Speak Different

oes 6,000 sound like a large number? Obviously, it depends on what you're counting. If you had a list of every language spoken in the world, it would include about 6,000 entries. In this case, I think most of us would agree that 6000 is large. In fact, since this essay is written with about 4000 characters, imagine that every letter is a different language and multiply by 1.5. The depth of

diversity represented by this many languages is incomprehensible.

If language usage were spread uniformly throughout the world and each person spoke exactly one language, then each language would have more than 1 million speakers. But that isn't the case. In fact, many languages have only a handful of speakers, most of whom are elderly. It has been estimated that, by 2100, the number of spoken languages will be less than 3,000, and possibly as low as 600. Many languages will continue to "exist" only in scholarly grammars, a marginally—but sadly—better fate than that suffered by the

innumerable languages that have disappeared throughout history without any form of documentation.

From an engineering point of view, we might be inclined to think of language as a kind of software residing in the hardware of gray matter. Like computer languages, different languages have different features. What is easy to do in one computer language might be virtually impossible in another. This insight already suggests one reason why the extinction of human languages is bad news.

Most human thinking occurs "in" a language. Likewise for communication. Although emotions and images transcend language, rational discussion among humans about almost

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anything requires language. What I wish to communicate, however, is constrained by the one language that I am able to use with any proficiency. However, as editor-in-chief of this magazine, I interact with numerous authors worldwide whose primary language is not English. These writers are forced to express their thoughts in English, a good language for technical

communication, but a system of constraints nonetheless.

Every language represents unique constraints since languages don't map into one another. In other words, there is no one-to-one and onto map that translates every word—much less every expression—of Hungarian into a word of Japanese and vice versa. Not even close. Although I haven't checked all $6000 \times 5999/2 = 17,997,000$ com-

> binations, I don't doubt that every language has words and expressions that have no convenient counterpart in any other language. At the very least, the meaning of each word represents a cultural consensus, while every language is a manifestation of a unique culture.

> What's more, every word represents an idea. English has exactly two words (we and us) for the concept of "us," namely, you and I. But, the hybrid Australian Aboriginal language Kriol has numerous words for these "simple" concepts. One such word means "you and I," another word means "another person (other than you)

and I," and yet another word means "you, I, and at least one other person." You get the idea. Couldn't we invent new words in English to express these ideas? Sure: The colloquial phrases "us two," "all three of us," and "you all" are steps in that direction. But try to explain-much less "translate"-kvetch or kentskahrake watekhwahratsherotehkwe in

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English, and you get a sense of the limitations of the constraints embodied in the vocabulary, syntax, and cultural worldview of a language.

One way to transcend the constraints of English-or any other language—is to redefine what constitutes "English." Like most languages, English "borrows" words from other languages when it lacks a word for a given concept. At some point, the speakers forget that a word is borrowed, and the boundaries of the language expand. But borrowing and assimilating usually have little effect on the worldview that underlies English, which is heavily noun centered and reflects a particular conception of place, time, and action.

Where do languages come from? While adults create words from time to time out of necessity, children are the true catalyst for language creation. By ignoring the hard boundaries and authoritarian air of the dictionary, children freely invent and adopt whatever expressions meet their needs. Since new concepts and points of view invariably require new words and expressions, language creation is a key part of language vitality. Of course, the role of children in transmitting a language to future generations is crucial.

Why is language extinction tragic? Language death is usually, if not inevitably, cultural death. But why does it matter to me that I cannot think or express myself in Greek, Dutch, Welsh; Finnish, Turkish, Polish; Russian, Italian, Mandarin; or Kirundi, Yazdi, and Hindi, much less Mohawk or Jaru? My gut feel is that the worst straightjacket is the one I live in but am only dimly aware of. I envy those who can think, view, and discuss the world through multiple pairs of eyes, ears, and thought processes. Ultimately, it's that simple.



