

Fonts for every language: SIL's font projects and the Open Font License

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People around the world speak over 6000 languages; to communicate in writing, these language communities use hundreds of variations on dozens of different scripts. Written communication is fundamental to today's information-based world, and an ever-increasing proportion of the world's writing and communication is done through computer systems.

While the writing systems of major national languages are generally well supported, millions of people still have no way to type their language on a computer, because there are no adequate fonts for their writing system. Minority language communities may use a well-known script such as Latin, Cyrillic, Arabic, or Devanagari, but with particular extensions or variations that were not known to mainstream developers, and thus are not supported in standard fonts or software. In other cases, entire scripts used by minority groups are as yet not fully documented or encoded in Unicode.

Without adequate support for their language in computer systems, people are excluded from the "information society", or have access to it only through a second or third language, seriously hampering their ability to participate in the modern world and to access the resources they need to develop their own communities, as well as to benefit from current technology to enhance their own literature and cultural heritage.

Several factors may play a part in cutting language communities off from adequate computing solutions:

Availability Is there even a font for their script or alphabet?

Completeness Does that font support that particular language, with its unique variations on the script?

Complexity Does the technology support the rules of the writing system?

Quality Is the result both correct and attractive, in the eyes of the user community?

Accessibility Does everyone have access to that solution?

For many of the world's minorities, at least one (often several) of these factors severely limits their access to digital information and modern communication systems.

The situation is changing, albeit gradually. A growing number of individuals and groups are coming together to provide solutions, and SIL International is privileged to play a part. By linking experienced type designers and technicians with minority communities that have particular needs, we have been able to provide high-quality fonts that meet the requirements of a number of minority language groups. Graphite, an open-source font layout engine developed by SIL, makes it possible to program complex script behavior into fonts without waiting for the (sometimes lengthy) process of standardization and then implementation in engines like Uniscribe, Pango, or ICU. And X_YTeX provides a document formatting system able to work with complex scripts, whether implemented via OpenType layout or Graphite.

For solutions to be useful, they must be available. And to be maximally useful, they must also be adaptable, as no single developer can hope to meet the needs of all potential users. We therefore encourage font developers to consider releasing their work under the SIL Open Font License. This license is specifically designed for fonts and related software. To quote from the web site (<http://scripts.sil.org/OFL>), "The OFL is designed to be in tune with the FLOSS (Free/Libre and Open Source Software) culture. It builds upon good ideas already in existence in some free and open projects but by bringing our extensive font design experience and linguistic software engineering know-how into the mix, we believe we are able to make a font-specific license better, simpler, more human-readable, neutral and reusable."

It is our view that every community should have at least one high-quality font, working with standard software, suitable for their language. We invite the partnership of all who are interested in making this a reality.