

Speaking with a single tongue - disappearing languages

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Like many animal species, thousands of languages are in danger of extinction. At stake is the world's cultural heritage.

"Kopipi! Kopipi!" In jungle on the Pacific island of Bougainville, a man from the village of Rotokas was excitedly pointing out the most beautiful birdsong I had ever heard. It consisted of silver-clear whistled tones and trills, grouped in slowly rising phrases of two or three notes, each phrase different from the next. The effect was like one of Schubert's deceptively simple songs. I never succeeded in glimpsing the singer, nor have any of the other ornithologists who have subsequently visited Bougainville and listened spellbound to its song. All we know of the kopipi bird is that name for it in the Rotokas language and descriptions of it by Rotokas villagers.

As I talked with my guide, I gradually realized that the extraordinary music of Bougainville's mountains included not only the kopipi's song but also the sounds of the Rotokas language. My guide named one bird after another: kopipi, kurupi, vokupi, kopikau, kororo, keravo, kurue, vikuroi... The only consonant sounds in those names are k, p, r, and v. Later I learned that the Rotokas language has only six consonant sounds, the fewest of any known language in the world. English, by comparison, has 24, while other languages have 80 or more. Somehow the people of Rotokas, living in a tropical rain forest on one of the highest mountains of the southwest Pacific, have managed to build a rich vocabulary and communicate clearly while relying on fewer basic sounds than any other people.

But the music of their language is now disappearing from Bougainville's mountains, and from the world. The Rotokas language is just one of 18 languages spoken on an island roughly three-quarters the size of Connecticut. At last count it was spoken by only 4,320 people, and the number is declining. With its vanishing, a 30,000-year history of human communication and cultural development is coming to an end.

That vanishing exemplifies a little-noticed tragedy looming over us: the possible loss of 90 percent of our creative heritage, linked with the loss of 90 percent of our languages. We hear much anguished discussion about the accelerating disappearance of indigenous cultures as our Coca-Cola civilization spreads over the world. Much less attention has been paid to the disappearance of languages themselves and to their essential role in the survival of those indigenous cultures. Each language is the vehicle for a unique way of thinking, a unique literature, and a unique view of the world. Only now are linguists starting seriously to estimate the world's rate of language loss and to debate what to do about it.

If the present rate of disappearance continues, our 6,000 modern languages could be reduced within a century or two to just a few hundred. Time is running out even to study the others. Hence linguists face a race against time similar to that faced by biologists, now aware that many of the world's plant and animal species are in danger of extinction.

To begin to understand the problem, we should take a look at how the world's languages are divided up. If the global population of about 5.5 billion humans were equally distributed among its 6,000 tongues, then each language would have roughly 900,000 speakers--enough to give each language a fair chance of survival. Of course, the vast majority of people use only one of a few "big" languages, such as Mandarin Chinese, English, or Spanish, each with hundreds of millions of native speakers. The vast majority of languages are "little" ones, with a median number of perhaps only 5,000 speakers.

Our 6,000 languages are also unevenly distributed over the globe. Western Europe is especially poorly endowed, with about 45 native languages. In 1788, when European settlement of Australia began, aboriginal Australia was considerably richer: it had 250 languages, despite having far fewer people than Western Europe. The Americas at the time of Columbus's arrival were richer yet: more than 1,000 languages. But the richest region of the globe, then and now, is New Guinea and other Pacific islands, with only 8 million people, or less than .2 percent of the world's population, but about 1,400 languages, or almost 25 percent of the world's total! While New Guinea itself stands out with about 1,000 of those languages, other neighboring archipelagoes are also well endowed--Vanuatu, for example, with about 105, and the Philippines with 160.

Many New Guinea languages are so distinctive that they have no proven relationship with any other language in the world, not even with any other New Guinea language. As I travel across New Guinea, every 10 or 20 miles I pass between tribes with languages as different as English is from Chinese. And most of those languages are "tiny" ones, with fewer than 1,000 speakers.

