

A Digital Typeface for the Reimagined Field of Post-Digital Letterpress Printing.

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GOALS AND OBJECTIVES

Letterpress printing has been experiencing a resurgence driven by a new generation of printers who are reimagining the field. Yet, we are not observing a proportionate effort from the type design community to supply digital fonts adequate for this new market.

In his book, *Printing Digital Type*, Gerald Lange dedicates a whole chapter to considering how, why, and when digital type works when printed on a hand-operated flatbed press—and when it doesn't. As he states, "Typefaces designed for the digital environment, which has an inordinate amount of technical demands, are not necessarily going to translate well on the letterpress page" (Lange, 2018, p. 75).

To address the growing need for digital fonts adequate for the demands of post-digital letterpress printing, we have developed a typeface design which is flexible enough to be used across a wide range of sizes and applications.

PROBLEM

Typefaces can be designed with various media applications in mind. Since John Baskerville's historic 18th-century innovations in typeface design and paper and ink technologies, metal fonts started to be printed on flatter surfaces and in an increasingly precise way (Chapell & Bringhurst, 1999). Indeed, in the introduction to his iconic book *American Metal Typefaces of the Twentieth Century* (1993), McGrew characterizes the typeface impression of ink on paper today as "essentially two dimensional."

Fast forward to the twenty-first century, we're seeing digital typefaces printed in a three-dimensional debossed way. Innovation and the use of flexographic photopolymer plates has facilitated production and invited a new generation of printers to start transforming the design and aesthetics of contemporary letterpress. Today, letterpress is used largely for print posters, cards, covers, and broadsides—pieces that require thicker papers compared to longtime traditional applications like high-quality books.

This shift in application was followed by a change in the desired depth of impression. The light "kiss" impression has traditionally been the best practice in printing with metal and wood type, especially among the book arts community. Now, hard impression—also known as "deep" or "bite" impression—done on thicker paper with photopolymer plates without the risk of damaging

irreplaceable type-sorts, has become more popular among a new generation of designers and printers.

As appreciation for three-dimensional deep impression printing has spread, so has the need for digital fonts, which can withstand these new technical conditions. The strong pressure, especially on thick soft papers, can make the ink spread significantly. It might fill white spaces irregularly and can distort original designs. In addition, the third dimension creates new areas of light and shadow inside and around the letterforms. With all of these effects, many of the new digital typefaces can have their features distorted and blurred.

Meanwhile, reproduction technologies have evolved to translate type designs into flat surfaces. Nearly all obstacles between the design of the type and its final appearance in texts on paper or screen have now been removed (Unger, 2018 p.90). Typefaces are largely designed on screen and often read on screen. Designing for screens has therefore become the main requirement for typeface designers since 2014 (Unger, 2018 p.99).

Yet the incredible evolution in type design tools, formats, and software—like variable fonts—has provided opportunities for its users to generate new typefaces that can function across a wider variety of outputs.

METHODOLOGY

To address these problems, we turned to experimental research while developing an original digital typeface. Our methodology began with a literature review, followed by the generation of sketches, prototypes, and tests to help understand and address the design problems identified through our review process and observations in the field.

To date, we have developed an extensive practice: printing on metal and photopolymer plates in both platten and flatbed presses; in diverse studio settings, including two educational institutions; and privately owned letterpress studios in the United States.

We have gathered a significant amount of print samples and information on traditional and contemporary practices in the United States, and we have built the necessary knowledge and analytical skills to formulate the hypotheses and generate the briefings that are guiding our design exploration.

INITIAL CONCLUSIONS AND CONTRIBUTION

The main features of our new typeface design are: big x-height and open counters; semi-condensed proportions; soft, slightly modulated strokes; and simple endings and clear joints. The result is an approachable, friendly, informal yet sturdy sans serif. Inspired by the new uses of letterpress printing, it retains its main features and attractiveness across a range of sizes and applications beyond

letterpress. It is expressive enough for titles, and it is still legible and pleasant in short paragraphs with point size as small as 6pt.

Throughout our process we have been generating proofs in letterpress presses like the Vandercook 219 and using different types of papers, inks, and typographical settings. We generated tests of sizes, trackings, and design samples for a range of weights.

We are currently at the point of finalizing the production of masters for an axis of weights. We ultimately plan to develop variations for optical sizes and applications (e.g., screen to deep impression).

In a broader scope, we intend to share the research and design behind this font in order to contribute to an international conversation about the future of type design for digital and letterpress applications.

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