

Deaths of Languages.

by Jared Diamond

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Six thousand languages are spoken today. By the end of the century, we may be down to two hundred.

In this magazine, the phrase "tragic loss of diversity" usually refers to the current disappearance of biodiversity, with its big, though indirect, consequences for humans. However, another tragic loss of diversity has been going on for a long time, and it has more direct consequences for us: the extinction of our languages.

Language is the most complex and distinctive product of the human mind. Possession of language is the most important trait distinguishing us from apes, and differences among languages constitute the most important distinctions among human groups. In addition to being the focus of each group's culture and the vehicle of its literature and songs, a language provides detailed clues to a people's history, just as do their bones, genes, and faces. Unfortunately, thousands of languages disappeared in recent millennia as their speakers were conquered or exterminated by dominant groups or assimilated into them. Farmers have overwhelmed hunter-gatherers, and strong states have overwhelmed weaker states and tribes. Whatever the original number of languages spoken in the world at the end of the Ice Age (I'd guess tens of thousands), we are down to about 6,000 today.

Most of those 6,000 languages are actually moribund, now spoken only by older people and being learned by few, if any, children. Moribund languages are being eliminated not so much through murder of their speakers (as in the past) as by a more insidious process: the use of a few dominant national languages in governments, schools, businesses, movies, videos, and on the Internet. At this rate, by the end of this century we shall have lost 97 percent of our remaining languages, and barely 200 will survive. That would be a gigantic intellectual and cultural loss for all of us.

This article is about the Ostrogothic and Frisian languages, two members of the Germanic language group--to which English, too, belongs. Ostrogothic disappeared about two centuries ago. Nothing is known of it except for a list of 101 words obtained from one of its last speakers. With the extinction of the Ostrogothic language, the longest-surviving Gothic people finally disappeared from history. The other language, Frisian--the modern language closest to English--still hangs on as a minority language in the Netherlands, backed at the eleventh hour by the resources of the majority Dutch-speaking government and by the pride of the Frisian people. The story of Ostrogothic exemplifies what we have all ready lost; the story of Frisian exemplifies what we can still save.

Today, Germanic languages and peoples fall into two groups: North Germanic, alias Scandinavian (Swedish, Danish, Norwegian, Icelandic, and Faeroese), and West Germanic (German, English, and Frisian). Around the time of Christ, though, many East Germanic peoples lived on the coast of the Baltic Sea in what are now eastern Germany and Poland. These groups are collectively termed the Goths (and individually known as the Visigoths, Ostrogoths, Burgundians, and Vandals) and were prominent among the so-called barbarians who destroyed the Western Roman Empire. Early in the Christian era, the Goths migrated south to establish kingdoms in North Africa and much of Europe, such as the Ostrogothic kingdom in the Ukraine. But all of those Gothic kingdoms eventually succumbed in battle to assorted other peoples, the last to fall being Spain's Visigothic kingdom, conquered by Arabs in A.D. 711.

For most Gothic languages, our only information consists of a few words quoted by Roman authors. Our sole extensive Gothic text is a partially preserved translation of the Bible into Visigothic, made circa A.D. 340 by Bishop Wulfila, inventor of the twenty-seven-letter Gothic alphabet. The translation is doubly significant as the earliest extensive text preserved in any Germanic language. However, from the ninth century onward, travelers to the Crimean Peninsula (which projects from southern Ukraine into the Black Sea) reported encountering there, among other groups, people who had distinctive customs and spoke some obviously Germanic language. As time went on, such reports began mentioning that these people were becoming multilingual, using their own language less, and adopting the Islamic faith and Turkish dress. The last report of a Crimean Germanic language, in 1780, came from a visitor who described meeting some Turkish-looking people speaking a Germanic language among themselves without knowing that it was Germanic. Their assimilation appeared to be complete by 1794, when another visitor to the Crimea reported that he could find no trace of such a language.