How did these enormous geographic differences in linguistic diversity arise? Partly, of course, from differences in topography and human population density. But there's another reason as well: the original linguistic diversity of many areas has been homogenized by expansions of political states in the last several thousand years, and by expansions of farmers in the last 10,000 years. New Guinea, Vanuatu, the Philippines, and aboriginal Australia were exceptional in never having been unified by a native empire. To us, the British and Spanish empires may be the most familiar examples of centralized states that imposed their state language on conquered peoples. However, the Inca and Aztec empires similarly imposed Quechua and Nahuatl on their Indian subjects before A.D. 1500. Long before the rise of political states, expansions of farmers must have wiped out thousands of hunter-gatherer languages. For instance, the expansion of Indo-European farmers and herders that began around 4000 B.C. eradicated all preexisting Western European languages except Basque.

I'd guess that before expansions of farmers began in earnest around 6000 B.C. the world harbored tens of thousands of languages. If so, then we may already have lost much of the world's linguistic diversity. Of those vanished languages, a few--such as Etruscan, Hittite, and Sumerian--lingered long enough to be written down and preserved for us. Far more languages, though, have vanished without a trace. Who knows what the speech of the Huns and the Picts, and of uncounted nameless peoples, sounded like?

AS LINGUISTS HAVE BEGUN SURVEYING THE status of our surviving languages, it has become clear that prognoses for future survival vary enormously. Here are some calculations made by linguist Michael Krauss of the University of Alaska at Fairbanks. Presumably among the languages with the most secure futures are the official national languages of the world's sovereign states, which now number 170 or so. However, most states have officially adopted English, French, Spanish, Arabic, or Portuguese, leaving only about 70 states to opt for other languages. Even if one counts regional languages, such as the 15 specified in India's constitution, that yields at best a few hundred languages officially protected anywhere in the world. Alternatively, one might consider languages with over a million speakers as secure, regardless of their official status, but that definition also yields only 200 or so secure languages, many of which duplicate the list of official languages. What's happening to the other 5,800 of world's 6,000?

As an illustration of their fates, consider Alaska's 20 native Eskimo and Indian languages. The Eyak language, formerly spoken by a few hundred Indians on Alaska's south coast, had declined by 1982 to two native speakers, Marie Smith (age 72) and her sister Sophie Borodkin. Their children speak only English. With Sophie Borodkin's death last year at the age of 80, the language world of the Eyak people reached its final silence--except when Marie Smith speaks Eyak with Michael Krauss. Seventeen other native Alaskan languages are moribund, in that not a single child is learning them. Although they are still being spoken by older people, they too will meet the fate of Eyak when the last of those speakers dies; in addition, almost all of them have fewer than 1,000 speakers each. That leaves only two native Alaskan languages still being learned by children and thus not yet doomed: Siberian Yupik, with 1,000 speakers, and Central Yupik, with a grand total of 10,000 speakers.

The situation is similar for the 187 Indian languages surviving in North America outside Alaska, such as Chickasaw, Navajo, and Nootka. Krauss estimates that 149 of these are already moribund. Even Navajo, the language with by far the largest number of speakers (around 100,000), has a doubtful future, as many or most Navajo children now speak only English. Language extinction is even further advanced in aboriginal Australia, where only 100 of the original 250 languages are still spoken or even remembered, and only 7 have more than 1,000 speakers. At best, only 2 or 3 of those aboriginal languages will retain their vitality throughout our lifetime.

In monographs summarizing the current status of languages, one encounters the same types of phrase monotonously repeated. "Ubykh [a language of the northwest Caucasus] ... one speaker definitely still alive, perhaps two or three more." "Vilela [sole surviving language of a group of Indian languages in Argentina] ... spoken by only two individuals." "The last speaker of Cupeno [an Indian language of southern California], Roscinda Nolasquez of Pala, California, died in 1987 at the age of 94." Putting these status reports together, it appears that up to half of the world's surviving languages are no longer being learned by children. By some time in the coming century, Krauss estimates, all but perhaps a few hundred languages could be dead or moribund.

