

There's an App for That

Technology Transforms Bible Translation



Ask someone what they imagine when they think of Bible translation, and they might describe a linguist sitting alone at a simple desk in a remote village, poring over a Bible word by word and writing or typing it into a local language. The work appears slow, painstaking and exacting.

While no less challenging or precise, today the work can look radically different. Where Bible translations once took 25 or 30 years to complete, advancements like customized software, computer tablets, apps and other tech have made it possible to get the Bible into people's hands faster, easier and in more ways than ever before in history.

Mike Cochran has served in language technology development with SIL International for 20 years, working with highly skilled teams to help increase the accuracy of translation work and the productivity of translation teams, from cultural anthropology to grammar and orthography.

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BY **KATIE KUYKENDALL**

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Katie Kuykendall has served for six years with Wycliffe Bible Translators USA, an organization dedicated to seeing a Bible translation project started for every language that needs it by the year 2025. She's passionate about educating the church in the United States about the need and impact of Bible translation around the world, and currently works as Wycliffe's Associate Director of Communications.

“Long ago, [SIL researchers] actually created a portable computer before there was one,” Mike said. “They also created hardware to process audio before there were cards and computers that did that. As an organization, we’ve always been pioneering in a technology space. Nobody else had anything like what we created.”

With the help of other organizations contributing their own expertise, today that pioneering innovation continues. Take a look at some of the cutting-edge tools changing the landscape of Bible translation around the world.

Paratext Software

When linguist John Nystrom and his wife, Bonnie, first started translation work in 1990 with the Arop language group of Papua New Guinea, the majority of the work—like checking key terms and phrases for accuracy and consistency—was done by hand. Today, software programs like Paratext have become incredible tools to reduce effort and increase output.

Developed by United Bible Societies and SIL International, Paratext is the world’s leading software application for developing and checking new Bible translation texts, or revisions to existing texts. It gives teams a central location for reviewing word lists and biblical terms, storing project notes, comparing a translation to the original Greek and Hebrew or a source

text to ensure accuracy, and collaborating with team members remotely using the internet.

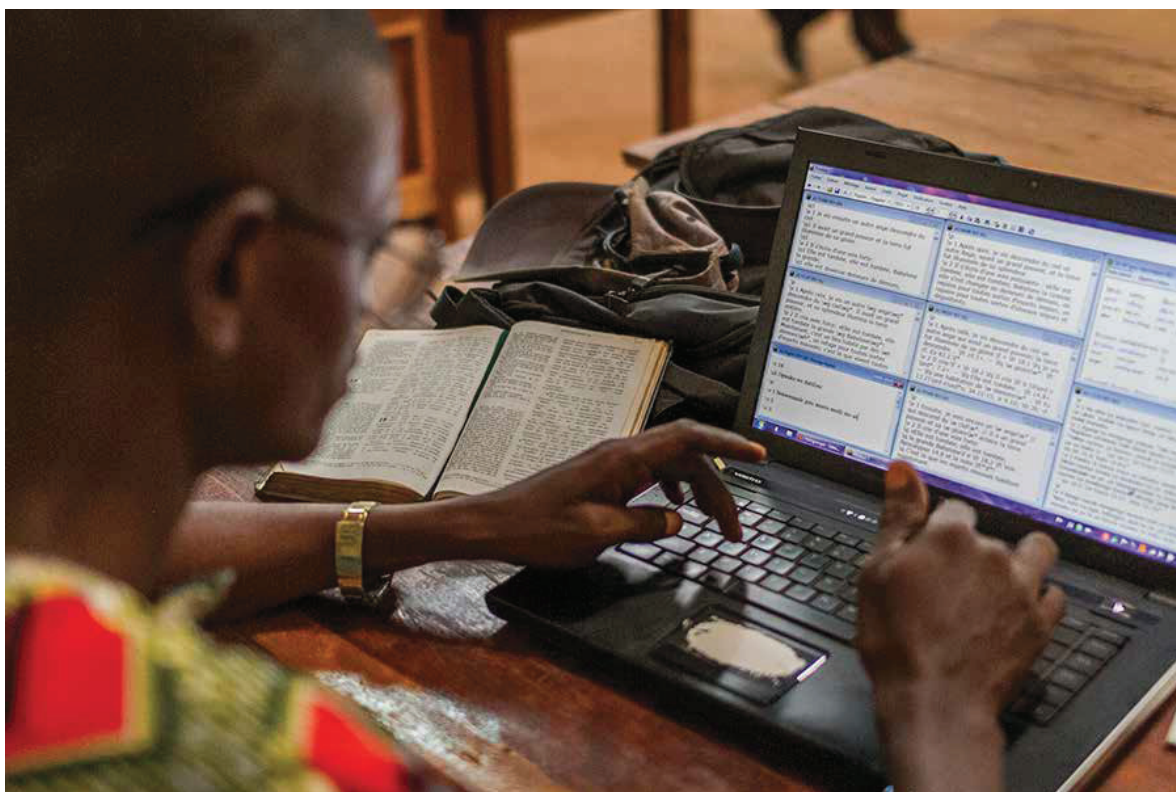
“Computers are better and faster than people at finding stuff and counting things,” John said. “But great translation tools use the computer’s finding and counting skills to set up what a translator wants to spend his time doing: deciding if what’s there is correct or if it can be improved.” That’s what Paratext has done for the Arop translation team and countless others.

