News

Professor revitalizes endangered languages

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Correction Appended

By 2100, over half of the world’s languages could be gone. According to associate professor and chair of the linguistics department K. David Harrison, the disappearance of those languages will bring with them the loss of important cultures and knowledge.

To help preserve this knowledge, Harrison and the Living Tongues Institute for Endangered Languages, founded by him, along with alumnus Matthew Thomas ’09 and his iPhone applications company BoCoSoft Inc., launched the first talking dictionary for Tuvan — an endangered language — as an iPhone application named the Tuvan Talking Dictionary in March.

This iPhone application, Harrison said, is only the first one of a series that he hopes to launch. He and his students are working on talking dictionaries and eventually iPhone applications for other endangered languages he has studied, including Matugar (Panau), Chamacoco, Siletz Deeni, Sora, Ho and Aka.

“With endangered languages, one language dies every two weeks, but almost one million iPhones on average have been sold every two weeks (over the past year). Thanks to the Tuvan Talking Dictionary app, the Tuvan language now has the potential to be instantly available to over 40 million devices world-wide,” said Thomas, who is both the founder and president of BoCoSoft, in an e-mail. “One app can make a difference.”

Harrison’s said that his ultimate goal is to have his model serve as an example that others can follow in studying and revitalizing endangered languages. Eventually, he added, he would like to set up a database of endangered languages on the Internet.

“If you look at Wikipedia or Google translator, Wikipedia has entries in 271 languages, but there are 7000 languages in the word,” Harrison said. “My idea is to have some of those other languages and to bring them into the bigger companies like Wikipedia.”

Harrison said that having the languages available on the Internet or iPhones as talking dictionaries gives these languages a chance to survive.

“Every language packages knowledge differently. We’re losing a part of the human knowledge base when we lose a language. The idea is to have an environment where all languages can thrive,” Harrison said. “Having linguistic diversity is good for all of humanity.”

In 2007, Harrison published a book discussing the effects of language extinctions titled “When Languages Die: The Extinction of the World’s Languages and the Erosion of Human Knowledge,” for which he went on “The Colbert
Report.”

The application is based on a talking dictionary developed earlier by Harrison and Director of the Living Tongues Institute for Endangered Languages Gregory D. S. Anderson. Harrison is the Director of Research at the Living Tongues Institute.

Harrison began to study Tuvan, a Turkic language spoken by the Tuvan people, in 1998 for his dissertation.

The majority of Tuvan speakers live in the Tuva Republic in Russia. Harrison currently teaches the only course on Tuvan outside of the republic. He then published a dictionary of the language, one in the U.S. for sale and one for free in Tuva. In 2006, Harrison set up a talking dictionary online for the language.

Through his self-developed method of identifying language hotspots, Harrison, along with the Living Tongues Institute, has also traveled around the world to study more endangered languages. Harrison will recount his encounters with some of the world’s last speakers of their languages in a new book to be published in December by National Geographic.

The Living Tongues Institute is also working with National Geographic in the Enduring Voices Project, a global collaborative in researching and revitalizing endangered languages.

“It’s seeing the endangerment of language as a global issue and trying to collaborate with people in these communities rather than coming into as linguists and ‘fixing their problems’,” said Jeremy Fahringer ’06, the project manager of The Enduring Voices Project.

One of the students working Harrison in his Endangered Language Lab is Michael Roswell ’11. He spent last summer studying Munich in Amazonian Peru. At the time of his visit, there were fewer than 10 people in the city of Munich who knew more than ten words of the language.

Roswell is working on a talking dictionary for the language as his thesis project.

“There’s not an obvious one-size-fits-all approach for this,” Roswell said. “I think to some extent just building a new database and putting a dataset with different goals was a way to make the technology of this work.”

Alexandra Israel ’10 is another of Harrison’s students. Israel works at Harrison’s lab transcribing Yokwoim, a language spoken in Papua New Guinea. She is also currently taking his class “Structure of Tuvan.”

“Professor Harrison is a really nice guy — he’s my adviser, my professor and my boss. Working with him is really cool partly because the nature of his work is so fascinating. You’re working with a language that’s never been recorded and transcribed before,” she said. Israel will spend the summer in Novgorod, Russia, to study the revitalization of Tatar, another Turkic language.

“Researching endangered languages is a really vital area for linguistic research and research in general,” Israel said. “I think it’s often overlooked, but hopefully, in some small way, I’m helping to change that.”

Correction: April 22, 2010

Correction: The original version of this article incorrectly quoted Harrison as saying, “Every language has a different knowledge package” when really it should have said, “Every language packages knowledge differently.”