WHY IS THE RATE OF LANGUAGE DISAPPEARANCE accelerating so steeply now, when so many languages used to be able to persist with only a few hundred speakers in places like traditional New Guinea? Why do declining languages include not only small ones but also ones with many speakers, including Breton (around 100,000) and even Quechua (8.5 million)? Just as there are different ways of killing people--by a quick blow to the head, slow strangulation, or prolonged neglect--so too are there different ways of eradicating a language.

The most direct way, of course, is to kill almost all its speakers. This was how white Californians eliminated the Yahi Indian language between 1853 and 1870, and how British colonists eliminated all the native languages of Tasmania between 1803 and 1835. Another direct way is for governments to forbid and punish use of minority languages. If you wondered why 149 out of 187 North American Indian languages are now moribund, just consider the policy practiced until recently by the U.S. government regarding those languages. For several centuries we insisted that Indians could be "civilized" and taught English only by removing children from the "barbarous" atmosphere of their parents' homes to English-language-only boarding schools, where use of Indian languages was absolutely forbidden and punished with physical abuse and humiliation.

But in most cases language loss proceeds by the more insidious process now underway at Rotokas. With political unification of an area formerly occupied by sedentary warring tribes comes peace, mobility, intermarriage, and schools. Mixed couples may have no common language except the majority language (for example, English or Pidgin English in Papua New Guinea, the nation to which Bougainville belongs). Young people in search of economic opportunity abandon their native-speaking villages and move to mixed urban centers, where again they have no option except to speak the majority language. Their children's schools speak the majority language. Even their parents remaining in the village learn the majority language for its access to prestige, trade, and power. Newspapers, radio, and TV overwhelmingly use majority languages understood by most consumers, advertisers, and subscribers. (In the United States, the only native languages regularly broadcast are Navajo and Yupik.)

The usual result is that minority young adults tend to become bilingual, then their children become monolingual in the majority language. Eventually the minority language is spoken only by older people, until the last of them dies. Long before that end is reached, the minority language has degenerated through loss of its grammatical complexities, loss of forgotten native words, and incorporation of foreign vocabulary and grammatical features.

Those are the overwhelming facts of worldwide language extinction. But now let's play devil's advocate and ask, So what? Are we really so sure this loss is a terrible thing? Isn't the existence of thousands of languages positively harmful, first because they impede communication, and second because they promote strife? Perhaps we should actually encourage language loss.

The devil's first objection is that we need a common language to understand each other, to conduct commerce, and to get along in peace. Perhaps it's no accident that the countries most advanced technologically are ones with few languages. Multiple languages are just an impediment to communication and progress--at least that's how the devil would argue.

To which I answer: Of course different people need some common language to understand each other! But that doesn't require eliminating minority languages; it only requires bilingualism. We Americans forget how exceptional our monolingualism is by world standards. People elsewhere routinely learn two or more languages as children, with little effort. For example, Denmark is one of the wealthiest and most contended nations in the world. Danes have no problem doing business profitably with other countries, even though practically no one except the 5 million Danes speaks Danish. That's because almost all Danes also speak English, and many speak other foreign languages as well. Still, Danes have no thought of abandoning their tongue. The Danish language, combined with polylingualism, remains indispensable to Danes being happily Danish.

Perhaps you're thinking now, All right, so communication doesn't absolutely require us all to have a single language. Still, though, bilingualism is a pain in the neck that you yourself would rather be spared.

But remember that bilingualism is practiced especially by minority language speakers, who learn majority languages. If they choose to do that extra work, that's their business; monolingual speakers of majority languages have no right or need to prevent them. Minorities struggling to preserve their language ask only for the freedom to decide for themselves--without being excluded, humiliated, punished, or killed for exercising that freedom. Inuits (Eskimos) aren't asking U.S. whites to learn Inuit; they're just

asking that Inuit schoolchildren be permitted to learn Inuit along with English.

