

Find your type: Sparking map-makers' interest in typography

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Keywords: map design, map labels, typography

Abstract:

How can we make typography more interesting to map-makers? We know that aesthetics affect how maps are read and interpreted (Muehlenhaus, 2012). Many design considerations set the tone of a map; Typography is one of them. The choice of typefaces can shift the tone of a text: “Typographic neutrality does not exist” (Guidero, 2016, p. 18). In other words, choosing a font for any map is as relevant as other design decisions like choosing a color palette, especially considering that most of the map elements (title, labels, legend, scale, north-arrow, etc.) contain characters or text (Gammelin, 2022). While most map-makers know some basics of typography, such as the difference between a serif and sans-serif typeface, typography as a discipline can be dug a lot deeper: Not only are there many more categories, but within the same one, a lot of design considerations shape a font. These considerations give typefaces different semantic (How does the typeface feel like?) and functional (How legible is the typeface?) qualities (Guidero, 2016; Piovesan et al., 2023). Therefore, map-makers should try to consciously choose a suitable font face for the given map’s context.

However, we frequently observed two things while teaching in cartography: (1) Many students only use the default fonts, which are already available on their computers. (2) It seems hard for many students to find suitable fonts, either because they do not know where to look for them, or because they do not know how to look for fonts, i.e., what makes a font suitable.

We believe that the common user interface design approach is at least partly hindering the ease of selection: an endless alphabetically-sorted drop-down with a small preview (if any) is probably not very encouraging—see e.g. QGIS, ArcGIS, Inkscape, Illustrator.

Based on these observations, we would like to start a discussion on how to find and select fonts for maps in practice and suggest different interfaces to come up with matching fonts for maps. With the goal of making the selection of typefaces more accessible to map-makers, we have identified many possible trajectories, which we explore by developing two usable prototypes, meant for two different usages.

The ‘Tinder’ approach aims to be very beginner-friendly. The interface mimics what most dating apps use: cards that can be swiped to the left to be rejected, or to the right to be liked. Each card shows one typeface, with its name, and a generated example of how it looks on a map. With this interface, the user can easily indicate which typefaces they like by swiping. In the back-end, we use the font attributes to calculate similarities. After a number of swipes, we show the user recommended typefaces, based on similarities to the typefaces that they liked. This prototype aims at making font selection fun and easy, while helping the user selecting the typeface which “feels right”: by simply swiping typefaces, the user identifies typefaces with the desired semantic qualities.

The complementary approach to the tinder-like user interface is an interface, targeting rather typography-experienced map-makers: it allows to filter typefaces mainly regarding their functional qualities (related to their legibility). Basis for this filtering are, besides the human assessed tags, above all metrics of each font (mainly contrast, the ratio of width between thin vs. thick strokes of the same letter), both provided via the google/fonts Github repository (Google, 2026). By making use of both, semantic qualities via the tags, and functional qualities (font metrics) the font selection can be tailored to specific needs.

To enable users of different backgrounds and with different level of knowledge on typographic to use this mode, we plan to provide tooltips (and alike user interface patterns providing additional information). They introduce typography-related terms and briefly explain fundamental typographic concepts. Ideally, the tool will also follow best practices for type on maps—see Gammelin (2022): e.g., if filters are configured in such a way that legibility in map use contexts would be limited, the user would get respective feedback.

The prototype will be built and published as a static and mobile-friendly website, using React, a JavaScript library for web (and native) user interfaces. For the typefaces, available within prototype, we draw on Google Fonts, mainly for three reasons:

- Open-source: They are free to use (for personal and commercial use) and open-source (FAQ, 2025)
- Quantity: Almost 2000 typefaces (1926 as of March 2026)
- Metadata: They come with human-assessed data, in particular tags: for each typeface, professionals have assessed tags and assigned a weight to tags from different categories like (“Expressive” or “Theme”).

There are many other (partly open) font repositories (e.g., [Fontshare](#), [collektiv](#) and [Open Foundry](#)), but for the scope of this project, Google Fonts seems to be most suitable.

The goal of our project is to explore possibilities to make choice of typefaces easier to map makers, and eventually make the discipline of typography more attractive to explore. By offering two approaches, with each its own interface and features, our tool should encourage map-makers to explore fonts, beyond the default ones.

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