদ পঞ্চদশ 03
পঞ্চদশ

জাইতে 04
জাইতে

পালাইন 05
পালাইন হুগুনি

ষ সদেশ 06
ষ সদেশ ভারাম

ট ট টি 08
ট ট টি চোটা

মুখের অংশে...
মুখের অংশে...
মুখের অংশে...
মুখের অংশে...
মুখের অংশে...

আমের অংশে...
আমের অংশে...
আমের অংশে...
আমের অংশে...
আমের অংশে...

Fig.3. Structure of the letter স (sa) showing a loop in the mouth because of a cursive continuous writing. Word written with Linotype Bengali for reference

Fig.4. Differences in the structure of letter জ (ja) in manuscript samples and Linotype Bengali

Fig.5. Word clusters in manuscript and Linotype Bengali. Interesting thing to notice is the structure of ল (la) in the 19th century manuscripts being different from modern structure as can be seen in Linotype Bengali.

Fig.6. Structural Difference in ষ (ssa)

Fig.7. Initial form of ভ (bha), tail of the letter connected with the headline.

Fig.8. Difference in the flourish in ট (ta) with deep connection with the body.

Fig.9. Kālikā Purāna, Sivarāma Ghosh, 19th century, Bibliothèque nationale de France. Département des Manuscrits. Indien 718, example of fluid shapes

The cursivity also gives rise to a wavy and undulating headline [3]. Because of this prominent feature of the written script, I also find it easier to read as my eye is guided from one character to the other in a more fluid and organic manner [fig.10]. This to me is a very expressive feature in Bengali that is very less explored in type intended for text.



3. Headline or Matra is the running horizontal line from which the bengali letters appear to hang from. For better understanding of Bengali type nomenclatures please refer to the glossary of Part I: Research.

Fig.10. Comparison of cursive structures with weavy headline with more stiffer Linotype Bengali.

Fig.11. Sketches exploring Flat Brush, 28.01.2024

Fig.12. Preliminary sketches exploring Flat nib pen, 14.02.2024

Exploring Through Sketches



Fludity

I started to sketch with flatblush as I enjoyed working with it in a initial exercise with my teacher Patrick Doan. Soon to realise that the structure was too stiff compared to my references as I wasn't used to drawing Bengali with it. But the phase helped me abundantly to hone my skills with the tool and understand its nuances which proved to be beneficial in the later stages.

I moved to sketch with flat nib pen to explore the fluid rounds in Characters like ল (la), ভ (bha), উ (uu), হ (ha) etc as they played a major part in cursivity of the script. This round characters also inform the more straight া (akar) . It was interesting to also note how this can effect the diagonals in র (ra) and য় (yya), which other wise can be very stiff and diagonal.

ইতিমধ্যেই কি সেগুলো সেগুলো কি কেউ কেউকেই উদ্ধার
 আমাদের কাগজ কাগজপত্র সে রকম কোন খবর নেই
 গত মাস বছর বছর ধরে ধরে এ বিষয়ে গবেষণা করে
 গুরু আমি এই এই সিদ্ধান্তে এসেছি যে ভারতের উচ্চ
 রজার কর চাই। সুমি আমার জন্য কর ও মিষ্ট নিয়ে
 আর সুমি নিয়ে এস যা মার্কেল মার্বেল। একদিন, না
 তার এই খেলায় মনগুলা - মাদটা চলে গেল। তার
 চুলোও না! এই একটা প্রতিষ্ঠানের সমস্যা। স্বীকৃতি
 ঈশ্বরজ্ঞান ও ও উপলব্ধি উপলব্ধির আকাঙ্ক্ষা অল

আমার জন্য জন্য এমন ব্যবস্থা ব্যবস্থা হা হা হা হা
 কে কেন? আচ্ছা আচ্ছা তিক আছে দেখা গা খাবার
 শু শুদ্ধ শুদ্ধ করে বলাই বলাই ২ বর্কে দামি দু
 পালটাটা পা পা পালটাটা করে ১০ ঠিকানা ঠিকানা
 শ্রী রামকৃষ্ণ ঋ ঋ আছে আকবর আকবর
 অনব, অর্গব ত্র্যবর্তী চ্য চ্য চ্য চ্য চ্য
 অর্গব ত্র্যবর্তী তর্নব তর্নব কালান কালান

রামজী রামজী ৩৩ রামজী রামজী ১ চিৎকার চিৎকার
 শুনে এসেছে এসেছি ধারের দিকে চল চল
 মাঝান সেবন মেতাঝন অ অ অ অ গাভেলৈ
 গাভ গাভ গাভেলৈ ই ই ই ই ই ই ই ই ই ই
 ও অডাগর রহস্য অডাগর রহস্য রহস্যনি যোদ্ধা
 যোদ্ধা আধরতলা জোলাইবাড়ী জোলাইবাড়ী
 এই শয়টানটাকে আগে আগে এন এন এন এন

শীঘ্রই যে ঈশ্বরজ্ঞান ও উপলব্ধি

আচার্য, আপনি কি?? আমি টাকা চাই না। সুমি জ্বল আমি
 কি চাই। হ্যাঁ, জ্বালি। আমার মুখের দিকে অকাণ্ড... রামকৃষ্ণ তাক
 না দিয়ে চুপে দিলেন আর... বিশ্বাস্য আর যেন আলো হা হা হা
 পল্ল পল্ল আলো, সুর্য আলো, চেতনাসক্তির সর্গীয়ত্ব সুর
 যেন আলোকিত করে তুলেছে, তুলেছে। নব্বেনকে যেন আত্ম
 হৃৎহৃৎ দেখাচ্ছে। হ্যাঁ আত্ম ওকে পুরো পৃথীটা দেখিয়ে দিলাম
 কিয়। ওর কাছে যেতেই হবে এ ও এ জন কটিতে পারবনা আমি

আমি সারাক্ষণ প্রগরনে আবিষ্ট হোয়ে যা থাকতে চাই। বৈধ
 নে, নরেন। সে ওখর রামকৃষ্ণের মাথুই বেশী সময় সময় কটি-
 তে আরম্ভ মল। তিনি তখন তখন তখন উত্তর উত্তর কলিকাতার
 একটি বাড়িতে চিকিৎসা চিকিৎসারী ছিলেন। একদিন —
 থাকুর, নরেন মারা যাচ্ছে। কোনও মাত্রা নেই ওর। ওয় পেশ না।
 ও সুর্য সারাক্ষণ ধরে যা দেখতে দেখতে চেয়েছিল অ অ অ দেখা নিচ্ছে।
 মনে রাখিগ, যা দেখালি তা রনের মতো তলাবন্ধ থাকবে। এই সংসারে মার কাছ

অবশি রটিয়ে দেব, সুমি সুমি আমার আধরতলা অবশি

Fig.13. Taking the fluidity in the structure forward, I tried to incorporating the wavy headline in these sketches. Dated between 12rth-24rth March.

Exploring Expressivity Through Speed

Looking for a more dynamic texture, I sketched without the inhibition of the tool, but more working with the speed, letting the hand freely embrace the rounds and strong diagonals in the script. The result was more free-flowing. But the challenge was how to convert this into a system to work as a typeface which is equally legible and also somewhat considers the reading habits of Bengali people.

স্বামির অভিজ্ঞতা¹⁴
 স্মৃতি বীজেশ্বরানন্দ
 অসংস্কৃতিক স্মৃতিবিশিষ্ট
 জগৎসাহা স্মৃতিবিশিষ্ট

Fig.14. Sketches exploring speed with different flat nib pens from taking a typecooker approach to more freehand approach, 26.03.2024

Fig.15. Sketches with increased speed, 17.03.2024

Fig.16. An excerpt from *Indrajal* Bengali comics dated June, 1983

স্মৃতিবিশিষ্ট স্মৃতিবিশিষ্ট স্মৃতিবিশিষ্ট স্মৃতিবিশিষ্ট
 স্মৃতিবিশিষ্ট স্মৃতিবিশিষ্ট স্মৃতিবিশিষ্ট স্মৃতিবিশিষ্ট
 স্মৃতিবিশিষ্ট স্মৃতিবিশিষ্ট স্মৃতিবিশিষ্ট স্মৃতিবিশিষ্ট
 স্মৃতিবিশিষ্ট স্মৃতিবিশিষ্ট স্মৃতিবিশিষ্ট স্মৃতিবিশিষ্ট
 স্মৃতিবিশিষ্ট স্মৃতিবিশিষ্ট স্মৃতিবিশিষ্ট স্মৃতিবিশিষ্ট
 স্মৃতিবিশিষ্ট স্মৃতিবিশিষ্ট স্মৃতিবিশিষ্ট স্মৃতিবিশিষ্ট
 স্মৃতিবিশিষ্ট স্মৃতিবিশিষ্ট স্মৃতিবিশিষ্ট স্মৃতিবিশিষ্ট

Looking for Legibility in handwriting

I was also looking at Bengali comic books from the 1980's to early 2000's. This featured handwritten text as opposed to the very homogenised Linotype Bengali featuring comic books after 2010. This writing styles adapted for condensed spaces and small size, often simplified the structure for legibility while maintaining the dynamic nature of the script.

বিশ্বাসযোগ্য নয়, যোকা। ডাকাত-
 দের মুখোশ তোমার কাঠের সাদায়া
 আর পিল্লদের চুরি হওয়া টাকা
 তোমার কাছে। দুঃখিত যোকা।
 আপনার তোমাকে নিয়ে যেতেই
 হবে।

মহাবাজ! একজনে চোরেব
আজই হোক বা কালই হোক
ঘোড়ার দরকার পড়বে। এ
চোরও নিশ্চয় আমার কাছে
ঘোড়া কিনতে আসবে। আর
তৎক্ষণাতঃ তাকে ধরে নিয়ে
আসবো আপনার
কাজে!

[A]

বৃষ্টি আর অন্য সবাই বিদায়
নিলে, পাশুবেরা ব্যাঘ্র বক্র
বনবাসী বনচাঁতে হৈতবলে
প্রবেশ করল। পাশুবদের
সঙ্গে দেখা করতে অনেক
ছুরিখাশি ও বনবাসী সেখানে
এলেন।

[B]

মেখা মেলা

মেখা মেলার মেখা তিন'শ পাঞ্চাশটি জেনগানের কঙ্কণটি
ওমনমন করে বসমান শিকখা গড়ে উঠেছে। মেখা মেলার কমিশন
হল তাঁর নিজস্ব অধীনে জেনার সুরশের কাছিনা। অক্ষয়
হিসেবে পরিচিত এক মঙ্গলদায়ক তাঁর দেবা হয়েছিল। দুইভা
হতাশায় তিনি বলেছিলেন: "আমার শরীর অপরিষ্কার, নিচ জোড়িত
আমার দেবা, আমার জন্মাব স্ক্যান্ডেল, আমার চিত্রা স্ক্যান্ডেল,
আমার ভাষা অপরিষ্কার। সবাই আমাকে ঘৃণা করে। এই হল আমার
বক্রণ জীবন।"

[C]

Fig.17. [A]. Except from *Amar Chitro Kotha*, no.365, Bengali comics dated August, 1986 showing a writing sample with more simplified upright monolinear structure. [B]. Another except from *Amar Chitro Kotha*, no.365, 1986 showing cursive writing with slanted letterforms. [C]. An except from *Amar Chitro Kotha*, no.689, Bengali comics dated August, 1998, showing a more conventional cursive handwriting structure with no slant

Fig.18. Sketches influenced from simpler letterforms of comic book writings, 8th May 2024.

আমি চাই ও উচিত আমি চাই চাই চাই ও উচিত শিক্ষা পাক
অধ্যয়না দক্ষর থেকে থেকে থেকে থেকে কে কে কে ইন্দ্রজ্যল
কমিষ্ট সাল ২০২৪। শাস্ত্র পরম্পর পরম্পর আমার একাডেমি এডভান্স ক্যা
এ বন্ধুক বন্ধুকগাজ্ ও জ্যামোয়াবের দল হল! ও জীবনবে... ও জীবন চারিয়া যামনে মোকে
'দুর্' জীবন চারিয়া মোকে আইনতো করবে মনাজীবনবে, ও যা খান ভানে বানুয়া ভাবে।
ও বন্ধু পাড়িয়া করবে ব্যাঘ্র, দুর্ দুর্ জীবন চারিয়া মোকে আইনতো করবে মনাজীবনবে।
এই মোকেআজন্দি অগমনি অগমনি পাত্রেঅবক ব্যাচী চীকঅনগোলো
জ্যাক্সি মং সংগীত রণীঅনাম সাঙ্কু ঠকুর ভারতীয় ভারতীয় জ্যাক্সি মংজীত
হ্যা! তা ঠিক! হ্যা তা। ঠিক তা ঠিক! কিন্তু এ
জাহাজগুলো জো জাহাজগুলিলি চি ছিল ল কিন্তু
জলদপুরো জলদপুরো সবকরি জাহাজ লুট করার

Digitizing — Defining a Direction

Sorting the Structure

The first digitization was done from a tracing [fig.19] of a sample text from the manuscript *Kavacasamgraha* [fig.01]. Although I was trying different approaches through my flat nib sketches but I couldn't achieve a lively feel like in this manuscript. I did a quick correction on harmonizing the base height the characters and transferred it to Glyphs [fig.20]. The result was very interesting, but I wasn't fully sure if I would like to take this direction as the challenge was to translate this into a contemporary drawing that doesn't look outdated and simply mimic the manuscript.

So I modified it into a more simpler structure influenced by my sketches from comic book writings [fig.21]. I kept the slight shift of weight and contrast in the terminals and the headline. This was a distinct feature in the manuscripts, reminiscent of the pressure and movement of the tool, bringing dynamism in the letters, a quality I wanted to preserve this quality in my drawing.