What made these reports so intriguing was that the Crimea had once been part of the Ostrogothic kingdom. Could those

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Crimeans really have been the last Goths, continuing to speak Ostrogothic for more than a thousand years after their kingdom fell? Or were they relatively recent immigrants from the area of modern Germany? That is, was their language some type of German, or was it something more like the Visigothic of Wulfila's translated Bible? Alas, almost all those visitors to the Crimea failed to write down even a single word of the mysterious language they heard. The one exception was a Flemish diplomat and man of letters named Ogier Ghislain de Busbecq, who served as the Austrian ambassador to Istanbul from 1555 to 1562. Busbecq was very curious about whether those Crimeans were indeed the last Goths, and he begged his interpreters to be on the lookout for any who might be visiting Istanbul. Finally, two of the Crimeans showed up in Istanbul, and Busbecq's interpreters brought them to dinner. A highly educated man and an accomplished linguist familiar with at least nine languages, Busbecq quizzed them in detail for several hours, got them to pronounce 101 words, and carefully recorded the meanings of those words as explained through his interpreters. A letter describing the dinner, sent by Busbecq to a friend, contains everything we know of that vanished Crimean language.

Linguists nearly weep in frustration at the sequence of steps by which those words have come down to us. To begin with, Busbecq wrote that of his two visitors, one really was a "Goth" (Busbecq's term, which I shall adopt) who had completely forgotten his own language because it was already falling into disuse. The real informant was the other guest, not a Goth at all but a Greek who had learned Crimean "Gothic" (Busbecq's term again) while living in the Crimea and who presumably pronounced it with a Greek accent. Busbecq's interview procedure was evidently to have the Greek visitor carefully pronounce a Gothic word and then explain its meaning in Greek, which Busbecq understood only imperfectly--so his Greek interpreter translated the explanation into Italian, in which Busbecq was fluent. Busbecq then translated the Italian into Latin, the language in which he wrote the letter to his friend. Because the phonetic alphabet now used by professional linguists hadn't yet been invented, Busbecq used either German or Dutch spellings to transcribe the Greek visitor's pronunciation of the Gothic words, depending on how the word sounded to him. Ultimately, a copy of Busbecq's handwritten letter in Latin fell into the hands of a French printer, who had difficulty reading Busbecq's handwriting but who published the letter anyway, without Busbecq's permission. The printer knew neither German nor Dutch and probably overlooked some typesetting mistakes.

Errors must have crept in at each stage of this process. Confronted with such complications, some linguists have thrown up their hands and despaired of reaching any conclusions about Crimean Gothic. But dozens of others have been struggling for more than four centuries to peel off the errors at each stage and to figure out what Crimean Goths really spoke. The following account is based on the most detailed study available (by the linguist MacDonald Stearns Jr., a former colleague of mine at the University of California, Los Angeles).

To give you a feeling for Crimean Gothic, the table at right lists some of Busbecq's transcriptions (as reconstructed by Stearns) and compares them with the modern German, English, and Frisian words having the same meaning. The first conclusion you'll reach is that Busbecq's informant was indeed speaking some Germanic language, because most of the transcribed words and grammatical endings are close to the corresponding German, English, or Frisian terms. A few Crimean words were evidently borrowed and modified from other languages, because the Crimea was such a linguistic melting pot over the centuries (for example, *telich* 'foolish', from the Turkish *telyq*; *sada* 'hundred', from the Iranian *sad*; *Menus* 'meat', from the Hungarian *men-hus* 'horsemeat'). There is even a Crimean word derived from Latin: *Cadariou* 'soldier' is a legacy of the days when Goths were fighting for or against Roman centurions (*centurio* in Latin). Some of the Crimean words lack a recognizable cognate in any other language (for example, *Marzus* 'wedding').

Even though our sample of Crimean Gothic is so small, it suffices to demonstrate that the language was closer to Wulfila's Visigothic than to either old or modern German--so those Crimeans could not have been descendants of medieval German immigrants. This conclusion is also supported by the similarity of the Crimean and Visigothic words for the numerals '2' through '10'. Citing the Crimean first and the Visigothic second in each case, they are as follows: 2/*tua*/*twa*, 3/*tria*/*thria*, 4/*fyder*/*fidwor*, 5/*fynf*/*fymf*, 6/*seis*/*saihs*, 7/*seuene*/*sibun*, 8/*athe*/*ahdaw*, 9/*nyne*/*niun*, 10/*thiine*/*taihun*.

