BY SALLY ACHARYA

What lily bulbs are edible, can be used to fight colds, and are found on the Siberian steppes in June? What is the link between the phases of the moon, the sandy bottoms of reef passes, and a certain type of Pacific triggerfish?

Scientists may not know the answers, or even think to ask the questions. Yet these are the sorts of things that linguist K. David Harrison, SIS/BA ’88, a professor at Swarthmore College, hears of regularly as he travels the remote reaches of the world in pursuit of vanishing languages.

Harrison is the author of *When Languages Die: The Extinction of the World’s Languages and the Erosion of Human Knowledge* (2007), which begins with a startling statement: “The last speakers of probably half of the world’s languages are alive today.”
David Harrison in Western Mongolia interviewing Tserenedmit, a last speaker of the Monchak language, 2004.

As it happens, Harrison has talked with a number of them, like "Aunt Marta," with whom he walked through a Siberian forest, learning a song about cedar nuts and wood grouses and tasting lily bulbs. She is one of the last speakers of Tofa, a language of reindeer herders whose traditional lifestyle required a specialized knowledge of subjects ranging from the habits of reindeer to Siberian plant life.

Now the Tofa are speaking in Russian and moving to cities, abandoning their culture of plant gathering and reindeer herding and, along with it, the words that carry centuries of accumulated knowledge.

Languages, Harrison notes, develop in a context. Centuries of human experience and ecological observation are packaged into single words, embedded in oral calendars, and available to pass on to the future. If, that is, the language survives.

The richness of a traditional language is not a matter of its having more words, like the popular notion that Eskimos have hundreds of words for snow—a claim that, at any rate, is more myth than reality. Harrison notes that Arctic dwellers would, of course, have many words for snow. But so does anyone who turns on the weather report to find out if they'll be driving in slush, sleet, or a wintery mix. What's striking is not the word count of a language, but the way it "packages" words to efficiently express what the speakers find important to their lives.

Horses were traditionally important to English speakers. Hence we have foals, colts, fillies, geldings, mares, and stallions, although modern speakers, with little need for the information, may need to resort to a dictionary to grasp the distinctions. More recently, the verb "to google"
came about as an efficient way to express the idea “to search for information on the Internet.” What a culture chooses to “package” linguistically reveals what it finds important and is a clue to deeper knowledge.

**Natural packaging**

Much of that deeper knowledge, in indigenous cultures, has to do with the natural world. Even today, Harrison notes, an estimated 83 percent of plants and animals have not been named or classified yet by scientists. That doesn’t mean they are undiscovered, any more than the New World was undiscovered before white people arrived. Local people may be quite familiar with these plants and animals.

In the Solomon Islands, for instance, are a people called the Marovo who live by fishing. There’s a word in their language, *ukuka*, that refers to fish that drift, circle, or float as if they’re drunk, which only happens under certain conditions. The Marovo tell the phases of the moon by words that describe when a certain variety of parrot fish comes to shallow water to sleep, or barracuda take bait readily at the seaward edge of reefs.

“They know much more about the habits and life cycle of fish than science does,” Harrison says. “If you sent in a marine biologist to talk with them, the scientist would be astounded.”

**Riding reindeer**

It’s not that the same information can’t, in theory, be expressed in a dominant language. The Russian-speaking grandchild of nomadic Tofa reindeer herders would certainly have a word for the sixth month of the calendar year. A computer programmer of Tofa ancestry could still talk about what his grandfather called a “chary” by saying, in Russian, “a reindeer that is five years old, male, castrated, and can be ridden.” It is not, however, likely that the topic would cross his mind.

And therein lies the catch. The notion of a “chary” would not exist if there wasn’t something important about that sort of reindeer that distinguished it from other reindeer. And people who
speak of an edible lily bulb
month aren’t simply making a poetic turn of phrase; they’re conveying ecological knowledge.

Embedded in vanishing words, Harrison says, “is a vast body of knowledge, exceeding in precision what science knows. And it’s rapidly being eroded.”

**Children decide**

There is at least a hope that endangered species can be saved by habitat protection or breeding programs. But the survival of a language depends on the survival of a culture itself. And the most lasting decisions are made not by scientists or policy makers, but by small children.

An endangered language is one that is being “crowded out,” Harrison explains. A Tofa child goes to school and realizes that the dominant language is Russian. A speaker of Ifugao, with its complex vocabulary about rice cultivation, hears Tagalog on Philippine television.

They could, of course, grow up to be bilingual or multilingual. Instead, children often decide their elders’ language is irrelevant, or even an embarrassing reminder of their lower status in the broader culture.

An indigenous language on the verge of extinction is almost invariably an unwritten one, and without a linguist, its knowledge will go unrecorded.

**Accidental linguist**

Harrison spoke no language but English when, as an AU undergraduate, he picked Poland as the place he’d like to study abroad. He had no personal tie to Poland, and no particular reason to be interested in going there.

“I was thrown in a situation where [I] just had to cope. It was like, ‘speak or don’t eat.’ After three months, I was like, ‘Wow, I can learn a language.’ I’m an accidental linguist.” After graduation from AU, he pursued a master’s degree at Krakow University and then a doctorate in linguistics from Yale.

His work as a linguist has been impacted by the ideas he first encountered in classes at the School of International Service. “The theme of sustainable development ran through my entire education,” he says.
Members of the Monchak community, Western Mongolia, reading the Tuvan-English Dictionary by David Harrison and Greg Anderson and seeing their language in print for the first time. 2005.

He’s now working to gather scholars from across disciplines that may be impacted by the knowledge contained in vanishing languages. Harrison has just launched the Enduring Voices Project, run under the umbrella of the National Geographic Society and his own nonprofit, the Living Tongues Institutes. The hope is for linguists, conservation biologists, and geographers to share the information they’ve encountered in their diverse fields, so that the knowledge of indigenous people can begin to be shared before it disappears.

There is a chance that some endangered languages might survive, if they’re valued sufficiently to be passed on to the next generation. But even when speakers are so few in number that the language itself has no chance of survival, Harrison is committed to learning as much as possible before the words pass out of human memory. “It’s to all of our detriment if we don’t tap into that knowledge,” he says. “It’s the heritage of all humankind.”