This preliminary explorations led me to some key focal points to guide my drawings further:

- i. The structure should come from the cursive handwriting traditions but also consider some Linotype like improvements for better legibility and clarity.
- ii. The ducutus should be clear in the letterforms.
- iii. Emphasis on movement.
- iv. Distinct cursivity in the headline

With these guidelines, I moved forward towards the next set of drawing iterations.

Fig.19. Letters traced from the 18th Century manuscript *Kavacasamgraha*, 28.03.2024

Fig.20. First draft based on the traced manuscript letters.

Fig.21. A second version drawn with simplification on the structure yet preserving the nuances of manuscript writing .

ব অতাস্তনমক্রযোজ্ঞঃ
সমনিকল্পী ১ ৫

19

20

একজাতীতো সংগঠিত
শ্রবণতা ও জৈববৈচিত্র
কলমী দেখা হয়

36 pt

রত চয় মহোদর কচরকচর পরিম গলবিল গোদ দুপাদাপি হামল মাশ শিচ
মতী জোতা পাৰপাতর পরিয়কারিণী বিপততারিণী পারিম বর রত হমতিচ
পাতনি রথিবি বকত হ্রামপরাপত তনায় পরতযেবে দীরনবিদীরন গোলোবা
চিবা মংমারবিরাগী পরিতয়কতা পোহাব বাহিল এলাচি বীজবারক পরবী ঐশ
রোগিণী পনায় এত ল জোরকপালে ঠকব মতয়কার পাৰাও বাদপরিতিবাদ ম
ওলো জাত দলব পাৰত পাতিবরতয় ততবতাপাম জং তদগতচিতত দ্বারব
দ্বারাবতী বিনিমংহর পরতিকার লোকমংগরহ রকতমরবণ বেতরবতী তদর
পরাপতবয়বহার কমতাকমতি গাগতর গজায় মবয়মাচী জেবরা জাতীয়া
মবরগপরাপতি হামে মাগর রমিবার মরবপরকারে গরজালি তরনি গাথে তি

12 pt

02.04.2024

21

একজাতীতো কাজী

42 pt

02.04.2024

একজাতীতো কাজী

42 pt

06.04.2024

Reduction

The next step was to work out from the preliminary drawings to dive into more typographic details, trying to find a vocabulary; how the terminals end, What is the curve tension etc. I looked at contemporary projects like *Frijky* by Neelakash Kshetrimayum and *Noort Bengali* by Juan Bruce [fig.22]. The resulting drawing [fig.23] was promising but still showed traces of the raw tool which I wanted to get rid of to achieve a more clean and contemporary look. This led to more reduction of the details, distilling it to only the necessary details for conveying my focal points.

ইন্ফাল, কাংলৈপাক²²

The twentieth century fades behind us

Kangleipak Eeyek [A]

ভারত-পাকিস্তানসহ পশ্চিম এশিয়ার বিভিন্ন দেশে লাগাতার জঙ্গি হামলার খবর মিললেও
নন-ভাইওলেপসকী সিষোল ওইরিবা ইরোম চন্ শর্মিলা

বিমল মুখোপাধ্যায়ের
জন্ম ১৯০৩ সালে
বর্তমান উড়িষ্যার গঞ্জাম
জেলায়। [B]

Fig.22. [A]. Multiscript typeface *Frijky*, Reading MATD 2010 project of Neelakash Kshetrimayum
[B]. Juan Bruce's *Noort Bengali*, released by Typetogether in 2021.

Fig.23. 18th May drawing, details with angular and sharp cuts to exaggerate the tool behaviour in a more typographic vocabulary.

Fig.24. Comparison between the above mentioned version and one drawn on 4th of June with reduced details, deeper connections but keeping the same feeling.

আকীজ²³

আকীজপাত²⁴

72 pt
18.05.2024

আকীজপাত

72 pt
04.06.2024

অআইঐঋঊঋঊওঔ

কখগঘচছজঝডণত

থনপবভমরলশাহী

36 pt
04.06.2024

Translating Fluidity

Although the drawing from 4th of June was a move forward but I wasn't still convinced with the texture it created in the text. Taking the manuskript references studied earlier, I tried to emphasize more on the wavy matra(headline) and deep organic connections. I made them fluidic with smooth treatment on the curves making them fast or slow depending on the length of the connections [fig.26]. My teachers also encouraged this direction and suggested to explore brush calligraphy

বেগুন সমাগর পার্শ্ব স্বাক্ষর নিখিতে
 আঙ্গুরের একমমর সমাগর আমার অঙ্গ
 সমগ্র একমমর বাচীমানসারাগ্রে প্যারনগ্নী
 বর্ষস্বাক্ষরবে একাদফলেসাতরাজবর্ষী
 দ্বাবায় একমম স্বাক্ষর ছিনা অঙ্গরে
 আঙ্গুরবাচীর চৌচৌদর প্যারনগ্নী
 প্যারনগ্নী বাচীমানসারাগ্রে প্যারনগ্নী
 স্বাক্ষরবে একমম আঙ্গুরের স্বাক্ষরবাচী
 বর্ষস্বাক্ষরবে একমম আঙ্গুরের স্বাক্ষরবে
 হ্যাঁ দিবেনবর্ষস্বাক্ষর

বসন্তসোহিনী পেন্‌টুভটাস
 অলিঙ্গসুন্দর সামুদ্রিক চতুষ্পদী
 শ্রী সোমেন্দ্রচন্দ্র নন্দী

25

- Fig.25. [A]. Excerpt from *Secrétaire Bengali, vol.1, 1779*, Bibliothèque nationale de France. Département des Manuscrits. Indien 725,
 [B] Lettering from cover of Soumendra Nandi's Book, 1992
- Fig.26. Showing details of the drawing from 12th June.
- Fig.27. Comparison between text set with the 4th June version[A] and 12th June version[B]

আজবগল

আজবগল

26

12.06.2024

শিকনি পালানেন বাতাবীলেবু আকাশপাতাল অপজাতি হবন কিনবি ব
 রাজি খেপালেন বলব গাজি মরব মাখাতেম তলানি মজাব জল কালিক
 মিলবি বেরত পারিজাত হুশ শিখল বলিলে আ জিরে অতিমানবিক জী
 আপনাআপনি কাতারেকাতারে হতাশ পারতে খলতি গম খেতেম হরিব
 গাবগুবাবুব লব মুনশীগিরি গতানুগতিকতা নন নবাবনাজিম নামত খান
 রহ বললেন কাকুতিমিনতি থনি জুলুমবাজ আহেলীবিলাতী নেমে বিজ
 কাকুতিমিনতি আপ গাহিবে বিনুনি জারে আকুলিবিকুলি গাবগুবাবুব
 মমি শক জবা শম মতিহারী নানানরকমের কালাপানিপার অহিতকারী
 জমতাম পাকলুম মারিব কালাপানিপার বিকেলবেলা তমালিকা খেলনা
 বুখাশুখা নাতিনাতনী কবিরাজী মানাতুম নিবকাশ একশা ককার খেলুন

[A]

04.06.2024
12 pt

আজা অভাব লা বগলাবগল ববগঅ বগলাবগল বগলাবগল এগণ বগ
 আজাল বগঅ আজল লালী অবগলঅবগল ববগল বগবলাঅ বগল
 অবগলঅবগল জব বগলাবগল জলআ লা ববগ বগবলাঅ এলাবগ ল
 অবগলঅবগল অলাজ বগবলাঅ জজ বগলা অভাব আল আজাব
 আলআ বগলাবগল আজা ববগব আলআ বগবলাঅ বগবলাঅ এল
 ববগ বগবল আজল ববগঅ আজবগল বগবল এ বগল আ লালঅ
 ডলল অলা এগণ অবল অবগলঅবগল ভাবগল ডলা বগবলাঅ ভাব
 ভাবগ আঅ অবগলঅবগল লা আ আজ জালব এলাল আজ অজল
 এল আজাব বগলাবগল বলা আজাঅ বগবণ আজল আজাঅ অবল
 আবগল আলআ বগবণ বগলাবগল অবগলঅবগল ভাব অবগলঅবগ

[B]

12.06.2024
12 pt

27

*“Remember structure & tool
are different. Don’t let the
tool dictate the type”*

— Patrick Doan

Drawing a Dynamic Text

Over the summer holidays, I went back to sketching and choose a flatbrush to capture the softer fluidic turns in the headline connections and added stroke modulations with changing of the brush angles to create it more dynamic.

Taking these features from the sketch, I refined my drawing from 12th June, reducing the weight and making the details more finer and cleaner, fit for a text cut. I added more characters to test it a real text and editorial scenario.



06.07.2024

↑ Fig.28. Sketch with Flat brush exploring fluid turns with stroke modulation and dynamic stroke angle on exit strokes.

মূল বজরাটির সঙ্গে আর একটি ছোট নৌকোও
বাধা আছে। সেখানে রান্নাবান্নার ব্যবস্থা।
জেলে ডিঙি থামিয়ে কেনা হয় টাটকা মাছ।
কখনও পাশ দিয়ে স্ট্রমার গেলে নদী উত্তাল
হয়ে ওঠে, বজরা ও ছোট নৌকোটি প্রবলভাবে
দোলে, ছোট নৌকোটিরই ছটফটানি বেশি,
যেন বড় ভাইয়ের হাত ছাড়িয়ে ছটে যেতে চায়
এক দুরন্ত বালক।

বজরার ভেতরের কক্ষে একজনই যাত্রী, খাটের
ওপর তাকিয়ায় ঠেস দিয়ে অর্ধ শয়ান রয়েছেন
এক ভ্রাম্যমাণ জমিদার, জোড়াসাঁকোর
ঠাকুরবাড়ির কনিষ্ঠ সন্তান রবীন্দ্র। গোষ্ঠীপতি
দেবেন্দ্রনাথের এতগুলি সন্তান, তবু বাংলার
বিভিন্ন জেলা ও উড়িষ্যায় ছড়ানো তাঁর
জমিদারি তালুক প্রত্যক্ষভাবে তদারকি করার

24 pt
15.08.2024

↑ Text set with the Drawing inspired by the fluidity explored in the flatbrush sketches, 15th August

I developed 2 different versions [fig.29] and interpolated them trying to find a good amount of contrast. I compared it with Linotype Bengali, which I found to have very high contrast. Generally all the contemporary fonts follow more or less this formula as it became a standard after its wide adoption due to use in all major publishing houses. I examined more to learn that the low contrast in Linotype Bengali is because of its intended use as a newspaper font primarily. This contrast helps compensate for the ink bloating in newspapers.

I chose to go for a more contrasted model as it fitted a wider editorial context. The weight is also little heavier. This was an intentional choice, as I was designing it for book type-setting, where a slightly sturdier structure would ensure better readability and durability in long-form text. The low contrast helped maintain a consistent texture in paragraphs, making it comfortable for extended reading.

29

Version with Less Contrast

Version with More Contrast

স্বপ্ন বিতান স্বপ্ন বিতান

sa_ba-pa_na

bi-ta-n

sopno

bitan

48 pt
24.08.2024

বিবি ভাতি ব নত নাবাৰি তাত বিনতা তানানানা
তত নাৰাব তানানানা বাতা তিন বাতাৰি তত না
তাত বানাবি তাত নতি তানানানা নাৰাত বিনতা
বানান নি বনাব নিবাত ভাতিবি নৰাব বাবত
নবতি নাৰাবি নানা তাতান নাৰ বিতত নাৰাবি
বানাত নতি নতি বনা বানা ন বন বানাব নত
বানাবি নিবত নান নাতি বাতা বাতা নতি তব
তানানানা নন নৰাবি নিববি নত ভাতি বনব ননি

বিবি ভাতি ব নত নাবাৰি তাত বিনতা তানানানা তত ন
তানানানা বাতা তিন বাতাৰি তত না তাত বানাবি তাত
তানানানা নাৰাত বিনতা বানান নি বনাব নিবাত ভাতি
বাবত নবতি নাৰাবি নানা তাতান নাৰ বিতত নাৰাবি ব
নতি বনা বানা ন বন বানাব নত বানাবি নিবত নান না
বাতা নতি তব তানানানা নন নৰাবি নিববি নত ভাতি
নিবনিব নিন ভাতিব তানানানা তানানানা বনি বনান ব
বানাত বিনতি তাতব নাৰব ননি তিতা নৰাবি বাতাৰি ন

Linotype Bengali

বিবি ভাতি ব নত নাবাৰি তাত বিনতা তানানানা তত ন
তানানানা বাতা তিন বাতাৰি তত না তাত বানাবি তাত
তানানানা নাৰাত বিনতা বানান নি বনাব নিবাত ভাতি
বাবত নবতি নাৰাবি নানা তাতান নাৰ বিতত নাৰাবি ব
নতি বনা বানা ন বন বানাব নত বানাবি নিবত নান না
নতি তব তানানানা নন নৰাবি নিববি নত ভাতি বনব ন

Fig.29. Comparison of the drawings from 24th August with different contrast and text set in Linotype Bengali.

Figgins Pica

Satisfied with the overall direction for the Bengali Text, I focused more on the details and optical weight balancing. Looking back at popular references of text typefaces, I found the proportions of a 19th century metal type *Figgins pica* [fig.30] working really well in terms of legibility in book typesetting. Especially the proportions in conjunct shrinking and weight distribution in the blobs make it very comfortable reading without compromising base height.

BENGALI ON PICA BODY.