When John and the team were translating the books of 1 and 2 Timothy and Titus, for example, they needed a clear translation for the phrase “clean conscience.” Once they settled on the most accurate and natural phrase for the concept, they needed to replace all the existing instances of “clean conscience” with their translated alternative.

Previously that would have required serious time and effort, and ultimately the team still couldn’t be sure they’d caught all the references in the Scriptures. With Paratext, rather than searching the translation by hand they were able to identify all the instances of the phrase immediately. The software pinpoints each one and shows how it has been translated.

But what if you’re not a trained linguist? What if instead you’re a minority language speaker who wants to help translate the Bible for your own community, in a remote location with limited resources?





A Lighter Option

While Paratext is ideal for many translation projects, for teams in some of the poorest, hardest-to-reach areas of the world, it can be impractical. Many of these teams are working with older computer models, most of which can't run the last three versions of Paratext, and there's no IT department in place to offer tech support.

In response to this complex need, teams from organizations like SIL International, Operation Agape, Distant Shores Media and Wycliffe Bible Translators USA are introducing a simple solution. They're partnering to develop Paratext Lite, a stripped back and more agile version of its robust counterpart.

"Paratext Lite is designed for a translator who hasn't been heavily trained in linguistics or isn't familiar with complex software," said Doug Hennum, chief innovation and information officer at Wycliffe USA. "It has a simple interface, does what they need it to do and then transfers it into Paratext so more highly skilled linguists and consultants can do what they need to do with it."

Best of all, it's tablet based and runs on the Android operating system, which is widely available around the world. This makes it ideal for low-power devices that work well in rugged desert environments or climates with high humidity and rain. It also eliminates the challenges

presented by desktop computers with malware issues, laptops constantly trying to download updates, or spotty internet connections.

"I think it may well be a game changer," Mike said. "Android devices are cheap and low power, and will give us the ability to roll out [the software] to people who otherwise couldn't take advantage of the tools."

Earlier this year the team rolled out Paratext Lite in beta mode, testing it with 95 people in 32 countries. The program was released in June.

There's an App for That

The explosion of apps (short for "applications") onto mobile devices in recent years has dramatically enhanced and expanded much of our digital experience. When communicating with friends and family, playing games, tracking our health and even managing finances, apps are now a pervasive part of daily life for many.

