EFFECTS OF MOTION ON TYPE LEGIBILITY

Proposal

Technology and communication have always gone hand-in-hand. As one changes, so does the other. The letters that we know today developed alongside printing technology as they became standardized to keep printing efficient and communicative. Today, there are more fonts available than could likely ever be cataloged. Each serves a new purpose or means of communication, including road signage, event posters, websites, mobile apps, and billboards. Letters are read from different distances and projected or printed on different surfaces, and these factors should be taken into account for a message to be clear or readable. This project aims to explore new possibilities at the intersection of technology and communication using variable font software to create a typeface, or font, designed specifically for motion.

Legibility is the measure of how easily something is read. A goal of type is to convey information as quickly and accurately as possible, therefore a good typeface is typically one that is legible. The more familiar the shapes of letters are, the less effort it takes to read them. Gothic blackletter type (Fig. 1) used to be common throughout Europe and was considered very legible. The Latin alphabet started becoming more common in the 16th century, but it was difficult for common people to read Roman type (Fig. 2; Beier, 159). In 1882, German statesman Otto von Bismark complained of not being able to read type using the Latin alphabet as well as blackletter, but by 1941, the German government could no longer continue supporting blackletter because it was simply too hard to read (Beier, 160). Today, blackletter is unlikely to be used for reading.

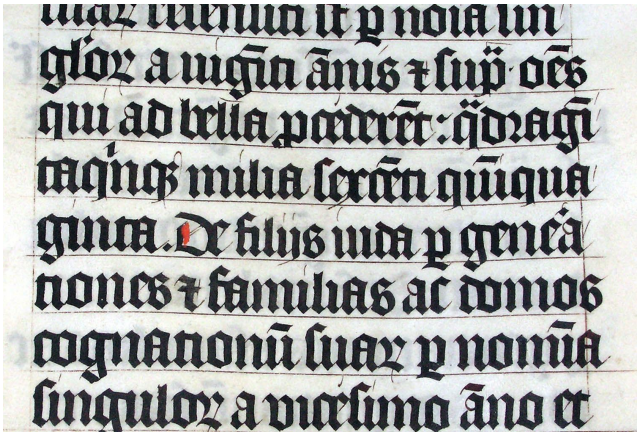

Fig. 1, blackletter type
"Vulgate Manuscript."

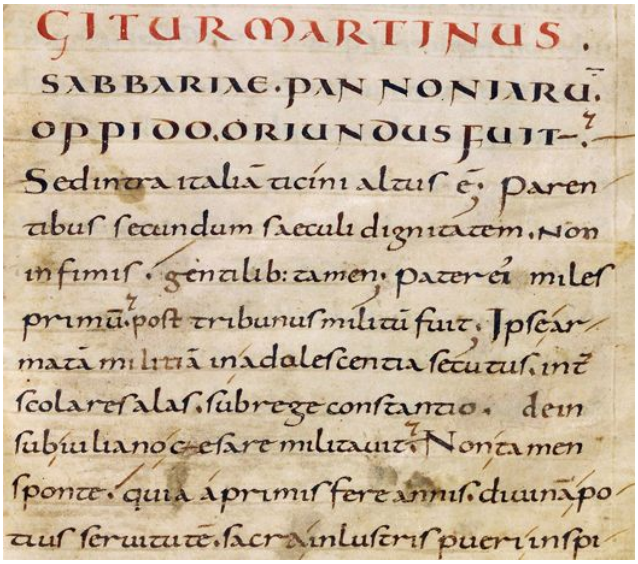

Fig. 2, the Carolingian Minuscule, from which Roman type is derived
"8th Century Page de la Vita Sancti Martini de Sulpice Sévère"

The widespread use and eventual abandonment of blackletter shows that while there are no objective scales of legibility, people will lean into increased ease of communication. This idea extends beyond type. Studies from the 1990s and early 2000s support the idea that if a speaker incorporates gestures into the speech, observers remember the information better (Madan). TED, a media organization, takes full advantage of this knowledge by giving their speakers a full stage to walk around rather than anchoring them behind a podium. A speaker that moves is more legible than one that does not, but a disadvantage of type is that most fonts cannot move or gesture.

Despite the difficulties of measuring legibility, there is somewhat of a context-dependent standard (Beier, 10). Screens can render fonts in high detail, but thin or decorative fonts lose detail when printed, especially at small point sizes or on heavily textured paper. This makes them less legible. Even different phones, computers and browsers display fonts differently. The same font can appear more legible on some screens but less legible on others. Variable fonts allow greater control over the legibility of typefaces by using sliding scales of values rather than defined versions of the font. The control that variable font software affords its users can be compared to the volume buttons on a TV remote. Arial is a common font that is limited to just a few weights, including regular Arial, Arial Black, and Arial Narrow. On a remote, this might appear as medium, very loud, and quiet. This limitation might be overlooked if those settings suit the average needs of a user, but it makes it difficult to adjust the settings to the most appropriate value for the content and context. If Arial were a variable font, the user could pick between "Arial Weight: 100" for a lightweight Arial, or "Weight: 600" for a very thick-weight, bold Arial, or even "Weight: 300", for a medium Arial. Similar to volume controls, the Weight value can be adjusted to any number desired.

Since so much of the information we consume from screen-based media is constantly moving, motion and flexibility has become an increasingly important part of communication. While not everyone is equipped with animation or coding skills, anyone with a computer can communicate and convey tone through fonts, and do so seamlessly if a font can be adjusted for limitations of the contexts it might appear in. Considering the rate in which technology progresses, it would be beneficial for one of the primary means in which people communicate to become more fluid. Technology has always played an important role in communication, and the more accessible variable fonts become, the easier it will may convey thoughts and ideas to more people.

Works Cited

Beier, Sofie. *Reading Letters: Designing for Legibility*. Amsterdam: BIS, 2012.

Inconnu, Moine. “8th Century Page de la Vita Sancti Martini de Sulpice Sévère.” *Wikimedia Commons*, 22 April. 2007, https://commons.wikimedia.org/wiki/File:Caroline_2.jpg

Madan, Christopher R, and Anthony Singhal. “Using Actions to Enhance Memory: Effects of Enactment, Gestures, and Exercise on Human Memory.” *Frontiers in psychology*. Frontiers Media S.A., November 19, 2012. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3536268/.

Pingstone, Adrian. “Vulgate Manuscript.” *Wikimedia Commons*, 2 Mar. 2005, https://en.wikipedia.org/wiki/Blackletter#/media/File:Calligraphy.malmesbury.bible.arp.jpg .