30

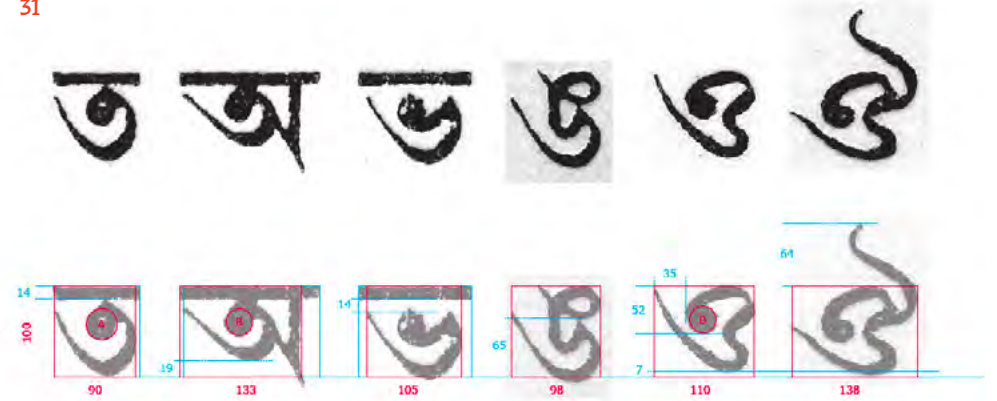
অনন্তর মার্থা যীশুর আগমনের সংবাদ পাইবামাত্র তাঁহার সহিত সাক্ষাৎ করিতে গেল, কিন্তু মরিয়ম গৃহে বসিয়া রহিল। অপর মার্থা যীশুকে কহিল, হে প্রভো, আপনি যদি এ স্থানে থাকিতেন, তবে আমার ভ্রাতা মরিত না। কিন্তু এখনও আমি জানি, আপনি ঈশ্বরের কাছে যে কিছু প্রার্থনা করিলেন, তাহা ঈশ্বর আপনাকে দিবেন। যীশু কহিলেন, তোমার ভ্রাতা উঠিবে। মার্থা তাঁহাকে কহিল, শেষদিনে পুনরুত্থান সময়ে সে উঠিবে, তাহা জানি। তখন যীশু তাহাকে কহিলেন, আমি উত্থিত ও জীবন। যে কেহ আমাতে বিশ্বাস করে, সে মরিলেও জীবিত হইবে; এবং যে কেহ জীবিত হইয়া আমাতে বিশ্বাস করে, সে কখনো মরিতে না; ইহা কি বিশ্বাস কর? সে কহিল, হাঁ প্রভো। এই জগতে যাহাকে অবতীর্ণ হইতে হয়, আপনি সেই ঈশ্বরের পুত্র খ্রীষ্টে, এমন বিশ্বাস করিতেছি। ইহা বলিয়া সে যাইয়া আপন ভগিনী মরিয়মকে গোপনে

V. & J. FIGGINS, LONDON.

Fig.30. Specimen of Bengali Pica on body, *V. & J. Figgins, New Specimens*; Oriental Types (London, 1884)

Fig.31. Analysis of Figgins Pica Body in *The Bengali letterforms proportion analysis*, by Riccardo Olocco, March, 2014

31

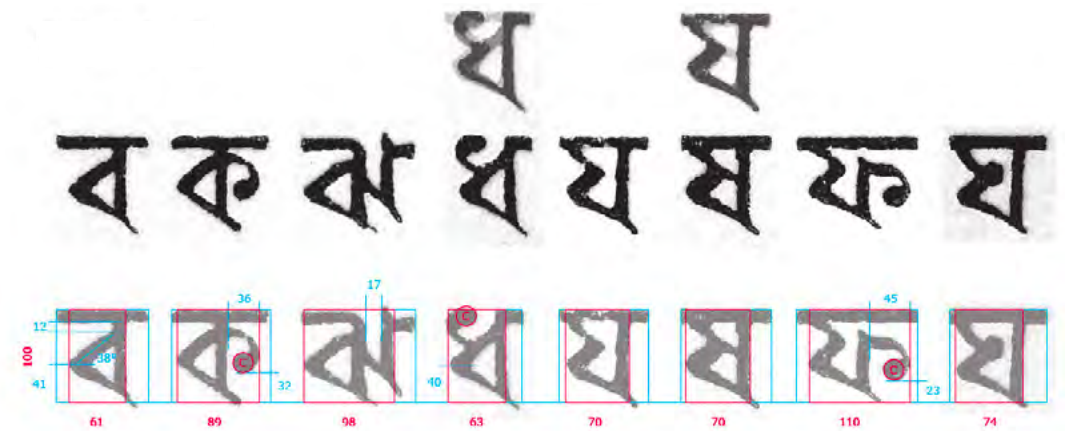


Blue vertical lines = sidebearings

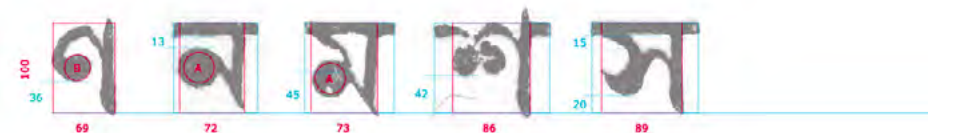
Endings

The pink numbers below the letters show the ratio of the width to the base character height (= 100). Basically, the ratio of width to height of the pink rectangle.

① ② ③
87% 70%



ধ ষ
ব ক ঝ ধ য ষ ফ ষ
ণ ন ম শ স



Alternates & Conjunct Characters

Next, I refined the structure of some characters by deepening the connection of the flourish and matra(headline). This enhanced the script's cursiveness feel and created a more dynamic texture in text. Looking back at my references, I also designed alternates to test their behavior in text. [fig.33]

Bengali conjuncts are structurally complex and denser in stroke weight. Drawing from my analysis of Figgins Pica, I focused on achieving a well-balanced optical weight for conjuncts and began integrating them.

Conjuncts play a crucial role in defining the final texture of Bengali text, significantly altering its rhythm compared to compositions using only base characters—something rarely seen in real-life text. The process of drawing conjuncts from the basic glyphset was challenging, and I still have a long way to go in perfecting them. However, given the scope of this program, I am quite happy with the results so far.



32

[A] ইশান ঈগল আহার উইপোকা

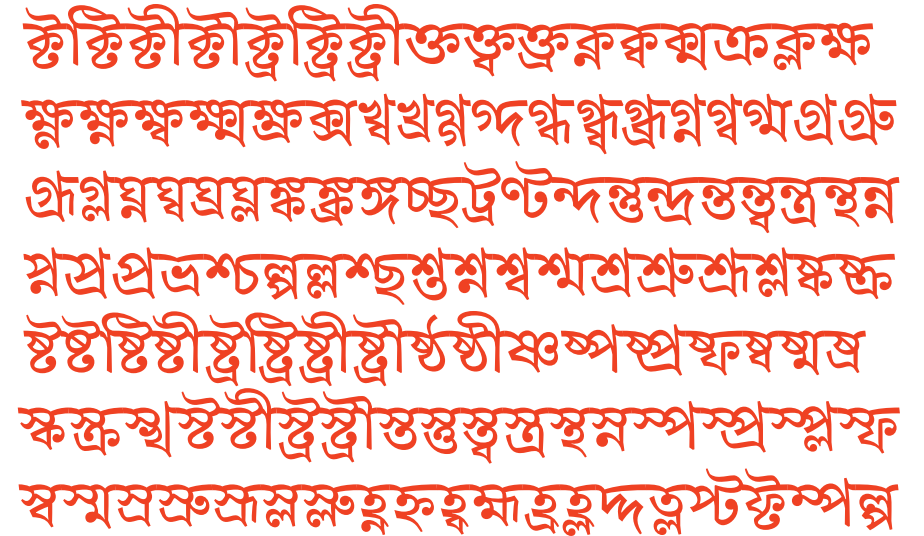
[B] ইশান ঈগল আহার উইপোকা

24 pt
14.09.2024
ইশান ঈগল আহার উইপোকা
i-sha-n ii-gol-l a-ha-r u-i-po-ka

[C] ওজন ঔষধ মায়ি উসা পলাও

24 pt
33 21.09.2024
ওজন ঔষধ মায়ি উসা পলাও
o-jo-n ou-ssa-dh ma-jh-i uu-sha p-la-o

34



[A]

24 pt
08.10.2024

[B]

10 pt
08.10.2024

নদীর ওপর দিয়ে ভেসে চলেছে জমিদারের বজরা। আশাচ মাসের আকাশে নবীন মেঘ লুকোচুরি খেলে সঙ্গে, কখনও হঠাৎ এক ঝাঁক পাখি উড়ে যাবার মতন এক শশলা বৃষ্টি, কখনও ঝলমলে রোদ দু পাশের জলরঙে আঁকা, কোথাও জনবসকোতথাও নিবিড় গাছসাদা, আবার মাঝে মাঝে শূন্য প্রান্তর নিছক শূন্য কোনও শিল্পীর তুলিতে ধরা পড়ে না, কিন্তু প্রকৃতির মধ্যে তাও ছবি হয়ে যায়। কখনও সূর্যালোক, কখনও ছায়ায় ছবিগুলির রং বদলে যায়। বজরাটি বিশেষ বড় নয়, দাঁড়ি মাঝির সংখ্যা ছজন। ছাদের ওপর দুজ বন্দুকধারী প্রহরী বসে আছে ছাতা মাথায় দিয়ে। একই হুকো কলকে পরস্পর বদলাবদলি করতে করতে করছে নিচু গলায়। এ বজরার মল্লাদের অকারণে হল্লা করার নিষেধ আছে, খুব প্রয়োজন না হলে তারা না, সখনির্দেশ হয় হাত তুলে কিংবা চোখের ইঙ্গিতে। মূল বজরাটির সঙ্গে আর একটি ছোট নৌকোও বাঁধা মেখানে রান্নাবান্নার ব্যবস্থা। জেলে ডিঙি থামিয়ে কেনা হয় টাটকা মাছ। কখনও পাশ দিয়ে স্টমার গেলে হয়ে ওঠে, বজরা ও ছোট নৌকোটি প্রবলভাবে দোলে, ছোট নৌকোটিরই ছটফটানি বেশি, যেন বড় ভাই

Fig.32. References for ই (i) and হ (ha) from *Principes ou Vocabulaire Bengaly*, 1801

Fig.33. [A]. Text set in Figgins Pica [B]. 14th September drawing, deep connections in urni (flourish) & matra(headline) in ই (i), ঈ (ii), হ (ha), উ (u) [C]. 21st September drawing, Alternate characters (ss10) and positinal forms for ও (o), ঔ (ou), ম (ma), ম (uu) and শ (pa), ও (o) respectively

Fig.34. [A]. 8th October drawing, Conjunct Characters [B]. Text set with The 8th October version.

Harmonizing the Details

I continued harmonizing the details, optically balancing the weights, especially in the ascenders and descender marks. I made the counter shapes more stable by stripping out any unnecessary details that made it distracting in a regular continuous text. Below are some of these changes that I developed over the next months.

42 pt
07.09.2024

পুষ্টিমূলষতিষ্কবৌধীসঁত

✎ In this version, I diagonal stroke in ষ (sha) is stiffer and connects lower with the stem. The matra connection of স (tta) is made shallow. The signs ̂ (chandrabindu) & reph is havier.

42 pt
08.10.2024

পুষ্টিমূলষতিষ্কবৌধীসঁত

✎ I changed the middle stroke of ষ to be more curvy with the flow of the ductus making it more organic. I made ৌ (ou matra) flourish a bit higher to resolve clashing but it made for increased leading. Harmonized the matra connection of স (tta) and made it deeper.

42 pt
24.10.2024

পুষ্টিমূলষতিষ্কবৌধীসঁত

✎ Changed the structure of conjunct ষ্টি (ssa-ta) to a more manuscript style, changed the proportion of ল (la) and weight in its blob. Reverted back the ৌ (ou matra) flourish and made it shorter instead. Made the sign chandrabindu lighter to optically harmonize and added curve in the exit stroke of reph. I also reduced the weight in the descending vowel marks. Increased the counter space in ী (ii-matra) ascender.

42 pt
17.12.2024

পুষ্টিমূলষতিষ্কবৌধীসঁত

✎ Changed the curve in the diagonal strokes of ষ (ssa), ষ্ (ka), ষ্ (ba), ষ্ (dha) etc and their conjuncts. This makes the counter space more airy and make a more stable shape suited for continuous reading. Made the reph mark shorter to make it less dense in the ascenders. The right ascending of ী (ii-matra) is also less curvy and more stable.

আজকের দিনটি বড় মনোরম। শুভ রোদ্দুরে একটুও জ্বালা নেই, স্নিগ্ধ বাতাস বইছে মৃদু শাহাড়শ্রেণী স্পষ্ট দৃশ্যমান। গত কয়েকদিন ছিল একটানা বৃষ্টি, কাল সন্ধ্যায় যেন সমুদ্র হয়েছে, তাই আকাশ স্বোদহীন নীলাভ। অরণ্যের প্রতিটি বৃক্ষ ও লতাপাতাই স্নানসিক্ত যার নিজস্ব বর্ণ, প্রকৃতির মধ্যে ধ্বনিত হচ্ছে আনন্দের কলস্বর। আজ এক সার্থক উৎসব।

শাহাড় থেকে নেমে অরণ্য ভেদ করে দলে দলে মানুষ চলেছে রাজধানীর দিগন্ত ধারা কিন্তু একটির সঙ্গে আর একটি মিশে যাচ্ছে না। কোনও দলেই শিশু কিংবা বৃদ্ধ-সমর্থ শরীরের নারী ও পুরুষেরা, সাথে হেঁটে যেতে হবে অনেক দূর। বিশেষ পোশাক-এমনকি যারা অন্য দিন তেমন পোশাকের ধার ধারে না তারাও কিছু-না-কিছু পরিধেয় ও পুরুষদের আবরণের প্রভেদ বিশেষ নেই, কটিবস্ত্র মাত্র সম্বল, নারীদের রয়েছে নকশাকাম কুমুম সজ্জিত, গলায় গুঞ্জাফুলের মালা, নানারকম হাড়ের টুকরো ও কুঁচ ফল। বিশেষ পুরুষদের মাথায় সালকের মুকুট।

যেন শাহাড় থেকে চল নেমেছে। অরণ্য থেকে বেরিয়ে আরণ্যকরা। অমরপুর থেকে আসছে রিমাংদের দল। প্রায় দুশো জনের এই দলটি বেশ সুশৃঙ্খল, প্রায় সকলে মাঝখানে রয়েছে এক অশ্বারোহী। অনুচ্চ এক টাট্টু ঘোড়া, তাতে উপবিষ্ট প্রৌঢ় মানুষ।

10 pt
28.12.2024

35

Vowel marks

I worked the vowel marks with required anchor placements and making alternates for resolving overlapping with ascender shapes. I also made the u-kar & uu-kar shapes for necessary glyphs. I also harmonized the Rakar forms.

