Designing a Devanagari-influenced Latin Typeface

A case study of Jaini Latin

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Abstract

Jaini is a Devanagari typeface based on the calligraphic style of the Jain Kalpasūtra manuscripts. Designing a Latin companion for Jaini raised many intriguing questions on style. The Latin type was envisioned along the lines of visual similarity to Devanagari. This potentially brought it into a space that is occupied by 'fusion' typefaces—those that embody one script, while taking on the appearance of another.

One of the main challenges faced was resolving the letterforms to look like a comfortable Latin while maintaining a calligraphic angle of Devanagari, since Latin calligraphy traditionally has a pen angle almost opposite to that of Devanagari. This paper describes the approach taken to shape Jaini Latin, and the reasoning with which the letterforms and the overall texture were fine tuned within the parameters of the brief. It also provides a short discourse on fusion fonts - their current design space - and positions Jaini Latin in relation to this space.

Key words: fusion font, Latin, Jaini, calligraphic, Devanagari, type design

1. Introduction

"Fusion ... is ... where elements from several legacies converge in a special, often subversive, context and the final product stands alone beyond the context bearing a new identity, and the subversion becomes elusive." (Parthapratim 2014, pg. 6.)

The above definition of fusion music, postulated by Chakravorty Parthapratim, is important for the context of this paper. Jaini Latin is a font akin to the concept of fusion in arts. It is a font inspired not only from the Devanagari with which it is paired, but also a style of Latin lettering whose salient feature is a right-inclined axis, written with a left-sloping brush angle. This style of lettering is itself a coadunation of the Latin alphabet and the Devanagari pen angle.

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Figure 1. Sample text of Jaini Devanagari

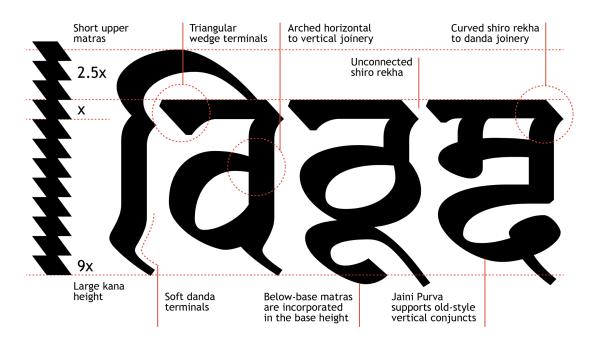


Figure 2. Jaini Devanagari's visual features.

Jaini Latin is the pairing Latin font of the pre-existing Jaini Devanagari. In 2014, the latter was released as a revival of the Devanagari calligraphy seen in the Jain Kalpasūtra manuscripts, particularly referencing a manuscript from 1503 CE (Shingre and Dalvi 2017, pg. 2). Jaini Devanagari is rooted in the calligraphic practice of its times. It has several unique features not seen in contemporary calligraphy, including a disconnected shirō rēkhā (the running top line of Devanagari) with triangular wedges, short upper mātrās, squarish letters with a large kānā-height, heavy knots, and lower mātrās integrated within the kānā height (See Fig. 2).

Jaini has been a seminal case study in the revival of an alternate practice of a past time, with the complications that it posed and the solutions that were worked out. Adding a Latin companion opens up new avenues for distribution and provides users with a purposefully designed pairing font when required. When it was decided that Jaini will have a Latin companion, it seemed like an interesting nut to crack. In fact, it was a lengthy debate to decide the most basic of things: what it would look like.

The initial discussions explored the different routes that Jaini Latin could take. One of the ideas was a blackletter font, which would have been historically rooted in the calligraphic traditions of Latin letterforms and have a similar dense appearance to Jaini Devanagari. Another approach could have been a contemporary Latin that compliments Jaini in its appearance of width, proportions, size and texture. The direction finally decided upon was to make a Latin that is rooted in a common lettering practice seen in the country, while attempting to foray into a new genre of type—that which is inspired by the visual features of a different script.

2. A note on terminology

There are currently numerous fonts available with the similar intent of creating a visual composite of two scripts. Jaini Latin is a response to many such fonts in the contemporary design space that have been dubbed as 'faux', 'pseudo', 'ethnic' and 'simulated' fonts. Searching for a 'faux Devanagari' font, for example, will return many such samples. During my process of researching these fonts and creating Jaini Latin, I have come to the decision that such terms may be avoided while speaking about this font. Words like 'faux', 'pseudo'

and 'simulated' carry negative insinuations of artificiality and pretence. 'Ethnic' on the other hand has an unnecessary connotation of exoticity.