The devil's second objection is that multiple languages promote strife by encouraging people to view other peoples as different. The civil wars tearing apart so many countries today are determined by linguistic lines. Whatever the value of multiple languages, getting rid of them may be the price we have to pay if we're to halt the killing around the globe. Wouldn't the world be a much more peaceful place if the Kurds would just agree to speak Arabic or Turkish, if Sri Lanka's Tamils would consent to speak Sinhalese, and if the Armenians would switch to Azerbaijani (or vice versa)?

That seems like a very strong argument. But pause and consider: language differences aren't the sole cause, or even the most important cause, of strife. Prejudiced people will seize on any difference to dislike others, including differences of religion, politics, ethnicity, and dress. One of the world's most vicious civil wars today, that in the land that once was Yugoslavia, pits peoples unified by language but divided by religion and ethnicity: Orthodox Serbs against Catholic Croats and Muslim Bosnians, all speaking Serbo-Croatian. The bloodiest genocide of history was that carried out under Stalin, when Russians killed mostly other Russians over supposed political differences. In the world's bloodiest genocide since World War II, Khmer-speaking Cambodians under Pol Pot killed millions of other Khmer-speaking Cambodians.

If you believe that minorities should give up their languages in order to promote peace, ask yourself whether you believe that minorities should also promote peace by giving up their religions, their ethnicities, their political views. If you believe that freedom of religion but not of language is an inalienable human right, how would you explain your inconsistency to a Kurd or an Inuit? Innumerable examples besides those of Stalin and Pol Pot warn us that monolingualism is no safeguard of peace. Even if the suppression of differences of language, religion, and ethnicity did promote peace (which I doubt), it would exact a huge price in human suffering.

Given that people do differ in language, religion, and ethnicity, the only alternative to tyranny or genocide is for people to learn to live together in mutual respect and tolerance. That's not at all an idle hope. Despite all the past wars over religion, people of different religions to coexist peacefully in the United States, Indonesia, and many other countries. Similarly, many countries that practice linguistic tolerance find that they can accommodate people of different languages in harmony: for example, three languages in Finland (Finnish, Swedish, and Lapp), four in Switzerland (German, French, Italian, and Romansh), and nearly a thousand in Papua New Guinea.

All right, so there's nothing inevitably harmful about minority languages, except the nuisance of bilingualism for the minority speakers. What are the positive advantages of linguistic diversity, to justify that minor nuisance?

One answer is that languages are the most complex products of the human mind, each differing enormously in its sounds, structure, and pattern of thought. But a language itself isn't the only thing lost when a language goes extinct. Each language is indissolubly tied up with a unique culture, literature (whether written or not), and worldview, all of which also represent the end point of thousands of years of human inventiveness. Lose the language and you lose much of that as well. Thus the eradication of most of the world's accumulation of languages would be an overwhelming tragedy, just as would be the destruction of most of the world's accumulated art or literature. We English-speakers would regard the loss of Shakespeare's language and culture as a loss to humanity; Rotokas villagers feel a similar bond to their own language and culture. We are putting millions of dollars into the effort to save one of the world's 8,600 bird species, the California condor. Why do we care so little about most of the world's 6,000 languages, or even desire their disappearance? What makes condors more wonderful than the Eyak language?

A second answer addresses two often-expressed attitudes: "One language is really as good as another," or conversely, "English is much better than any of those fiendishly complicated Indian languages." In reality, languages aren't equivalent or interchangeable, and there's no all-purpose "best language." Instead, as everyone fluent in more than one language knows, different languages have different advantages, such that it's easier to discuss or think about certain things, or to think and feel in certain ways, in one language than another. Language loss doesn't only curtail the freedom of minorities, it also curtails the options of majorities.

Now perhaps you're thinking, Enough of all this vague talk about linguistic freedom, unique cultural inheritance, and different options for thinking and expressing. Those are luxuries that rate low priority amid the crises of the modern world. Until we solve the world's

desperate socioeconomic problems, we can't waste our time on bagatelles like obscure Indian languages.

But think again about the socioeconomic problems of the people speaking all those obscure Indian languages (and thousands of other obscure languages around the world). Their problems aren't just narrow ones of jobs and job skills, but broad ones of cultural disintegration. They've been told for so long that their language and everything else about their culture are worthless that they believe it. The costs to our government, in the form of welfare benefits and health care, are enormous. At the same time, other impoverished groups with strong intact cultures--like some recent groups of immigrants--are already managing to contribute to society rather than take from it.