36

[A] কাকিকীকুকুক্কঁকৈকৈকৌকৌক্যককাঁ

24 pt [B] প্রপঞ্চ দ্বিমদ্রবব্রাদ বগ্রাগীত ভেডছিছা

Fig.35. Texture of text in 10 pt, composed with the drawing from 28th December

Fig.36. [A]. different vowel mark placements with the mark to mark feature, shown with the base letter ক (ka)
[B]. Few of the rakar forms with their base characters. In the rakar forms the base characters has to be shrunk to keep the base height consistent and the rakars also have to be adjusted optically and in length according to the character width

মত্যাঙ্গিৎ রায়েৰ সিনেমা—এহ্নে দাসগুপ্ত উল্লেখ
 করেন, এই ধরনের শৌল্লিক পরীক্ষামূলক কৌশল
 শুধুমাত্র প্রতিদ্বন্দ্বী—তেই দেখা যায় এবং রায়
 পরবর্তী কোনো চলচ্চিত্রে এমনটি ব্যবহার
 করেননি। তবে, সীমাবদ্ধ(১৯৭১)—র শুরুতে
 স্প্লট-স্ক্রিন ব্যবহার বা জনঅরণ্য(১৯৭১)—তে
 ফ্রিজ-ফ্রেমের উপস্থিতি ইঙ্গিত দেয় যে, রায়
 সমান্তরাল চলচ্চিত্র আন্দোলনের নতুন ভাষার
 প্রতি সাড়া দিচ্ছিলেন। মনে হচ্ছিল যেন, মৃগাল

Multiscript Design

Looking back, this process wasn't just about designing a typeface; it was about understanding the deeper essence of both writing systems & creating a conversation between them, developing an intuitive feel for how the two scripts could live together in harmony.

Challenges in a Bengali-Latin Family

One of the most challenging aspects of my type design journey was finding harmony between Latin and Bengali, ensuring that both scripts not only functioned well together but also retained their distinct typographic identities. This wasn't just about making them visually compatible—it was about respecting their inherent structures, calligraphic traditions, and historical evolution while still creating a unified system.

Bengali, with its origins in reed or bamboo pen writing, has a stroke logic that contrasts sharply with Latin's broad-nib pen construction. The angle of contrast in Bengali is naturally opposite to that of Latin, which meant I couldn't simply apply one system's logic to the other. Instead, I had to rethink contrast placement, stroke modulation, and letter proportions in a way that allowed both scripts to feel like part of the same family, without distorting their natural forms.

To tackle this, I studied existing multiscript typefaces, observing how designers approached the challenge of balancing different writing systems. Conversations with one of my mentors Hugues Gentile and Noopur Datye of EkType helped me break down the problem into key considerations: weight distribution, contrast levels, and overall personality matching. I found that certain micro details, like terminal treatments, stroke endings, and modulation patterns, could serve as subtle bridges between the two scripts. However, I also realized that forcing uniformity wasn't the answer. Bengali has its own natural calligraphic gestures, and Latin has its own structural conventions. My goal was to create a system where they could coexist without one feeling like an adaptation of the other.

It was a long and iterative process—tweaking proportions, adjusting contrast relationships, and constantly testing how both scripts interacted in real text settings. Some solutions worked on paper but failed in extended reading; others felt visually coherent but disrupted the natural rhythm of either script. And while I still see areas to refine, I'm excited about how the design is evolving—shaping a truly bilingual typographic voice that respects both traditions.

যেহেতু সদস্য জাতিসমূহ জাতিসংঘের 24 pt

সনদে মৌলিক মানবাধিকার, মানব

দেহের মর্যাদা ও মূল্য এবং নারী

Whereas a common understanding of these rights and freedoms is not just important 41

One of the more subtle yet crucial challenges was determining the size relationship between the two scripts. Bengali, unlike Latin, has a single case, which means there's no natural variation in letter height like the x-height and cap height relationship in Latin. This difference directly affects how the two scripts sit together on a line.

I had to carefully refine the proportions—adjusting the baseline, x-height, and headstroke alignment, so that both scripts felt optically balanced without compromising their individual rhythms. To ensure visual harmony, the guidelines must be carefully adjusted so that both scripts maintain a balanced body size while accommodating their distinct structural needs.

ascender line

headline

baseline

descender line

শিল্প

Fig.41. Comparison of Adobe Bengali by Neelakash Kshetrimayum & its Latin companion in Bold and Regular weights

Fig.42. Comparison of Tiro Bengali and its Latin companion by Tiro Typeworks in 12 point text, upright and italic

Fig.43. Vertical Guidelines for Manik Bengali and Latin

- 42 জীবন, স্বাধীনতা এবং দৈহিক নিরাপত্তায় প্রত্যেকের অধিকার আছে। বা দাসত্বে আবদ্ধ করা যাবে না। সকল প্রকার ক্রীতদাস প্রথা এবং দাস করা হবে। কাউকে নির্যাতন করা যাবে না; কিংবা কারো প্রতি নিষ্ঠুর, অবমাননাকর আচরণ করা যাবে না অথবা কাউকে এহেন শাস্তি দেওয়া যাবে না। No one shall be subjected to arbitrary arrest, detention or exile. Everyone is entitled in full equality to a fair and public hearing by an independent and impartial tribunal, in the determination of his rights and obligations and of any criminal charge against him. আইনের আশ্রয় সমান এবং ব্যক্তিনির্বিশেষে সকলেই আইনের আশ্রয় সমানভাবে ভোগ করতে পারবে। আইনের আশ্রয় লাভের অধিকার আছে। আইনের আশ্রয় লাভের অধিকার প্রত্যেকেরই আছে। No one shall be subjected to arbitrary interference with his privacy, family, home or correspondence. Everyone has the right to protection of the law against such interference or attacks.

12 pt

ascender height

x-height

baseline

depth of descender

Angel

The Starting Point

In terms of references for my Latin, I was interested in Gotico-Antiqua and hybrid structures in parallel to my 18th Century manuscripts in Bengali. I was also intrigued by works from German expressionism like that of Rudolf Koch and Czech designer, Vojtěch Preissig.

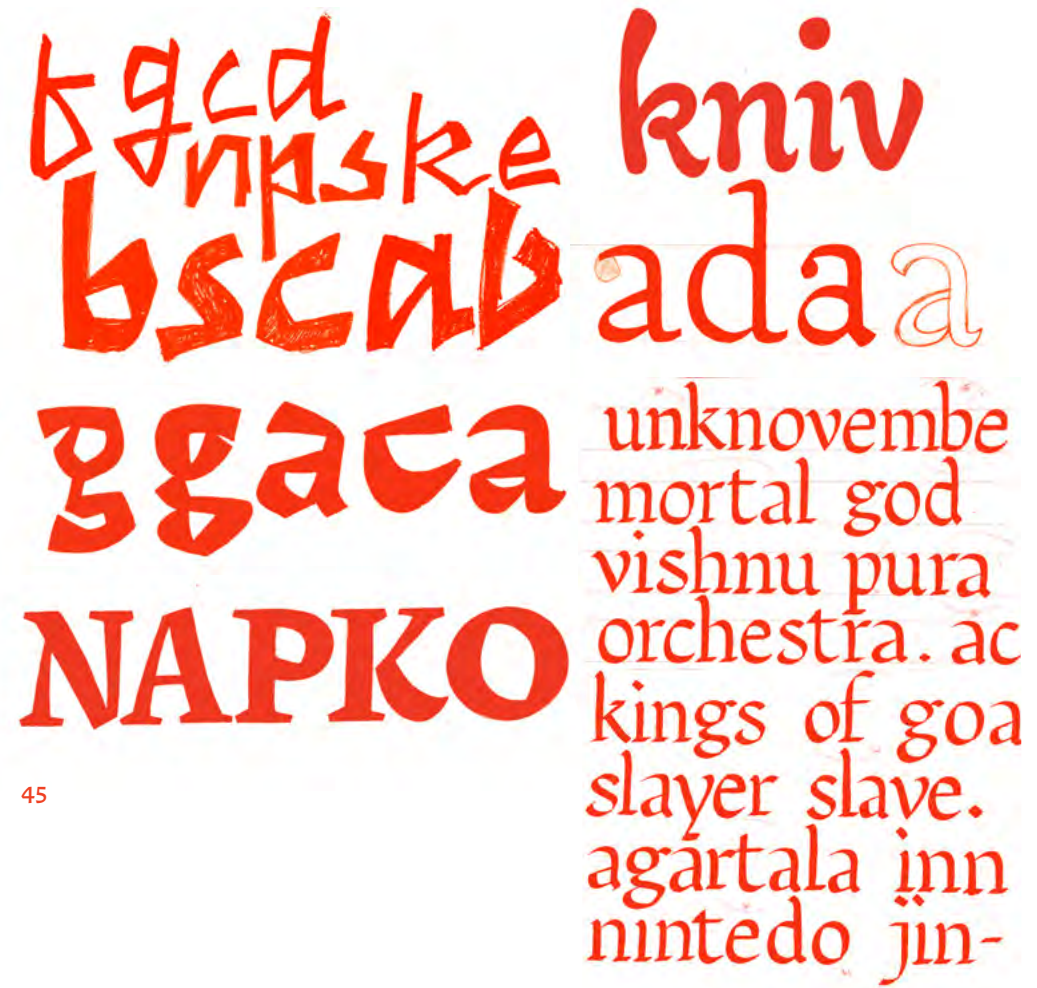
[A] **Senibus autem** [B]



[C]

Fig.44. [A]. Gotico-Antiqua, proto-roman, hybrid, 15th-century types between gothic and roman. Book by Jérôme Knebusch, co-published by ANRT / ENSAD Nancy. [B]. Sweynheim & Pannartz 115R, proto-Roman by Konrad Sweynheim & Arnold Pannartz, 1467 [C]. Preissig Calligraphic by P22 Type Foundry inspired by works of Czech designer Vojtěch Preissig

Fig.45. Collage of different sketches made between Jan - May



45

Sketch Explorations

I naturally reached for a broad-edge pen, sketching isolated words and experimenting with TypeCookers to explore expressive forms. The challenge was to distill this energy into a dynamic yet readable text typeface. Earlier in the program, flat-brush calligraphy sessions with Patrick Doan had deepened my understanding of Roman letterform construction, which in turn influenced my approach. After discussions with my instructors, we selected a few promising ideas to develop digitally. I found myself constantly moving between my sketchbook and laptop—refining some shapes while keeping room for new discoveries.

Digital Drawings for a Text

By May I had started digitizing some ideas that I explored through sketches earlier. I had already started working on the Bengali Text, but the goal for the Latin text was to let go of all the inhibitions to aesthetically match the Bengali, and make them in conversation with each in a more intangible way.

07.05.2024
48 pt

hamburgerfonic
আগডুমবাগডুম faemorrhagic

28 pt

👉 *The first drawing I developed, had a clear influence of the hybrid proto-roman references, but looked more rigid and pointed compared to my developments in the Bengali.*

15.05.2024
48 pt

hamburgerfonic

17.05.2024
48 pt

hamburgerfonic

👉 *This led me to revise the drawing with more softer rounds a smoother wedges in the stem endings, keeping the sharp cuts in the connections as I felt it was also in conversation with the deep matra connections in Bengali. While this was definitely a move forward but still was looking static compared to my Bengali's progress, especially when seen in text paragraphs.*

Fig.46. [A]. Proof document of Galfra, designed by Ladislav Mandel between 1975 and 1981, for SEAT telephone directories
[B]. Antique Olive designed by Roger Excoffon in the 1960s for the French type foundry Fonderie Olive.

“Have you seen the work of
Mandel & his phonebooks?”

— Sébastien Morlighem



46

[A]



[B]

At this stage, I was drawn to expressive humanistic forms rooted in a strong writing tradition. This also aligned perfectly with my explorations in Bengali. However, I struggled to translate my sketches into something with a more contemporary feel. Noticing this, our teacher Sébastien encouraged me to look into the works of the French type designer *Ladislav Mandel*. I also discovered *Antique Olive* by Roger Excoffon, a brash humanist sans-serif typeface. I was immediately captivated by the refined organic yet characterful approaches in these references.

On further inquiry, I learnt that the strong horizontal movement and the contrast between mechanical and monolinear modulation weren't just stylistic choices but functional design solutions for readability in extended text. This is more pronounced in Mandel's *Nordica* and *Galfra*, which were designed for phone books using photocomposition, making them highly legible at small sizes. Another of his works, *Aurélia*, showcased fluid humanistic serif forms with clear calligraphic roots.

47



Puisse je ne jamais m,habituier, ne jamais connaitre la satiete ne pas m,amuser de leur seule chanson. est la vieille tribu humaine qui soupire et qui parle et les paroles des sages qu,avilissent les amateurs et les pedants sont remplies de vie et de sang dans les souvenirs de ma jeunesse et dans ces livres j,entends le meme cri le meme desir la meme affirmation la meme volonte.

[B]

Inspired by these discoveries, I returned to my drawings with a fresh perspective, refining my letterforms to incorporate these nuanced principles and expanding the characterset.