I would rather dub this style as 'fusion' type. The term 'fusion' is frequently used in the field of arts as a crossover of genres and styles, be it dance or music. Jazz fusion music refers to compositions combining jazz with other genres like rock, funk and blues. Jaini Latin is a fusion of the Latin script and the Jaini calligraphic hand. The font adds novelty to the space of digital Latin type with its attempt to harmoniously blend a starkly different pen angle with formal Latin letterforms. While there have been multiple fusion fonts designed up till now, an overwhelming majority of them fall short in terms of legibility, sobriety and familiarity.

3. Background

3.1 Jaini Latin's Predecessors: Devanagari-Latin fusion type

Jaini Latin is a response to the existing space of Devanagari-Latin fusion fonts. These fonts contain certain qualities that play on our perceived sense of Indian type, specifically Devanagari type. They constantly make appearances in advertisements, branding, packaging and global Indian representation. Significant fonts in this genre are Samarkan, Modakshara BT, ITC Simran, Faux Sanskrit, Jaipur, and Linotype Sansara.

the five boxing wizards jump quickly. Mr juck, TV quiz yhu, bass few lynx, two draven jocks help fax my dig quiz Waitz nymph for quice jigs vex sphinx of black quartz, judge my vow. Figure 3. Latin fusion fonts inspired by Devanagari. Source: (Top - Samarkan) https://www.dafont.com/samarkan.font, (Others) https://www.myfonts.com/

These fonts seem to resort to crude shortcuts to deliver a sense of Indianness to consumers. Most of them have a running top line imitating the Devanagari shirō rēkhā, that appears to have simply been stuck on to the letters. The execution of these fonts leaves much to be desired from the lens of familiar and conventional Latin letterforms. Little attention has been paid to rhythm, spacing, proportions and consistency; these seem to have been traded for the exotic appearance of the letterforms. This does little justice to the script (Latin) the typeface embodies, while raising questions of the designer's understanding of Indian scripts and their rhythm, or lack thereof.

Looking beyond fonts, we see many examples of lettering in books, advertisements and shop fronts that attempt to execute this visual idea, mostly by the addition of a shiro rekha-like structure and quirky letterforms. However, a static custom piece of lettering does not have the perniciousness of a poorly made font, especially a freely available one at that. It can simply be admired as a part of the scenery without having to worry about its insinuations in the typographic landscape.



Figure 4: Collection of images showing fusion lettering. In a book title (top) and miscellaneous lettering photographed in Mumbai (middle, bottom).

On the other hand, one can also observe many examples of fusion type 'done right' in Indian lettering. An especially noteworthy and widespread style is seen in street signages in Mumbai. The Latin is written with the Devanagari pen angle, and different lettering artists have their own interpretations of the letters. This contrast is widely observed in hand-painted numbers as well. The letters in the examples shown below all have a Devanagari influence without losing out on their ease of readability in Latin.



Figure 5. Lettering photographed in Mumbai.

3.2 Similar Observations in Chinese/Japanese-Latin Fusion Lettering

Discourse in fusion type would be incomplete without mentioning "Chop Suey" or "Chopstick" fonts. These refer to the wedge-like, sharply constructed letters seen outside a large majority of East Asian stores and restaurants in India and abroad. (Although notably, not very often within these countries themselves.) While these fonts can be looked at as interesting designs, they are largely a gross reduction of traditional Hanzi calligraphy.¹ Historically, these fonts originated in the West and became a shortcut to the

¹ Raven Mo explains this in detail with Linus Boman in an excellent video on Chop Suey fonts: Linus Boman, "How this font became the face of Chinese food in America", YouTube Video, 19:55, February 2, 2022, https://www.youtube.com/watch?v=YP9gEeVQZ2U

Chinese and Japanese context, frequently resulting in a derogatory and inflammatory manner of usage.

Meanwhile, Takashi Kono (1906-1999), a Japanese Graphic designer, had created posters and logotypes with Japanese-Latin fusion letterforms as well. Yet, his letterform designs are much different from Chop Suey; simply a choice of "fashion" and style rather than trying to "create or support a Japanese image or stereotype". (Takagi 2013, pg. 9.)