Especially interesting is the Crimean Gothic word for 'egg'. Linguists have deduced that the proto-Germanic language, spoken around 500 B.C. and ancestral to all later Germanic languages, had a sound "jj" between two vowels, which became "gg" in North Germanic languages, "i" in West Germanic languages, and "d" in Visigothic. For instance, the proto-Germanic word meaning 'egg' would have been *ajjaz*, which became *egg* in Old Norse (spelled *agg* in modern Swedish) but *Ei* in modern German and in Dutch. (We English speakers lost our original *Ei* and now say 'egg', as do Swedes and other North Germanic peoples, because that was one of the many words that our English ancestors borrowed from the Danish invaders who ruled much of medieval England for two centuries.) The surviving portions of

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Wulfila's translated Bible have nothing to say about eggs, so we can't be certain what a Visigoth said when ordering scrambled eggs for breakfast. However, Busbecq, God bless him, did ask his informant about eggs. Sure enough, the answer was *ada!*--demonstrating that Crimean Gothic had undergone the same "jj"-to-"d" sound shift attested by many Visigothic words. We would never know this if Busbecq had not written down that one word.

But the Crimean Goths were not speaking Visigothic, or even a dialect derived from Visigothic. Among the features of Crimean Gothic unparalleled not only in Visigothic but also in any other preserved Germanic language, is the unique formation of the words for '12', '13', and so on (*thiinetua* meaning '10-2'; *thiinetria* '10-3'), as well as the unique formation of the words for '30', '40', and so on (*treithyen* meaning '3rd- 10', *furdeitheien* '4th- 10'). (Look at the Crimean numerals for '2', '3', '4', and '10' in the list two paragraphs back).

In short, in the course of one evening, Busbecq was able to learn enough about Crimean Gothic to convince future linguists that its speakers were not Germans but a distinct group of Goths related to the Visigoths. Almost surely, they were the direct descendants of the mighty Ostrogoths who settled in the Crimea about A.D. 250, battled the Huns, and conquered Italy. Incredible as it may seem, a few of their descendants were still speaking Ostrogothic some fifteen centuries later, in 1780, at the time of the American Revolution. But before George Washington could complete his second term as president, the few remaining Ostrogoths lost their language and cultural identity, leaving a host of linguistic questions forever unanswerable and extinguishing the last of the Gothic peoples, who had played such a major role in history.

Frisian, the other Germanic language I shall discuss, is of special interest to us speakers of English because it is the language closest to ours, even closer than are German and Dutch. The word for 'cheese', for example, has a familiar sound (*tsiis*) in Frisian but a less familiar sound in Dutch (*kaas*) and German (*Kase*). (Look again at the table, opposite, for some other Frisian words.) About 2,000 years ago, the Frisians shared the coasts of what are now Denmark, Germany, and the Netherlands with the ancestors of the modern English--the Angles, the Saxons, and the Jutes--who invaded England in the fifth century. When I picked up a book in Frisian, the language struck me as much more reminiscent of the Old English of *Beowulf* than is modern English, because the English, but not the Frisian, language ultimately lost most of its inflectional endings.

After remaining politically independent until the sixteenth century, the Frisians finally became submerged within the Dutch state and German principalities. Today, Germany's remaining Frisian speakers (who live on the country's northwest coast) number only a few thousand individuals, and their two very different dialects (or separate languages) seem doomed to extinction. About 700,000 Dutch people still speak Frisian in the coastal Netherlands.