Apps are also changing the way people all over the world engage with the Bible. YouVersion's Bible app allows readers to interact with Scripture in more than 1,000 languages. The Deaf Bible app from Deaf Bible Society offers Bible translations in various sign languages exclusively designed for the Deaf. *Bible.is* from Faith

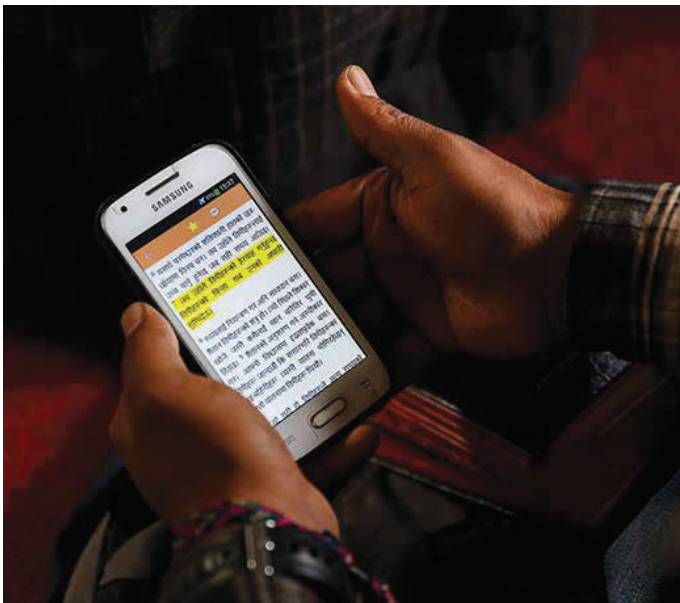
Comes By Hearing contains audio Bibles for oral cultures and the “JESUS” film, a video dramatization that depicts the life of Jesus Christ in over 1,500 languages. Still more apps like iDisciple and Olive Tree offer thousands of devotionals, sermons and Bible studies.

Bible translation is no exception to the app phenomenon, as developers are continually finding ways to adapt these globally embraced tools to make Scripture accessible in brand new ways.

“There are several key experiments moving us forward rapidly,” Mike said. One is a program SIL developed called Scripture App Builder. It helps you build customized apps for Android and iOS smartphones and tablets, where you specify everything from the Scripture files used down to the fonts and colors. Scripture App Builder will package everything together and build the customized app for you. You can then install it on your phone, send it to others by Bluetooth, share it on microSD memory cards and publish it to app stores on the internet.

Another exciting new tool is called Scripture Forge, an app for translation teams to facilitate online community Scripture checking. Many Bible translation projects today are engaging an increasingly geographically diverse group of mother-tongue speakers.

“Often those people are online, which gives us an opportunity to do things we haven’t been able to do before, especially regarding evaluating how effective our approaches are,” Mike said.



Scripture Forge allows teams to engage with the language community by uploading Scripture portions, asking targeted questions about the translation and inputting the responses back into Paratext. The Scripture portions can be shared widely through social media and other channels, broadening the reach of the translated Word.

“You’re improving quality as you go, and people are actually using it before you’ve spent 15 years in a community. You’re also changing the quality of your translation as you go, because it’s being used by more people in a greater variety of contexts,” Mike added. “And if halfway through [a translation project] a team member has to leave, or a project stalls [because of conflict, unrest or funding issues] the community can still use what’s already been produced.

“Those things are very motivating for me with these technologies—the breadth, the reach. It’s motivating to reach the diaspora.”

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Advancing Together

Ultimately the core goal behind any advancement remains the same: ensuring that every person has access to God’s Word in a language and form they can clearly understand. As Bible translation and distribution organizations, if we’re serious about that call our methodologies for completing this task are going to continue to grow and change.

One thing is abundantly clear: When it comes to technological advancements in Bible translation today, “it’s becoming much more of a collaborative effort than it ever used to be,” Doug said. “There are very few things we’re working on that we aren’t doing with a partner. The future is not going to be one organization making this happen. It’s got to be done in partnership.” 