When thus comparing the existing design space of Devanagari-Latin fusion fonts with better examples of lettering, it became clearer to us the direction we wanted to take for Jaini Latin. We were then able to create a brief for Jaini's visual grammar.

4. Positioning Jaini Latin

If Jaini Devanagari was a reproduction of letters that already existed as a reference, Jaini Latin was only a written brief with a few sources of visual inspiration. It was something that had to be crafted with an idea of its form as a reference.

We wished to stress on the adherence to what looks natural in Latin, since the font is ultimately a Latin font. In some fusion fonts, Latin letters actually look like Devanagari letters. For example, a Latin 'o'-like form that has been shoehorned to look like a Devanagari 'ठ' (ttha). Or a latin 'm' that looks like a Devanagari (Marathi variant) 'ल' (la).



Figure 6. A comparison of fusion styles. Typefaces (left to right): Noto Serif Devanagari, Samarkan, Jaini Latin, Anek Latin Semicondensed Medium.

In the case of Jaini, Devanagari letters have not been repurposed to form Latin letters. The Latin font has only been visually inspired from the Devanagari companion. It has been designed with the intention of being used as a standalone Latin font, and many decisions have been taken keeping this in mind. Hence, the word 'om' set in Jaini Latin can still be recognised and read as the Latin script (Fig. 6). Our brief eventually stated that Jaini Latin needs to be a "comfortable Latin font that matches well with Jaini Devanagari, while being a part of the fusion type space." It would not be an outright parody, but a more tasteful execution with hints of Devanagari. With our brief set thus, we moved to uncover Jaini Latin's letterforms.

5. Process

To design a script companion for a currently existing typeface, there are two things one must keep in mind: the script grammar of the script and visual grammar of the typeface (Rajan 2016, pg. 3.) The visual grammar was to follow Jaini Devanagari, and the script grammar would follow that of a condensed Latin, with a slight twist—in the pen angle.

5.1 Reverse contrast - Switching the pen angle

Formal broad-nib Latin calligraphy is done with a pen angle of around 30°, drawn with a flat cut broad nibbed pen. On the other hand, formal Devanagari calligraphy (Balbōdh style) has an angle of around 135°, drawn with a diagonally-cut left-canted pen. The calligraphy present in the Jain Kalpasutra manuscripts has a pen angle of around 132° (Naik, 2015). In accordance with the brief, to create a visual effect of Jaini Devanagari in the Latin type, the primary step we chose was to switch the angle of the Latin letters to that of Devanagari.



Figure 7. Reverse contrast is a key feature of hand painted street lettering in Mumbai.

The term 'reverse contrast' in Latin seems to specifically focus on typefaces with horizontal stress, when compared to the usual vertical stress of many Latin typefaces.² It then follows that a stark shift in the calligraphic angle can also be deemed a reverse

² See David Jonathan Ross's page "Backasswards!", dedicated to the discussion of reverse contrast fonts: https://djr.com/backasswards/

contrast, when comparing the angles of the Latin foundational hand and the Balbōdh or Jaini style in Devanagari. With this pen angle, we then explored letterforms.

5.2 Initial explorations

Initially, we explored multiple variations in forms and texture. These were not perfected or refined much. Rather, the overall effect of each that was observed in larger display sizes as well as smaller text sizes informed the direction for the typeface. Jaini Latin in its current form is an eduction of various previous trials, a few of which are shown below.

HAMBDRG hamborg आवणात

Figure 8. The initial attempt at Jaini Latin by Noopur Datye.

HAMBORG hamborg आवणात

Figure 9. An attempt at adding blocky 'serifs'.

HAMBORG hamborg आवणात

Figure 10. An iteration inspired by blackletter type.

HAMBDRG hamborg आवणात

Figure 11. Another iteration inspired by blackletter type.

In the initial trials, the overall effect of the Latin matched that of Devanagari quite apparently. However, in smaller sizes, the text shimmered and tapered very unusually. 'Serif'-like forms were also explored but not taken forward. The blackletter-inspired iterations were a product of a Latin blackletter typeface study done at the beginning of the process. While we did not move ahead with such a style, it deepened our understanding of rhythm and was an interesting insight into other styles that could exist in the design space of Latin drawn with a left sloping pen.

5.3 Texture-based decisions

Decisions for letterforms were taken based on both, larger and smaller text sizes. We did this to ensure ease of reading in smaller sizes or from a distance. As mentioned earlier, the waviness and length of the tails of the initial trials had to be dialled back. This reduced the 'Jaini' influence, but it made the Latin look cleaner in text (Fig. 12).