Many warning signs might suggest that even the large number of Frisian speakers in the Netherlands face the fate of the Goths. The writing of the Frisian language virtually disappeared several centuries ago and was not revived until recently. Since World War II, Frisians have been moving out of Friesland and have become scattered among the majority population, while the Dutch have been moving in. Within Friesland itself, the upper class, the townspeople, and professionals speak predominantly Dutch, while the lower class, the inhabitants of rural areas, and the agricultural population speak predominantly Frisian. The percentage of Frieslanders who speak or understand Frisian has been decreasing for decades, and those who do speak or understand it mostly can't write it (instead they write in Dutch). The Frisian language is becoming ever more "Dutchified" in its vocabulary, its grammar, and some aspects of its pronunciation.

Recently I found myself in Friesland without having planned the visit. While lecturing at the University of Groningen in the northeastern Netherlands, I was invited by three ornithologists to go for an afternoon's bird-watching. I discovered that Friesland is a distinct province of the Netherlands, with its boundary only fifteen miles west of Groningen. Of my three bird-watching companions, two were Dutch, but one, Theunis Piersma, a well-known authority on migratory shorebirds, was Frisian. Suddenly, there I was in Friesland with a Frisian.

I confess that upon realizing my situation, I felt both curiosity and a little trepidation. I had spent much time in parts of Europe where ethnic divisions provoke vicious conflict, especially Spain's Basque Country and the former Yugoslavia. Were my two Dutch companions welcome in Friesland? Was I entering a depressed area with high unemployment, alcoholism, and a dying language spoken only by old people? Worst of all, was Friesland home to a terrorist movement seeking independence?

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Absolutely not. It was immediately obvious that Friesland is peaceful and flourishing, made prosperous by agriculture, industry, and tourism. Road signs are bilingual, in Frisian and Dutch. Everywhere, the Frisian flag flies beside the Dutch flag. Domestic architecture and boats are distinctively Frisian in style. I passed a Frisian wedding procession and visited a Frisian museum. To our two Dutch companions, Theunis spoke Dutch; to a pedestrian whom he asked for directions, he spoke Frisian, which our companions could not understand. The overwhelming sense I came away with was that the Frisians are proud of being Frisian and Dutch and are comfortable in their dual identity. Their outlook is reflected in the words of the Frisian national anthem: *It beste lan fan d'ierde!* (The best land on earth!)

How did this happy situation come to be? The key is that the Frisian language is neither outlawed nor merely tolerated as a necessary evil by the Dutch but instead is vigorously supported. As early as 1907, the government began making grants for Frisian lessons in primary schools. In 1955 the teaching of Frisian was permitted in all primary schools, and by 1980 it was required. The government of the Netherlands supports radio and TV broadcasts in Frisian. Frisian writing has been revived, with dozens of books for both children and adults being published in Frisian each year. Since the Bible was finally translated into Frisian in 1943, the number of people using the Frisian language for prayer has increased.

The visit left me feeling cautiously optimistic about the future of the Frisian, language. The Netherlands' public policies seem good both for the Frisian people and for the Dutch state. Even a cynic with zero interest in linguistic diversity would have to admit it: at a relatively insignificant price, the Netherlands has spared itself the problems that many other multiethnic countries have.

I wish I could say the same for the rest of the world. In fact, the situation of most other minority languages is disastrous. For instance, of the 250 or so original Australian Aboriginal languages, fewer than 100 are still spoken or even remembered by anyone at all, and only half a dozen can boast more than 1,000 speakers. The highest density of languages in the world today is on the island of New Guinea, where approximately 1,000 different languages are still spoken. (Yes, they are really distinct languages, not just dialects, and they fall into dozens of language families, as different from one another as Athabascan languages are from Indo-European.) The median number of speakers per New Guinean language is only 2,000 people, and even the most widely used New Guinean language has only 200,000 speakers. On a recent trip to the island I encountered a North American missionary couple who are devoting their lives to studying the Elopi language and producing an Elopi translation of the Bible. When I asked why they had chosen that language, they explained, "It's because Elopi is such an important language: it has 600 speakers!" That makes Elopi a giant compared with its neighbors Baso, Kapori, and Mandar--spoken by 175, 60, and 20 people, respectively. To deal with this linguistic Babel, the government of Papua New Guinea (the eastern part of the island) adopted English and Pidgin as the national languages but has not promoted instruction in the indigenous languages, all of which face a bleak future.