[A]

28.05.2024
48 pt

hamburgefonic

Fig.47. [A]. Mandel's *Nordica* ('northern' serif) and *Lineale* ('sans serif'), circa 1986, showing strong horizontal weight distribution and deep connection with inktraps [B]. *Aurélia*, another text face conceived by Ladislav Mandel (unreleased), 1967

Fig.47. (TOP) Comparison of the Sans and Serif versions (BOTTOM) Comparison in 10 pt text paragraph alongside the Bengali text I was working at that time. 12.06.2024

Sans or Serif?

I developed the drawing from 28th May and started typesetting with it in text paragraphs alongside the Bengali Text I was working on at the time. After analyzing boths scripts together, I soon stumbled upon a crucial question— should my Latin text be a Sans or a Serif? I also considered going with a more hybrid wedged structure as i was doing untill now. Taking the letterforms of *Nordica* as a reference, I decided to draw a quick serif version, as I felt it would complement my Bengali design better.

I reduced the overall weight for a better optically match with the Bengali, reduced the reverse contrast and balanced it with heavy asymmetric serif to keep the horizontal emphasis. This horizontal weight also complements the continuous horizontal matra of the Bengali script.

48

12.06.2024
44 pt

hamburgefontsic

hamburgefontsic

44 pt

10 pt

lump roles countertouch soon the luck train lump roles countertouch soon luck tra
unfungible titan corn incan do a plug to do unfungible titan corn incan do a plug o
suets uh perfused doe chloridated larigo doc suets uh perfused doe chloridated larig
menting dom genro dang rupture four niched documenting dom genro dang rupture
deturb husk up rip sod of the tarted fin hug four niched deturb husk up rip sod of t
pad criniferous libament relet nonabiding in tarted fin hug pad criniferous libament
muff endere squinters disanchor rectangle relet nonabiding muff endere squinter
baubees apprest the ask loom of nun hi song disanchor rectangle baubees apprest tl

শকিনি পালানে বাতাবীলবে আকাশপাতাল অপজাত হিবন কনিব কিপলি গলিত বাগ খল জমবি
রহলি রাজি থিপোলনে বলব গাজ মিরব মাখাতমে তলানি মিজাব জল কালকিপূরাণ অলি গলিকরা
তরী মজবনে মলিবা বিরেত পারজিত হুশ শখিল বললি আ জরিে অতমিনবকি জীবতিকাল মরলিাম
কাকুতমিনিত আপনাআপনি কাতারকোতারে হতাশ পারত খলত গিম খতেমে হরবি বারবার কালা
পানপির তাগ পশম গাবগুবাবুব লব মুনশীগরি গিতানুগতকিতা নন নবাবনাজমি নামত খানাতালাশি
মাখ তপতী আশপাশ রহ বলনে কাকুতমিনিত খনা জুলুমবাজ আহলৌবলিতী নমেে বজিলবিতাশি

Developements Over the Summer- More Movement

In June, with the start of the summer break, I got more time to reflect on the lingering question—serif or sans? Caught in a dilemma between the two, I decided to take a break from digital drawings and focus on research instead. I revisited my refernces, read more, and returned to sketching with a flat brush.

Motivated to capture more movement and dynamic forms, I had a breakthrough in Bengali by experimenting with stroke pressure modulation and softer curves, bringing a sense of fluidity to the letterforms. This gave me time to look at the letterforms with a new and fresh outlook.

Inspired by these sketches, I went back to redrawing, maintaining the existing proportions while making the connections on verticlas more deeper, borrowing from cursivity in the structure, refining stroke modulation and micro-details. I applied this same approach to both the sans and serif versions, hoping for a more in-depth critique once school resumed in September.

anir অম 49

a [A]

Fig.49. Flat-brush sketch from 26th july, A step towards more smoother and fluid letterforms.

[A]. I took a liking towards this 'a', specially how it flared in the tail, a dynamic behaviour that encourages the movement forward.

Fig.50. [A]. Sans serif version drawn on 16th september inspired from the sketch explorations, with lower connections in 'n, m, h.' and flared sharp tail in the 'a' matched by the head serifs in 'u, n..'

[B]. Bengali counterpart of the text style drawn on 18th of september.

[C]. Serif version redrawn on 26th september, with emphasis on the curve speed from cursive structures. The head serif in 'u' is matched with 'd,h,l..' while keeping the sharp flared serif in 'n,a,p..'

[D]. Comparison of texture in text paragraphs

50

16.09.2024

72 pt

[A]

adhesionul

18.09.2024

72 pt

[B]

আগরতলাই

26.09.2024

72 pt

[C]

adhesionul

10 pt

abide acorn of the habit dacron for the buddha gouda quaalu bench bogus of the scribe robot for the aplomb jacob ribbon. coral of the spiced jocose for the basic havoc soccer. demure of the tidbit lodger for the cuspid period bidder. ebbing echoir of the bushed is decal for the apache anode needs. feeder focus of the lifer bedford for the serif proof buffer. gender gospel of pigeon dogcart for the sprig quahog. herald honors of the dih

10 pt

কহিও ডিঙাইয়াছিলি তরিতরকারি অবদমন আহত ডাকাইয়াছিল জিতি বর বাঁক লড়ছ মাসুল সাঁটছিলাম পিন লাউমাচা পুরুষমানুষ চালাইবার বিমাইয়াছি বিজলী কাঁসিয়া বাঘিনী অচলন ওত রটল হাঁপা ঢুকাইয়াছি কে অনুমাপক রত রইল দাসাইল অসীম হরল অমল সালিও ছয় রঙ দু রাখিয়াছিস রং কাল মল জারাইয়াছ ঘিরিয়াছিলাম ভিরমি চিবাইয়াছিলি পড়িয়াছিলাম রূপালি শরম মাছিমারা সটীক আরক ভরিয়াছি শুকাইয়া

10 pt

abide acorn of the habit dacron for the buddha gouda quaalu bench of bogus of the scribe robot for the aplomb jacob ribbon census coral of the spiced jocose for the basic havoc soccer demure docile of the tidbit lodger for the cuspid period of ebbing echoing of the bushed decal for the apache anode needs feeder focus of the lifer bedford for the serif proof in buffer gender is gospel of the pigeon dogcart for the sprig quahog

[D]

Serif It Is !!

Returning to school after the summer break was an exciting new phase for both my Bengali and Latin typefaces. After discussions with my teachers, we agreed to move forward with the serif version, as it complemented the Bengali script and was better suited for editorial and book use.

With renewed enthusiasm, I focused on refining micro-details, balancing stroke weights, and fine-tuning proportions. I expanded the character set, adding uppercase letters and numbers. To finalize the serif treatment, I experimented with different weights and styles before settling on an asymmetrical bracketed serif, which struck the right balance between character and functionality. Listed down below are some of the changes over the month of October.

HCadhesion

60 pt

02.10.2024

☞ *Settled for a straight crossbar in e narrower proportions of the rounds to fit better in text composition with Bengali*

HCadhesion

07.10.2024

☞ *Softer top serifs in d, h, i, u ... Lower terminal of C. Change in the terminal ending of e, c ... shallower connections in h, n, m, u...*

HCadhesion

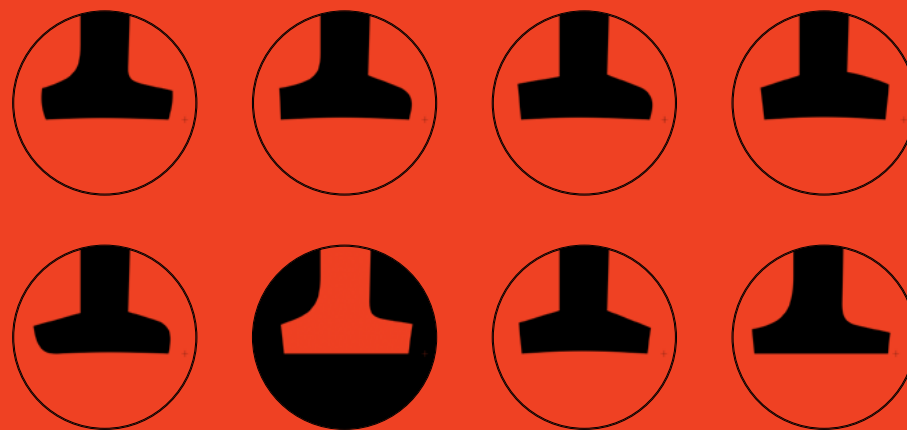
10.10.2024

☞ *Concaved foot of bottom serifs. Serifs in s harmonizing with rest of the family. Balanced proportion of the o.*

HCadhesion

30.10.2024

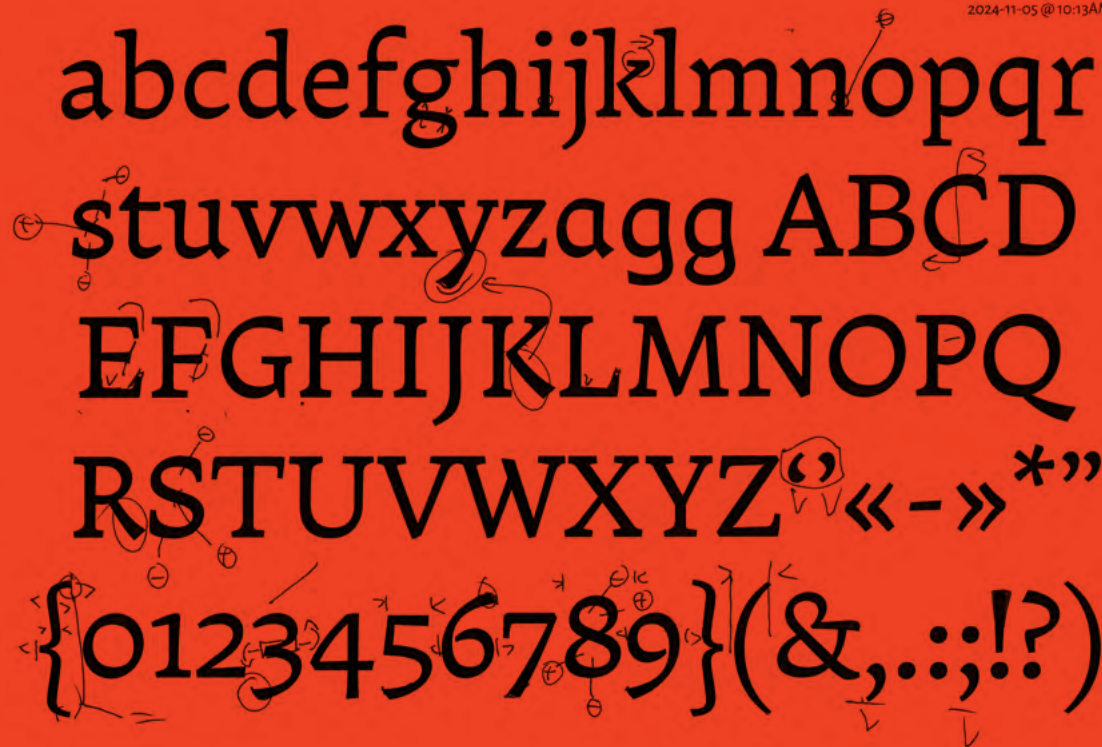
☞ *Suble change in the curve speed of the rounds. Straight cut in the foot of bottom serifs. Cleaner curve in the flared serifs of a, u, n...*



↑ Fig.51. Exploration of serif detail for the Text Latin

↓ Test proof from 05.11.2025 with Hugues Gentile

2024-11-05 @ 10:13AM



Ray's debut film, *Pather Panchali* (1955), was a landmark release for Indian film, establishing Bengal as the home for auteur-driven Indian cinema while also drawing attention in the west. A more pensive work than *The Big City*, it

10 pt

Akiro Kurosawa and Jean Renoir revered Ray. Martin Scorsese, Francis Coppola and V Anderson are among the many filmmakers who have been inspired by him. And he's considered one of the founding fathers of Indian cinema. But this titanic reputation, along with such a large body of work, could make tackling the films of Bengali director Satyajit Ray seem intimidating for even an avid film lover. Inspired by the lyricism of one-time mentor Jean Renoir and the street-level truthfulness of Italian neorealism, specialised in a kind of cinematic naturalism in which the on-screen action unfolds in

দ্বন্দ্বীতে রায় তাঁর দীর্ঘ ক্যারিয়ারে অনুশীলন করা বাস্তবতাবাদী চিত্ররীতিকে প্রশ্ন করতে শুরু করেন, এতদিন ধরে তাঁর চলচ্চিত্রের অন্যতম বৈশিষ্ট্য হয়ে উঠেছিল। 'The Cinema of Satyajit Ray' গ্রন্থে গুপ্ত উল্লেখ করেন, এই ধরনের শৈল্পিক পরীক্ষামূলক কৌশল শুধুমাত্র প্রতিদ্বন্দ্বীতেই দেখা যায় এবং পরবর্তী কোনো চলচ্চিত্রে এমনটি ব্যবহার করেননি। তবে, সীমাবদ্ধ'র (Company Limited) শুরুতে স্ক্রিন ব্যবহার বা 'জনঅরণ্য' (The Middleman)-তে ব্রিজ-ফ্রেমের উপস্থিতি ইঙ্গিত দেয় যে, রায় স্তরাল চলচ্চিত্র আন্দোলনের নতুন ভাষার প্রতি সাড়া দিচ্ছিলেন। মনে হচ্ছিল যেন, মৃগাল সেনের মতো চিত্রকারদের প্রতিপ্রিয় রায়ও দেখাতে চেয়েছিলেন যে, তিনিও সাহসী ও পরীক্ষামূলক হতে পারেন। স্ট্রিপের দৃশ্যের সর, শিরোনাম ফ্রেমিটের সঙ্গে সিদ্ধার্থের শহরের মধ্যে দিয়ে চলার দৃশ্য আসে, যেখানে সে

10 pt

Conversation between Latin & Bengali

At this stage, I focused on harmonizing micro-details and typographic treatments across both scripts. I created multiple proofs to study how they interacted on the page, aiming for a balanced overall gray. I could sense a dialogue forming between Bengali and Latin—each retaining its distinct structural character while aligning through finer details.