Hamburn -> Hamburn

Figure 12. Reducing the waviness and length of the tails.

The horizontal serif-like structures were first envisioned to shelter all the letters, much like the Devanagari shirō rēkhā. Eventually, they were removed from letters like O, C, G, and S, thus appearing only in letters where it is not unusual to see a serif. This shifted Jaini Latin's letterforms further away from the current fusion space and towards a more comfortably read Latin (Fig. 13).

CDGS -> COGS OSCBHUoscbhu

Figure 13. Characters like O, S, C do not have any top line in the upper or lower case. Characters like B, H, U in both upper and lower case have a top line that doubles as a serif-like structure.

5.4 Features and Proportions

Jaini Latin and Devanagari share similarity in some visual features, as shown below (Fig. 14). These have, of course, been repurposed according to what works for Latin.



Figure 14. Matching visual features in Devanagari and Latin.

Jaini Latin has also been designed to optically match Jaini Devanagari's height and optical width (Fig. 15). The scripts can be set inline for the purpose of logos or lettering.



Figure 15. Latin and Devanagari set together in one line.

5.5 Visual Challenges

Drawing Jaini Latin with a left canted pen posed many interesting impediments. Since the letterforms were bound by the rigidity of the pen tip, the challenge was to work with this strict axis and still make the letters appear natural and comfortable to read. The letters were repeatedly drawn on paper with a 'chiselled' (canted) marker before digitisation. While doing so, it was observed that there were many non-normative traits displayed by the characters.

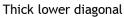
For example, the accumulation of weight at the joinery of the stem and shoulder of the n and h. With the regular Latin axis this portion is the thinnest. The form had to be managed with a slight optical adjustment—a reduction of weight at the joinery.

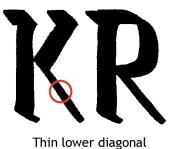


Figure 16. Foundational hand calligraphy, reverse contrast calligraphy, Jaini Latin font

To have a thicker upper diagonal and a thin lower diagonal was impossible to avoid for an uppercase 'K'. With K and R the structure of the letter had to be changed to add weight to the bottom stroke of the letter. The top stroke of the K had to also be thinned slightly to bring visual balance.









Form change, optical adjustments

Figure 17. Foundational hand calligraphy, reverse contrast calligraphy, Jaini Latin font.

The right inclined axis in the 'o' and 'e' looked very odd in the beginning. This was bound to happen with this angle of the pen; we could only make the effect look calculated, by instituting a pattern. We attempted to harmonise the inner counters of these letters with the 'n' and others to bring in more rhythm.



Left axis

Right axis

Right axis, balanced forms

abcehmnopr

Figure 18. (Top) Foundational hand calligraphy, reverse contrast calligraphy, Jaini Latin font. (Bottom) Repeating counter shapes in letters.

'S' and 'N' posed different problems. 'S' has a thick spine in formal calligraphy, with a downward directionality. To achieve this spinal girth, I had to turn the pen upwards, which looked odd at first. WIth 'N', the diagonal is normally the thickest portion. With this pen angle, it became the thinnest. Yet, even in street lettering samples, I noticed that they look similar to the letters that I had drawn. I finally came to the realisation that these letters are the eccentricities, and thus markers, of this calligraphic hand.



Figure 19. Foundational hand calligraphy, reverse contrast calligraphy, Jaini Latin font.

6. Discussion

My main concern with the categorisation of Jaini Latin along with other fusion fonts is that it is unlike many existing fonts in this category, in design and intent. Consider Linotype's embarrassing description of their font Sansara (1999): "... [the font's] oriental facade hides Arabic letters, recognizable only at second glance.... [Sansara] brings to mind 1001 Arabian Nights, flowing gowns and snake charmers." The font itself looks to me more Devanagari-esque than Arabic, but it seems to have been grouped by the designer as one and the same.

Раск пју box with five doæn liquor jugs.

Figure 20. Linotype Sansara, 1999.

Jaini Latin, on the other hand, is a font that only means to add a subtle Devanagari accent to the Latin script. It would be a shame if it were only grouped along with fusion fonts. Under Indra Kupferschmid's preferred classification method of 'tagging' (Kupferschmid 2012), Jaini Latin could instead appear under multiple tags of 'fusion', 'display', 'contemporary' and even 'calligraphy'.