Programs to reverse Indian cultural disintegration would be far better than welfare programs, for Indian minorities and for majority taxpayers alike. Similarly, those foreign countries now wracked by civil wars along linguistic lines would have found it cheaper to emulate countries based on partnerships between proud intact groups than to seek to crush minority languages and cultures.

Those seem to me compelling cultural and practical benefits of sustaining our inherited linguistic diversity. But if you're still unconvinced, let me instead try to persuade you of another proposition: that we should at least record as much information as possible about each endangered language, lest all knowledge of it be lost. For hundreds, perhaps thousands, of the world's 6,000 languages, we have either no written information at all, or just brief word lists. If many of those languages do indeed vanish, at least we'd have preserved as much knowledge as possible from irreversible loss.

What is the value of such knowledge? As one example, consider that relationships of the languages that survive today serve to trace the history of human development and migrations, just as relationships of existing animal and plant species trace the history of biological evolution. All linguists agree, for instance, that we can trace existing Indo-European languages back to an ancestral Proto-Indo-European language spoken somewhere in Europe or western Asia around 6,000 years ago. Now some linguists are trying to trace languages and peoples back much further in time, possibly even back to the origin of all human language. Many tiny modern languages, the ones now most at risk of vanishing unrecorded, have proved disproportionately important in answering that question that never fails to interest each of us: Where did I come from?

Lithuanian, for example, is an Indo-European language with only 3 million speakers, and until recently it struggled against Russian for survival. It's dwarfed by the combined total of 2 billion speakers of the approximately 140 other Indo-European languages. Yet Lithuanian has proved especially important in understanding Indo-European language origins because in some respects it has changed the least and preserved many archaic features over the past several thousand years.

OF COURSE, DICTIONARIES AND GRAMMARS of Lithuanian are readily available. If the Lithuanian language were to go extinct, at least we'd already know enough about it to use it in reconstructing Indo-European language origins. But other equally important languages are at risk of vanishing with much less information about them recorded. Why should anyone care whether four tiny languages, Kananabu, Saaroa, Rukai, and Tsou, spoken by 11,000 aborigines in the mountains of Taiwan, survive? Other Asians may eventually come to care a lot, because these languages may constitute one of the four main branches of the giant Austronesian language family. That family, consisting of some 1,000 languages with a total of 200 million speakers, includes Indonesian and Tagalog, two of Asia's most important languages today. Lose those four tiny aboriginal languages and these numerous Asian peoples may lose one-quarter of the linguistic data base for reconstructing their own history.

If you now at last agree that linguistic diversity isn't evil, and might even be interesting and good, what can you do about the present situation? Are we helpless in the face of the seemingly overwhelming forces tending to eradicate all but a few big languages from the modern world?

No, we're not helpless. First, professional linguists themselves could do a lot more than most of them are now doing. Most place little value on the study of vanishing languages. Only recently have a few linguists, such as Michael Krauss, called our attention to our impending loss. At minimum, society needs to train more linguists and offer incentives to those studying the languages most at risk of disappearing.

As for the rest of us, we can do something individually, by fostering sympathetic awareness of the problem and by helping our

children become bilingual in any second language that we choose. Through government, we can also support the use of native languages. The 1990 Native American Languages Act actually encourages the use of those languages. And at least as a start, Senate Bill 2044, signed by former President Bush last October, allocates a small amount of money--\$2 million a year--for Native American language studies. There's also a lot that minority speakers themselves can do to promote their languages, as the Welsh, New Zealand Maori, and other groups have been doing with some success.

But these minority efforts will be in vain if strongly opposed by the majority, as has happened all too often. Should some of us English-speakers not choose actively to promote Native American languages, we can at least remain neutral and avoid crushing them. Our grounds for doing so are ultimately selfish: to pass on a rich, rather than a drastically impoverished, world to our children.

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