To enhance readability, I fine-tuned the stroke modulation, introducing subtle flaring in the verticals, with slightly heavier tops inclined to the right. This adjustment improved the forward movement of the typeface, making it more comfortable for reading at small sizes.

03.12.2024

adhesion
আগরতলা

Fig.52. Harmonized details in the Latin and Bengali Text, 03.12.2024

Adding Weight

Once I felt confident about the regular weight, I moved on to developing the bolder weights. I started with a heavier master and interpolated between the two to generate medium and bold instances, giving me greater flexibility in determining the most effective weights for editorial use.

For both scripts, the key challenge was maintaining a balanced contrast and curve tension across all characters. Certain forms risked closing up if not carefully managed, making them appear overly heavy. As with Bengali, I created an optical axis and interpolated different values to find the right contrast that would complement the regular weight. Another point was matching the weights so that they naturally take on the shapes of the lighter weight. I also made a lighter master out of extrapolation but would like to take more time in refining it later.

I like how it turned out overall. With its relatively low contrast Manik Text is perfectly legible in very small sizes. When applied in larger, display sizes (like book covers), more crispy details will show up which are invisible in small sizes.

Honduragsত
Honduragsত
Honduragsত

[A]
54 pt
28.12.2024

[B]
54 pt
26.01.2025

↑ Fig.53. [A]. First draft of the Extrabold with Regular for comparison, 28.12.2024
[B]. Refined version of the Extrabold with proportions fixed, added contrast, weight distribution and curve tension fixed with the rest of the family, 26.01.2025

Contrast
+100

ohnno

+100 From early dawn **throng**s of tri
their strong bodies naked in the
ful **loincloths** but the women ha

Contrast
+200

ohnno

+125 From early dawn **throng**s of tri
their strong bodies naked in the
ful **loincloths** but the women ha

+150 From early dawn **throng**s of tri
their strong bodies naked in the
ful **loincloths** but the women ha

+175 From early dawn **throng**s of tri
their strong bodies naked in the
ful **loincloths** but the women ha

+200 From early dawn **throng**s of tri
their strong bodies naked in the
ful **loincloths** but the women ha

08.01.2025

↑ Fig.54.

Explorations on contrast and inter-
polations of it to determine a good
contrast amount , 8th January, 2025.

Aa Aa

Extrabold

Bold

← Fig.55.

The final weights for Manik Text .

Aa

Semibold

Aa

Medium

Aa

Regulat

Aa

Light

52 pt
Bold

10 Great films set in Kolkata

18 pt
Medium

The megacity once known as Calcutta has been immortalised on screen through the work of Bengali directors such as **Satyajit Ray**, Bimal Roy, Mrinal Sen & Aparna Sen.

Extrabold

4 August, 2022

10 pt
Regular

Kolkata (known as Calcutta until 2001) is often superseded by the likes of Mumbai and Delhi when it comes to on-screen imaginings. Yet it has provided a key location for world-renowned Bengali filmmakers such as **Mrinal Sen** and **Satyajit Ray**, who have documented the city over many decades. As a result, even for cinephiles who've never had the good fortune to visit, it's a metropolis that has time and again besieged the imagination.

Bold

Straddling the Bay of Bengal, Kolkata was once a colonial city and trading port of the British Empire, but it also has a rich history of political resistance. With its extensive cultural legacy, it occupies a unique position in the development of art and politics in India. In the 1960s and early 70s, the transformation of Calcutta into an axiom of leftist

agitation inspired many filmmakers to explore the radical sociopolitical shifts that were taking place at the time.

Famous landmarks that repeatedly shape the on-screen urban topography of Kolkata include the Victoria Memorial, Howrah Bridge, the Hooghly River, Dalhousie Square and the shopping district of Chowringhee. Its cinematic past is anchored in the founding of the film studio New Theatres in the 1930s by producer **B. N. Sircar**, which contributed to the development of Indian cinema through technical and narrative innovations.

With the recent success of the thriller **Kahaani** in 2012, Kolkata has re-appeared on the radar for many filmmakers and studios, and rightly so.

Character Set

Uppercase

ABCDEFGHIJKLMNOPQRSTUVWXYZ
WXYZÀÁÂÃÄÅÆÇĆĈČĎĎĚĚË
ÈÉÊËĔĖĜĞĜĤİİÎÏĴĴĴĴĴĴĴ
ÖØŒÙÚÛÜÝŦßŴŵŶŷŸŹ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
WXYZ

Lowercase

abcdefghijklmnopqrstuvwxyzàá
âãäåāæçćĉčďđěęèéêëĕĝğĝĥìí
ïïĵĵĵĵĵĵĵĵĵĵĵĵĵĵĵĵĵĵĵ
ÿÿÿ
abcdefghijklmnopqrstuvwxyz

numerals

01234567890123456789
01234567890123456789

Punctuations
& Symbols

— . : ; ‘ ’ , “ ” „ ? ! ; | † ‡ • … & * @ " < > « »
€ € \$ \$ ₹ ₹ ¢ ¢ £ £ ¤ ¥ ¥ § ¶ © ™ ® º μ ° %
[{ (\ | /) }]
← ↑ → ↓ ↔ ↕ ↖ ↗ ↘ ↙ ↘ ↙ ↘ ↙ ↘ ↙ ↘
— . : ; ‘ ’ , “ ” „ ? ! ; | … & " [{ (\ | /) }]

On **11 April** this year, when **Cannes** announced its participating films, an amnesty was broken: an Indian movie, Payal Kapadia's **All We Imagine as Light**, had made it into the official competition – something that hasn't happened in **30 years**. The last time a movie from India made it into the race for the **Palme d'Or**, it was back in **1994**.

A Secondary Script

This chapter deals with the challenges and process of designing Manik Italic for Latin text and a secondary style for the Bengali text.

Fig.56. [A]. Slanted letterforms in hand painted poster of the Bengali movie *Swayamsiddha* (1975), [B]. Cutout of an editorial advert in the Bengali magazine *Desh*, 1969-70 edition.

What is Even an Italic?

Proposing Bengali italic is as oddly Eurocentric as applying terms like ‘serif,’ ‘sans-serif,’ or ‘roman’ to Bengali typography. This approach disregards Bengali’s unique typographic history, imposing a foreign tradition onto it as terms like *serif*, *sans-serif* and *roman* in the Bengali context. However, a reactionary purism that aims to remove all outside influence overlooks the natural cross-cultural exchanges that enrich many traditions. Infact we can see a lot of use of slanted lettering in script style as a tool of creating hierarchy in old handcomposed posters and editorials [fig.56] and comic books alike [fig.17.B].

As discussed earlier, italic are not a traditional element of Bengali typography, however current italic are typically simple oblique forms of regular text, as shown in part 1, making them difficult to distinguish, affecting readability and aesthetics. Developing a distinct, stylistically differentiated italic could improve both legibility and the visual harmony of text, in addition of helping to create better hierarchy in text.



[A]



[B]

Chirography

Chirography, the study of handwriting and penmanship, played a key role in shaping my approach to the Bengali secondary script. As I analyzed different chirographic examples, the first thing that stood out was the strong slant, which I felt would complement the expressive nature of my upright design.

For the Latin italic, I initially explored script-style forms, sketching connected letterforms. However, I soon realized that a fully script-like italic would be too distracting when used alongside the regular weight in text. In contrast, this wasn't a concern for Bengali, as the script is inherently cursive. To refine my approach, I studied chancery italic, particularly their steep pen angle, long ascenders, and sawtooth rhythm, which lend an elegant, erudite feel. I also examined expressive italic with dynamic modulations, such as Anselm Serif by Stormtype, to find a balance between movement and readability.

স্বাক্ষরশিল্প

শ্রদ্ধা দিলে কবিবাসরে কুম্বপদ্যায় স্তম্ভচ্যুতিয়া বহুনি পঞ্চম পলা —
চ্যাময়ে ধ্রুপে শ্যামাকো বাহো দ্বিষ্টে হেমঙ্গমা হানেকষ্টে মোতো সুঙ্গী —
বাহুঙ্গমা বিখ্যামা গঙ্গমা অষ্ট ধট বাঙ্গা বিদ্যে ৷ ২৩৫০ ৷ বাঙ্গা অষ্টে —
কষ্টে নামাঙ্গ্যং । দেবারিগলে ভাত : কুম্বপদ্যায় বনশ্যামা বৈতি । অষ্ট দাঙ্গ্যমঃ —

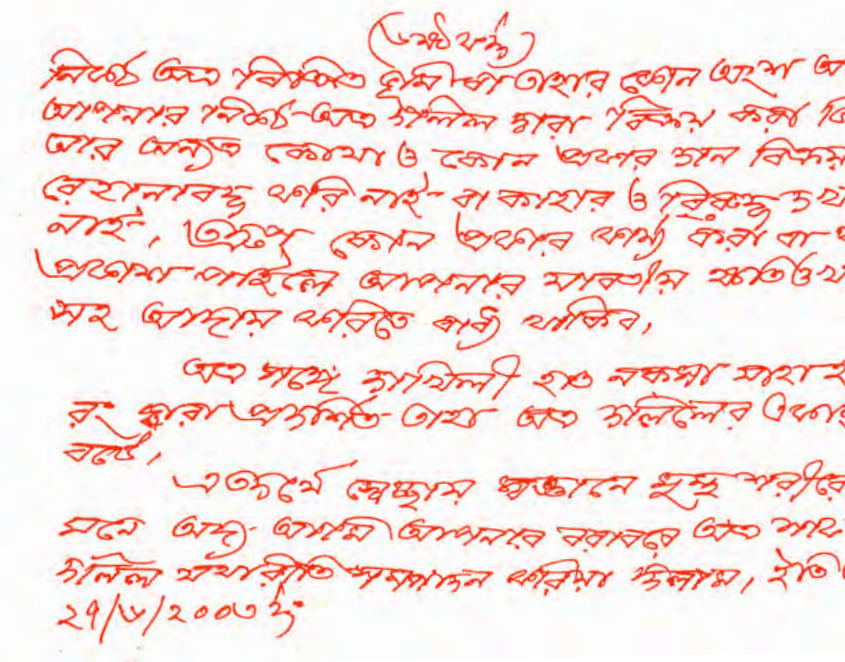
57

Jahrmarkt Jahrmarkt

58

full-blooded "chancery cursive"
which Arrighi is most famous. 59

The ancestry of Anselm goes
back to Jannon, a slightly 60



61

For the Bengali though, as there were no true italic typefaces available, I decided to find more dynamic writing samples. I discovered a series of documents, like land record deeds and legal papers, as even a decade ago all the official transcriptions were handwritten, not printed. The nature of these documents meant the scribe has write fast and hence creating a highly slanted dynamic texture.

Now the challenge was to distill these qualities in a more systemetic and toned down manner to fit in a text, still bringing a lively texture without distracting too much with the details.

- Fig.57. Bengali manuscript handwriting with strong slant. Horoscope from personal archive.
- Fig.58. Kaligari Serif, Italic and Display script from Franziska Weitgruber, 2016
- Fig.59. Requim text italic from Hoefler & Co, an example of chancery italic for text.
- Fig.60. Anselm Serif Italic, By Storm Type(2007). A spirited take on humanistic book typeface with playful details.
- Fig.61. Excerpt from a land deed paper showcasing fast Bengali writing. I took inspiration in the structural changes for some letters and fluidity of the matra.

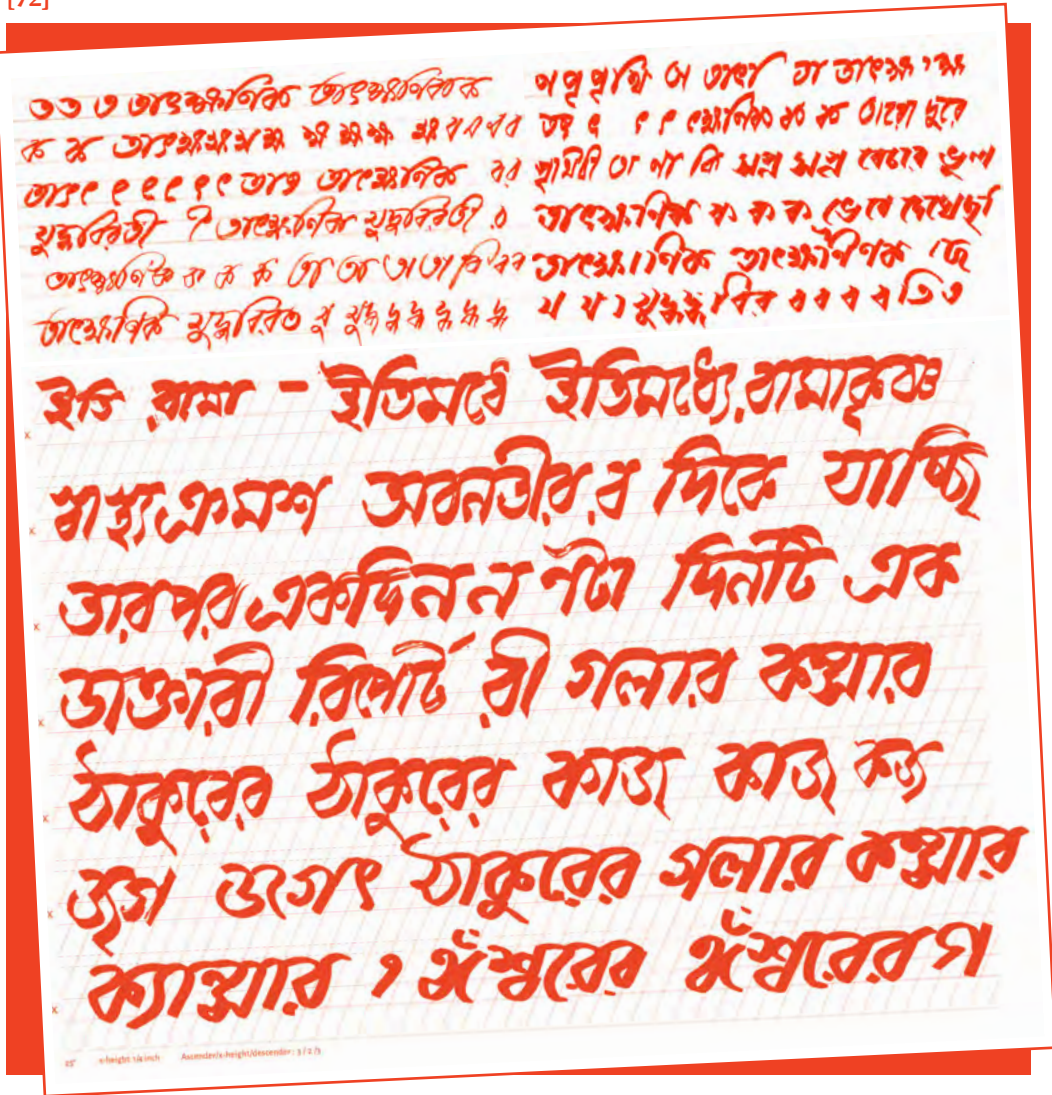


Fig.62. Assortment of sketch explorations for a secondary script with strong slant in Bengali, done between March-April of 2024

Fig.63. Different sketch explorations for the Latin Italic, done between April-May of 2024

Sketches

With these vibrant references in mind, I began sketching—or rather, freehand writing—to explore structural variations influenced by cursivity and speed. This approach allowed me to experiment with expressive Bengali letterforms, mimicking the natural flow of handwriting.