In North America, of the unknown number of native languages that were spoken when Europeans arrived, only about 200 survive. Most are on the verge of extinction, and many are now spoken by only one or two elderly people. Not one has a secure future. Even Navajo--by far the most widely spoken North American Indian language (with about 100,000 speakers) and one of only two heard in radio broadcasts--is at risk, because many or most Navajo children now speak only English.

How Indian languages were reduced to this condition is no secret. For most of the first three centuries after Europeans settled in North America, their main preoccupation was to kill, conquer, drive out, or acculturate Indians. Once the Indian population had been subdued, the U.S. government decided that the best way to "civilize" Indian children was to send them to boarding schools with instruction in English only and to punish severely any of them caught speaking their "barbarous" native tongues. Only in 1967 did our federal government reverse its complete ban on school instruction in any Indian language; not until 1990 did our government decide (in principle) to encourage Indian languages; and not until 1992 did the government appropriate funds for that purpose, in the form of \$2,000,000 to foster Native American language studies (that's an average of \$10,000 for each of 200 languages). By comparison, our government has spent nearly \$20,000,000 to save one endangered North American bird species, the California condor. As an ornithologist, I would be the very last person to begrudge money for the condor; I would merely like to see money for human languages as well.

Why should anyone care about all these vanishing Indian languages? One consideration is their unique value for understanding the history and origins of Native Americans. Many extinct or vanishing Indian languages are the only evidence we have of the long migrations and complex histories of particular peoples. For example, the long-extinct

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Timucua language of northern Florida, known mainly from the writings of a Spanish missionary living among the Timucuans in the early 1700s, appears to be closest to Indian languages of coastal Venezuela and Colombia, suggesting an ancient back-migration of Indians from South America across the Caribbean to Florida. Our only evidence for a transcontinental migration of Gulf Indians from the area of the U.S. Southeast is the existence of the extinct or nearly extinct Yuki and Wappo languages of northern California (down to ten speakers and one speaker, respectively, a few decades ago), spoken 2,000 miles from the nearest Gulf languages (Choctaw, Creek, and others). With the vanishing of Yuki and Wappo, we are unlikely ever to learn more about them or to uncover the clues they held to great migrations rivaling those of the Goths.

The larger reason that anyone should care about these languages is related to the overall circumstances of Indians in the United States and Canada today--a serious issue for Indian minorities and non-Indian majorities alike. To put it mildly, the situation is not the happy one of Frisians in the Netherlands. Many Indians are caught up in poverty, alienation, health crises, and personal tragedy, which translate into social, political, and economic problems for American society as a whole. Both those Indians who remain poor and those who have achieved some affluence pose challenges to the rest of society, albeit in different ways. What is the role of language in all this? The answer is simple: for North America's 200 Indian language groups, as for every other language group in the world, their language is the vehicle of their culture. No one is demanding that English-speaking Americans be forced to learn Navajo, any more than anyone is demanding that the Dutch of Amsterdam learn Frisian. But all Americans would be much better off if Indians felt unalienated, and proudly and unambivalently Indian and American, just as the Frisians feel proud to be both Frisian and Dutch.

EXTINCT		MODERN	
Crimean Gothic	German	Frisian	English
Apel	Apfel	apel	apple
Boga	Bogen	boge	bow
Bruder	Bruder	broer	brother
geen	gehen	gean	go
Goltz	Gold	goud	gold
Handa	Hand	han	hand
lachen	lachen	laitsje	laugh
Oeghene	Augen	eagen	eyes
Rinck	Ring	ring	ring
Salt	Salz	salt	salt
schieten	schie[Beta]en	sjitte	shoot
schlipen	schlafen	sliepe	sleep
Siluir	Silber	sulver	silver
Sune	Sonne	sinne	sun
tzo	Du	dij	thou
telich	narrisch	nuver	foolish
sada	hundert	hundert	hundred
Menus	Fleisch	fleis	meat
Cadariou	Soldat	soldaat	soldier
Marzus	Hochzeit	boaskerij	wedding

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