While this paper is limited in its socio-political discussions, the question can be further explored: Can (and should) a typeface represent Indianness, or Indian culture? Inherently, type can provide superficial visuals, like the Devanagari shirō rēkhā which is present only in North Indian scripts like Devanagari, Bangla and Gurmukhi. Can such fonts then be used to represent India as a whole?

Personally, if 'Indianness' and regional diversity is to be shown, there is one foolproof method—using Indian scripts and languages along with Latin for branding, packaging and any other form of design. This entails the creation of more typefaces in Indian scripts, that are based in our calligraphic or typographic tradition, much like Jaini Devanagari. Jaini Latin is only a different approach towards designing a Latin, and not a replacement for regional scripts. As the designer, I would be most pleased to see Jaini Latin used in non-Indian contexts. This would be a true test of the original brief: the challenge of drawing a close-to natural looking Latin typeface while altering something as basic as the contrast.

7. Conclusion

During the initial font study it was found that the area of drawing with a strictly reverse angle in Latin is not very populated. There seems to be more scope in such an undertaking. It would be interesting to see a wider range of conventional Latin styles tackled in this reverse contrast, such as weights, widths, and even a slanted approach. There is also much scope in making more fusion fonts based on other scripts and their traditions. Additionally, it would be interesting to see user-based research on understanding whether users who live in areas where Jaini Latin's contrast is seen on street signages can read this style more comfortably than those who do not.

Finally, the term 'fusion' has only been the product of a few months of deliberation. There is more discursive conversation to be had around this term, while exploring the possibility of coining new terms for such typefaces. This paper hopes to add to, and spark more discussion around this ubiquitous type phenomenon.

Angles

Jainism is a transtheistic religion, holding that universe was not created, and will exist forever. It is independent, having no creator, governor, judge, or destroyer. In this, it is unlike the Abrahamic religions and the theistic strands of Hinduism, but similar to Buddhism. However, Jainism believes in the world of heavenly and hellish beings who are born, die and are reborn like earthly beings. तीर्थकर महावीर के समय तक अविछिन्न रही जैन परंपरा ईसा की तीसरी सदी में दो भागों में विभक्त हो गयी : दिगंबर और श्वेताम्बर। छति प्रमाणसागर जी ते जैनों के इस विभाजन पर अपनी रचना 'जैनधर्म और दर्शन' में विस्तार से लिखा है कि आचार्य भड़वाहु ने अपने ज्ञान के बल पर जान लिया था कि उत्तर भारत में १२ वर्ष का भयंकर अकाल पड़ने वाला है इसलिए उन्होंने सभी साधुओं को निर्देश दिया कि इस भयानक अकाल से बचने के लिए दक्षिण भारत।

925 SILVER

ākiñcanye na mokṣo'sti kiñcanye nāsti bandhanam/ kiñcanye cetare caiva janturjñānena mucyate// anārambhastu kāryāņāṃ prathamaṃ buddhilakṣaṇam/ ārabdhasyāntagamanaṃ dvitīyaṃ buddhilakṣaṇam//

"It's a criticism of the idea of a saviour ... come and tell another population how to be, what to believe. It's a condemnation, not just a criticism."

THIRUCHIRAPALLI CHUQUIBAMBILLA

References

Kupferschmid, Indra. 2012. "Type classifications are useful, but the common ones are not." kupferschrift. <u>https://kupferschrift.de/cms/2012/03/on-classifications/</u>.

Naik, Pradnya, and Girish Dalvi. 2015. Calligraphic Analysis of the Jain Manuscript Style.

Parthapratim, Chakravorty. 2014. *RELOCATING FUSION IN MUSIC*, The Cultural Strategies and Contexts.

https://www.academia.edu/6290749/RELOCATING FUSION IN MUSIC.

- Rajan, Aadarsh. 2016. *Finding Patterns and Rhythms in Tamil*, Giving Tamil its Space How Inter and Intra-character spacing has a significant effect on script grammar.
- Shingre, Maithili, and Girish Dalvi. 2017. *Reviving a Manuscript Style*, The design process of Jaini.

Takagi, Mariko. 2013. Bamboo Fonts, Cultural stereotypes visualised by display fonts.

Wachendorff, Irmi. 2018. Cultural Stereotypes in Letter Forms in Public Space. https://www.researchgate.net/publication/334429825_Cultural_Stereotypes_in_Le tter_Forms_in_Public_Space.