Building on this, I transitioned to sketching with tools like the flat nib and brush, similar to my process for the upright style. This helped me better understand stroke behavior and contrast. I applied the same methodology to Latin, ensuring a parallel exploration. After discussing with my instructors, I narrowed my focus to a few key typographic behaviors that were most relevant to my project.

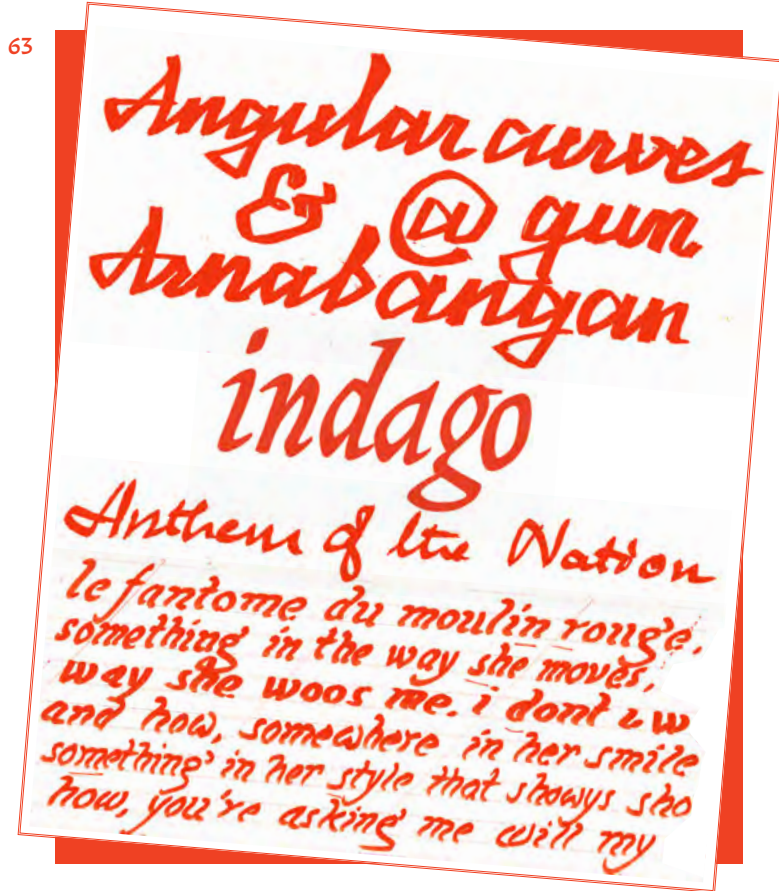


Fig.63. Different sketch explorations for the Latin Italic, done between April-May of 2024

Emphasis on the Structure

Designing the italic was a very enriching experience for me. I am fascinated by the fact that italic is in some way a different script, with changes in structure, spacing and overall texture, among other things.

Once I was satisfied with the upright design and had explored enough through sketches, I began digitizing my ideas for the italic companion. My initial Bengali drawings turned out slightly heavier than the upright, with wider proportions. The highly slanted cursive structure added complexity, making the letterforms expand in an effort to maintain legibility.

অবজাতীত 64
60 pt

ছাহাইলাম তরজমা কামারশাল উলু বহুকাল তেতে বব্ব
আবাত জো বেজো আতাত আতাত জোব জোব জোব বব্ব
অবেঅবে জোত জোবে বব্ব আতাত আতাত বেতব্বী আতাবব্ব
আজীবতেব্ব তেজী বেত বেব্ব তেতো চরাবার বাগডুম ঘাম 12 pt
বল বাবু রন আজাপুরাতনী অবগাহ জানল শখ আতীর 07.05.2024

Fig.64. First version of the Bengali Italic with heavier weight.

Fig.65. [A]. Simplification of the initial drawings . Pointed terminals instead of Flared. Deep connections
[B]. Further reduction of the letterforms. Stabilized the ikar and ikar ascenders. distinct structural change in the knot of ক (ka). Change in direction of flourish ending, making it more harmonius in the textual texture.
[C]. First version of the Latin Italic, having connected script with strong influence of handwriting but is too distracting in text and doesn't fit well with my overall upright design.
[D].Simpler yet dynamic ascenders

65

[A]
60 pt
05.06.2024

[B]
60 pt
16.09.2024

[C]
60 pt
16.09.2024

[D]
60 pt
24.09.2024

অবজাতীত
অবজাতীত
adhesiono
adhesiono

I soon realized that I need to simplify the structure while preserving the dynamic strokes. Patrick emphasized four key criteria to distinguish the italic from the roman—angle, cursiveness, terminals, and width. Keeping these in mind, I started defining core guidelines for my Bengali secondary script.

- i. Visible structural difference in letters like ক (ka), ছ (cha), জ (ja) & স (sa), inspired from the vernacular chirography refernces
- ii. Depper connections, increased cursivity
- iii. A strong slant with a simpler structure
- iv. Increased contrast and slightly narrower letterforms compared to the upright.
- v. Pointed terminals instead of flared one like in the upright.

These insights guided my Bengali italic design, ensuring that it retained fluidity while integrating seamlessly with the upright.

By september, I started working on the Latin Italic drawing exploring script style, but soon shifted towards a more simpler structure keeping the dynamism and a strong slant of 22°. I also maintained the emphasis on the horizontal weight distribution, like the upright.

Slant

In the 24rth september's drawing, there were still a lot of details and visible flaring to make the texture stand out in the text size . I felt like the serifs also doesn't fit my upright, so in the next drawings I harmonized the design of the serifs. While working on simplifying the structure more, I minimised the flaring, just enough to not create a distracting uneven texture when used in text. On testing it in text paragraphs along with my regular, while the slant of the bengali was feeling very natural but in the latin it felt too much. So I created an Indesign file with several test paragraphs with varying slant and setteled on a reduced slant of 18° [fig.66]. Although I applied different slant angles to optically make them look slanted equally [fig.68.B].

In parallel, I continued to harmonize the Bengali italic to have staight and clean stroke endings, that fits equally with the Latin counterpart.

Over the lip of the *little dell*, swallowed to put on the Ring. *The desire to do this laid hold of him*, and he could think of *nothing else*. He longed to yield. *Not with the hope of escape*, না বজরাটি বিশেষ বড় নয়

66
Slant 0

Over the lip of the *little dell*, swallowed to put on the Ring. *The desire to do this laid hold of him*, and he could think of *nothing else*. He longed to yield. *Not with the hope of escape*, না বজরাটি বিশেষ বড় নয়,

Slant -4

Over the lip of the *little dell*, swallowed to put on the Ring. *The desire to do this laid hold of him*, and he could think of *nothing else*. He longed to yield. *Not with the hope of escape*, না বজরাটি বিশেষ বড় নয়

Slant -8
10 pt

অকিঙাতীশাঅনষদ

67
[A]
52 pt
14.11.2024

অকিঙাতীশাঅনষদ

[B]
52 pt
23.01.2024

gadhesionuf

[A]
52 pt
10.10.2024

gadhesionuf

[B]
52 pt
24.10.2024

gadhesionufcy

[C]
52 pt
14.11.2024

gadhesionufcyg

[D]
52 pt
23.01.2024

68

Fig.66. Slant angle tests in paragraph with comparison to Upright in both the scripts, 10.10.2024

Fig.67. [A]. Weight and base height of the characters matched to fit better with the upright. Fixed curve tension. [B]. Matra connection in ক (ka) fixed, proportion of দ (da), ষ (ssa), ii-kar fixed and stroke ending of দ harmonized with rest of the family. Inclead blob weight in ষ

Fig.68. [A]. Added top serifs in the ascenders that harmonizes with the softer serifs in roman, [B]. Reduced the overall slant by 4 degrees. Changed the curve tension in n, u, h, m..still maintaining a emphasis on the horizontal weight distribution although lesser than the roman [C]. Corrected proportion of the g. Simplified the non seriffed legs to a straighter horizontal cut. Terminals of s, f, c made consistent. Made single story f as I felt it balanced the otherwise cursive letterforms giving it more cleaner & contemporary look. [D]. Added a single story g as well and harmonized the tails of g, y. Crossbar of t & f made more cleaner with straight cuts that reflect the dynamism of the roman.

Balancing the color

Achieving an even texture between Latin and Bengali italic while ensuring harmony with their upright counterparts in text size required careful adjustments in weight, contrast, and rhythm.

For the Latin italic, I refined the angle and stroke modulation to ensure a smooth flow. By fine-tuning the balance of cursiveness, terminals, and width, I achieved a rhythm that felt fluid yet controlled.

In Bengali, I had to account for the natural complexity of letterforms. Regular proofing in text settings helped me fine-tune the overall color, ensuring that both scripts blended seamlessly while still retaining their individual characteristics.

Italic Capitals

For the uppercase, I starting out with more swashy Capitals but in the later versions, I toned down to a more refined structure to be more stable, still with some hints of cursiveness in certain characters like the A, M, V. In the final version, I kept the T as an alternate so that it creates a lively texture when set in all caps. I also noticed the the uppercase was tending to lean more towards the lowewrcase when set together, so the slant in the uppercase is reduced by 1° to opticall match with the rest .

69 *AEHJVUOPGQSTham* 52 pt 14.11.2024

AEHJLUOPGQSTham 52 pt 14.11.2024

AEHJLUOPGQSThamT 52 pt 23.01.2024

Exploring the conjuncts in Bengali

Extending the Bengali Secondary script with the conjunct characters was one of the most challanging part of the project. The complex structure needed extra attention and unconventional solution to fit in a legible text while mantaining the expressive cursivity. The denser characters of the conjunct needs carefull optical balancing of both weight and proportion which Iwould like to give more time later. But overall it was highly satisfactory seeing these characters work in the text size.

70

44 pt কুসুম্কারাঙ্কন

50 pt আত্মশ্রমশ্রম

50 pt অভিশস্তন্য

88 pt অস্মান

10 pt

আজকের দিনটি বড় মানোরমা। শুভ রোদ্দ
মিষ্ণু বাতাস বইছে মুহু মন্দ, শটভূমিকার
দৃশ্যমান। গত কয়েকদিন ছিলাম অকটানা ব
অমস্ত মেঘ নিঃশেষ হয়েছে, তাই আকাশ
অরণ্যের প্রতিটি বৃক্ষ ও লতাশাতাই মানি
যার যার নিজস্ব বর্ণ, শকুতির মধ্যে ধনিত
কলম্বর। আজ এক মাথক উৎসবের দিন।
মাছাড থেকে নেমে অরণ্য ভেদ করে দলে
রাজধানীর দিকে। যেন অনেক নদীর ধার
অঙ্গে আর একটি মিশে যাচ্ছে না। কোনও
বৃদ্ধ-বৃদ্ধা শায় নেই, চলেছে অমর্থ শরীরের
শায়ে হেঁটে যেতে হবে অনেক দূর। বিশেষ
অকলেই, অমনকি যারা অন্য দিন তেমন
না তারাও কিছু-না-কিছু শরিয়ান করেছে
আবরণের শ্রেণ্ড বিশেষ নেই, কটিকস্ত
রয়েছে নানারকম আওরণ, কেশদাম কুম্
গুঞ্জাহানের মাঝা, নানারকম হাডের টুক

Fig.69. Progress on the Italic Capitals between 14th November and 23rd January.
Fig.70. Bengali conjunct characters in text.

প্রথম গল্প অধ্যায়ক শঙ্কু ও খোকা এবং অন্যান্য গল্প প্রকাশিত হয় ১৯৬৫ সালে। এই চরিত্রটি রসায়ন, পদার্থবিদ্যা, জ্যোতির্বিজ্ঞানপ্রভৃতি বিভিন্ন বিজ্ঞানচর্চায় পারদর্শী ছিলেন এবং একের পর এক আশ্চর্য আবিষ্কারের মাধ্যমে রহস্য উন্মোচন করেছেন। সত্যজিৎ রায়ের এই চরিত্র বাংলা শিশু সাহিত্যে এক অনবদ্য দান। Along with his contemporaries *Satyajit Ray & Ritwik Ghatak*, Mrinal Sen was part of a trio of *filmmakers from Bengal* who put *Indian parallel cinema* on the global stage. While Ray's cinema is marked by *lyrical humanism* and Ghatak's *theatrical* background informs his *melodramatic* films,

What About A Display?

Bengali display typography has long been a space for bold expression, often breaking away from the fluid, cursive nature of the script seen in text settings. This chapter explores the development of Manik Poster—a high-impact, counterless design that reinterprets the distinctive blocky aesthetics of Bengali display type and a befitting latin counterpart to it.

Abstract & Expressive

While defining the design space for my typeface, I realized that a dedicated display cut would be essential for making it truly versatile in editorial settings. Exploring Bengali book covers, posters, and title treatments from older editorials, I noticed a distinct pattern in vernacular lettering—heavy, blocky letterforms, often with disconnected or missing matras and even counterless structures. These forms stood apart, pushing the boundaries of abstraction and breaking away from the traditionally cursive and fluid nature of Bengali script.

As I was developing the text styles for Manik, I simultaneously began sketching ideas for a display cut. Drawing from my references, I decided to embrace the abstract, counterless forms, even though they diverged stylistically from the rest of my family. This felt like an authentic representation of Bengali display typography, where expressivity often takes precedence over structural consistency.

I named this style *Poster*, as it is intended for large sizes, 36pt and above. This decision shaped the design philosophy of Manik—not as a stylistically consistent system but governed by the spirit of diversity, each responding to its optical purpose while remaining rooted in vernacular influences. Expressivity became the key binding element, materializing in different ways across the masters, ensuring that the typeface remained dynamic and true to its origins.



Fig.71. A collection of various bengali book covers ranging from fiction to non fiction featuring titles with a blocky counterless letterforms

Direction for the Latin Poster

This stylistic direction in Bengali letterforms also reminded me of the bold typographic experimentations of the *German Expressionist* movement in the 1920s. A key challenge, however, was ensuring that the design didn't appear overly playful or naïve. In the Bengali context, these abstract, blocky letterforms became widely accepted within creative art movements, drawing from the raw forms of the *Bengal School of Art*. This movement, running parallel to German Expressionism, influenced later designers like Satyajit Ray, who popularized these letterforms through his book covers, magazines, and film posters—embedding them within Bengal's broader visual culture.

For the Latin counterpart, I looked at early 20th-century avant-garde typefaces that captured a similar raw, expressive quality. Two standout references were Rudolf Koch's *Neuland* (1923) and Louis Oppenheim's *Fanfare* (1927), both of which embody a striking, handcrafted energy that aligns with the bold abstraction of Bengali display typography. Studying these typefaces encouraged me to take a more gestural approach in my sketches, exploring exaggerated proportions, high contrast, and sharp angular cuts. The confidence and spontaneity in their letterforms gave me a new perspective on how my Bengali display style could push the boundaries of form while remaining rooted in its historical influences.

- Fig.72. This tight setting of 20 pt *Neuland* appeared in the first specimen brochure *Gebr. Klingspor* published in 1923. It probably shows how Koch intended to use the typeface.
- Fig.73. Excerpt of text set with *Fanfare* by Louis Oppenheim from *Berthold Sample No. 240*

DENNEINEJEGLICHEKUNST
 ODERWERK WIEKLEIN
 SIESEIEN★DASSINDALLE
 SAMTGNADEN WUNDWIR
 KETSIEALLESAMTDERHEI+
 LIGEGEIST ZUNUTZUND
 ZUFUCHTDERMENSCHEN
 +WAREICHNICHTEINPRIE
 STER WUNDWAREUNTER
 EINERVERSAMMLUNG+ICH
 NAHMEESFUREINGROSSES
 DING★DASSICHSCHUHEMA
 CHENKONNTE LUNDICH
 WOLLTEAUCHGERNEMEIN
 BROTMITMEINENHAN
 DENVERDIENEN KINDER
 ★DERFUSSNOCHDIEHAND
 DIESOLLENNICHTDASAUGE
 SEINWOLLEN EINJEGLI
 CHERSOLLSEINAMT TUN
 DASIMHGOTTZUGEFUGT.

72

73

Meisterschaft
 Versand

The Poster Multiscript

Bengali Initial Drawing

As I moved into digitization, I explored three different approaches [fig.76] to determine how my design would function at various display sizes. My first attempt retained outer curves, introducing sharp cuts in counters but removed the matra, creating a disconnected letter structure. While this introduced a sense of abstraction, it still felt too restrained.

In the second version, I experimented with selectively disconnecting the matra in certain glyphs to bring it closer to the feel of my text style. However, this approach felt inconsistent and contradicted the findings from my references.

Finally, I pushed the abstraction further with a third, bolder version—removing both the counters and matra entirely. This iteration felt the most stylistically extreme compared to my text styles, yet felt more promising in terms of exploring the abstraction.

76

নগরীলহমডডশপাতি 42 pt
16.04.2024

নগরীলহমডডশপাতি 42 pt
16.04.2024

নগরীলহমডডশপাতি 42 pt
24.04.2024

I also explored a titling version [fig.77] designed for continuous text headlines. Stylistically and optically, it sits between the text and poster styles, balancing readability with expressive character. While I set it aside for now due to the scope of this program, I plan to revisit and develop it further in the future.

কাজে নহিলে মতিমতী আপ ধসজেন সোঁকিতে 77
জিলে যনোজিলেম আমি যসায়ি ফুয়িয়েজিলেম 20 pt
28.04.2024

Returning to the poster style, I focused on refining the third version from my initial explorations, balancing the forms with sharper cuts and more straight edges—closely mimicking my papercut experiments.

চাপডামএকহাণ 78
60 pt
30.04.2024

চাপডামএকহাণ 60 pt
24.05.2024

Fig.76. The initial three versions that I tried to understand the direction taking optical size in consideration.

Fig.77. Further exploration from version 2 for titling or continuous text in larger size

Fig.78. Comparison between the versions of 30th April and 24th May . I added more sharp lines and strong cuts inspired from the papercut exercises. This simplification made the letter forms more dynamic.

Starting The Latin

For the Latin, I started by sculpting the shapes from a box, carving out the white space to create a raw, sculptural form. I kept the x-height high with low ascenders and descenders. However, I soon realized that the sharp details and Fraktur-like structure didn't sit well with the Bengali. To harmonize them, I refined the curves, removing unnecessary cuts and flares to achieve a simpler yet stronger structure.

I liked how the letterforms could be constructed from one or two overlapping solid shapes, with straight, energetic stems and asymmetric curves reflecting the papercut aesthetic. But as I began proofing both scripts together, I noticed a significant difference in width and proportion between the Bengali and Latin, which required further adjustments to ensure a cohesive rhythm to work in bilingual settings.

79



hamburgetfontsi

[A]

86 pt

16.05.2024



hamburgetfontsi

[B]

86 pt

26.05.2024



হাম্বুর্গেফন্টসি শিল্পালিপি

86 pt

24.05.2024

Fig.79. Initial drawings for the Latin poster and comparing with the Bengali counterpart.

[A]. First digitization, trying to find raw forms in a sculptural approach by carving out the letters from a box. I kept a Fraktur like skeleton but with uneven stem. [B]. Second version with reduction of the uneven stems into a more simpler grotesk like form, still preserving the uneven curves .

Refining & Harmonising the Scripts

I continued refining both scripts in parallel, adjusting their proportions to achieve optical harmony. To balance the density, I removed the counters in the Latin but introduced small geometric punctures in letters like **e**, **p** and **o** to prevent them from appearing too heavy. This decision was influenced by Bengali's inherently higher stroke density, which required more internal cuts to maintain legibility.

Managing white space and character spacing became crucial, as the overall texture needed to be tightly set. This also introduced a new challenge—handling Bengali's ascender and descender vowel marks while keeping the leading low, ensuring the text remained compact and cohesive.

80

[A]

72 pt

46 pt

14.08.2024

Aliangbābumā
petercat পিটারকেট

[B]

72 pt

46 pt

17.12.2024

Aliangbābumā
petercat পিটারকেট

81

46 pt

30.10.2024

dgopkwsyBEGMQ

46 pt

03.12.2024

dgopkwsyBEGMQ

46 pt

23.01.2025

dgopkwsyBEGMQ

Alternate characters for Latin

To further refine the relationship between the two scripts, I designed some stylistic alternate Latin characters and ligatures that better aligned with the overall structure and rhythm of the Bengali. While the default forms carried the raw, sculptural energy I aimed for, certain letters needed adjustments to match the compact, dense texture of the Bengali.

82

gSTNGINEFRBñTH

Fig.80. [A]. The counters in **a**, **g**, **b** & **d** are filled. Letterform proportions harmonized in each script but the spacing still felt loose and uneven. x-height of Latin still felt shorter compared to the base height of Bengali. [B]. Simplification in the uppercase, tighter and even spacing. Proportion between both scripts worked to look optically balanced. In Bengali, The descender marks are scaled down to fit better and also help with mantainig a tight leading. Diagonal characters like ক, ব, ঝ added the horizontal top bar to manage the negetive space. The ascender flourish ending defined.

Fig.81. Refining and harmonizing the latin between October to January.

Fig.82. Few of the stylistic alternates and ligatures, 26.01.2025

1234567890
 ১২৩৪৫৬৭৮৯০
 @&,.:;!?!|(-){k}(s)

Th

Fig.83. Refining and harmonizing the latin between October to January.

Fig.84. Detail of the Ligature Th

মূল বক্তৃতাটির সঙ্গে আর
 একটি ছোট লৌকোও বাঁধা
 আছে, আশা করি মাসের
 আকাশে নবীন মেঘ লুকো
 ছুরি খেলে দিনমণির সঙ্গে,
 কখনও হঠাৎ এক বাঁক
 পাখি উড়ে খাবার মতন।
**There were rumours
 of strange things
 happening outside &
 as Gandalf had not at
 that time appeared
 or sent any message
 for several years,
 Frodo gathered all**

মহীনের খোড়াগুলি

আবার বঙ্গ কুড়ি পরে [১৯৯৫]

১৯৬৫—বাংলার কবি জীবনানন্দ দাশের বনলতা সেন

KING GIZZARD &

The Lizard Wizard

LIVE IN LOS ANGELES '24

November 1 @ The Kia Forum in Los Angeles, CA

the Beginning of the shoot, we ran into a একেই বলে শুটিং – সত্যজিৎ রায় | প্রথম সংস্করণ
major problem. Apu & Durga from Kolkata মে ১৯৯৮ প্রকাশক: আনন্দ শাবলিন্দার্স আইডেট
called PALSIT, about 70 miles away লিমিটেড • প্রচ্ছদ: সত্যজিৎ রায় • ভূমিকা; ফিল্ম
an. There, we found an open field* full of তৈরির কাজটাকে মোটামুটি ৩ ভাগে* ভাগ কর
flowers, (*the perfect setting*) for the scene যায়। প্রথম হল লেখা, দ্বিতীয় ছবি তোলা, আর
Apu and Durga see a TRAIN for the 1st তৃতীয় ছবি জোড়া। যে ছবি লোকে পর্দায় দেখবে
ne. The first day of shooting coincided সেটাই [প্রথমে গল্পের মতো করে] গুচ্ছিয়ে লেখা হ
with the “Jagaddhatri Puja festival”. The একে বলে চিত্রনাট্য — এই চিত্রনাট্য অনুসরণ ক
a playful quarrel between Apu & Durga, যখন ছবি তোলা শুরু হয়, তখন সে কাজটার জন
the KASH FLOWER. Since our team — প্রধান হাতিয়ার হল ক্যামেরা আর শব্দযন্ত্র।
ding the director, cinematographer, and এই কাজটাকেই বলে শুটিং; {গত ২৫ বছরে} আমা
rs—*were all newcomers*, there was a bit of ছবির শুটিং এর জন্য ভারতবর্ষের নানান জায়গায়
the beginning, but enthusiasm was in no যেতে হয়েছে। সবচেয়ে বেশি ঘোরাঘুরি করতে হ
{A week later} when we returned to the তিনটে ছবিতে — ১. গুপী গাইন বাঘা বাইন, ২.
ion, we were stunned—“*where had all the সোনার— কেলা, আর ৩. জয় বাবা ফেলুনাথা।*
owers gone?” The entire landscape looked বীরভূমের গ্রাম, বেনারসের অলিগলি আর ঘাট,

Conclusion

As I reflect on this journey, I realize that designing this typeface was not just about form, proportion, or contrast—it was about creating a bridge between two distinct yet deeply expressive writing systems. It was about understanding their histories, embracing their differences, and finding a way for them to exist in harmony without compromising their individual identities.

Studying at ÉsadType has been an incredibly enriching experience, and the past 16 months have been unparalleled in terms of learning and growth. One of the most valuable aspects of the program was not only developing typefaces but also exploring their practical applications. This holistic approach has deepened my understanding of type design beyond just the technical aspects, allowing me to think about its impact in real-world contexts. This process was far from linear—there were highs and lows, moments of doubt, and times when I questioned both myself and the project. But I am grateful for every challenge, as each one pushed me further.

Looking ahead, the next four months will be dedicated to the refining the Bengali part of this project as part of my master's program at Ésad. There is still much to refine in the Latin design, which I plan to revisit later. Eventually, I hope to expand the type family further, making the Latin character set more robust and possibly adding weights to the italic as well. I would also like to experiment with a Display italic or Thin display as well.

More than anything, this journey has reinforced my belief that type design is not just a technical craft—it is a living, evolving language of form. With this typeface, I hope to contribute to that ongoing dialogue, offering a design that is rooted yet contemporary, expressive yet functional. And while this marks the conclusion of this phase, it is only the foundation for what is to come.

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Arnab Chakraborty
EsadType 2023-2025

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paper - dark green

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