

### The world's languages in crisis

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The Eyak language of Alaska now has two aged speakers; Mandan has 6, Osage 5, Abenaki-Penobscot 20, and Iowa has 5 fluent speakers. According to counts in 1977, already 13 years ago, Coeur d'Alene had fewer than 20, Tuscarora fewer than 30, Menomini fewer than 50, Yokuts fewer than 10. On and on this sad litany goes, and by no means only for Native North America. Sireniski Eskimo has two speakers, Ainu is perhaps extinct. Ubykh, the Northwest Caucasian language with the most consonants, 80-some, is nearly extinct, with perhaps only one remaining speaker. Here we might be accused of jumping the gun, prematurely announcing the extinction of a language, since—as I heard somewhere—two or three more speakers of Ubykh had reportedly been found.<sup>1</sup> But what difference does it make in human history that a language became extinct in 1999 instead of 1989? What difference does it make if the youngest speaker is 90 or in fact 9? Only 81 years in the date of the inevitable extinction of the language, a mere moment in human history—though a crucial moment for linguists today, as we shall see.

Language endangerment is significantly comparable to—and related to—endangerment of biological species in the natural world. The term itself is presumably drawn from biological usage. For language we need our own definition of terms. Languages no longer being learned as mother-tongue by children are beyond mere endangerment, for, unless the course is somehow dramatically reversed, they are already doomed to extinction, like species lacking reproductive capacity. Such languages I shall define as 'moribund'. (There is an important difference here from biological extinction, because under certain conditions language is potentially revivable, as shown by the case of Hebrew.) In assessing the modern situation of language endangerment, let us set aside the languages already known to have become extinct—that is yet another issue, which we shall not get into. The question for us here is this: how many languages still spoken today are no longer being learned by children? This is a key question, as such languages are no longer viable, and can be defined as moribund, thus to become extinct during the century nearly upon us.

Statistics on language viability are very hard to come by. This is partly because in some parts of the world we hardly know what languages are spoken, let alone how viable each is, and partly, perhaps even more, because governments generally favor one language over another and have reason not to provide figures for nonfavored languages. Or, if they do so at all, for various reasons

<sup>1</sup> Except for the case of Eyak, which I can personally confirm, many of the statistics, large and small, in this article are but reports or estimates; I trust it will be obvious that any imprecision in the present figures should in no way detract from the basic point of their shocking significance. For North America and the Soviet North the figures for numbers of speakers come mainly from colleagues. For the numbers of languages and their speakers for the world generally, by far the best single source available that I am aware of is the *Ethnologue* (Grimes 1988), to which this paper refers below.

they may provide inaccurate or distorted figures. For some viability statistics I shall begin in the areas most familiar to me personally. In Alaska now only 2 of the 20 Native languages—Central Yupik Eskimo and Siberian Yupik Eskimo of St. Lawrence Island—are still being learned by children. For the languages of the small Soviet northern minorities it is much the same: only 3 of about 30 are generally being learned by children. Thus in Alaska and the Soviet North together, about 45 of the 50 indigenous languages, 90%, are moribund. For the whole USA and Canada together, a similar count is only a little less alarming: of 187 languages, I calculate that 149 are no longer being learned by children; that is, of the Native North American languages still spoken, 80% are moribund. These North American numbers are relatively well known to us.<sup>2</sup> The situation in Central and South America, though less well known, is apparently much better. It would seem, so far, that only about 50 of 300, or 17%, of Meso-American indigenous languages (including Mexico) and 110 of 400, or 27%, of South American languages are likely to be moribund. So for all the Americas the total is 300 of 900, or one third.

For the rest of the world, the worst continent by far is Australia, with 90% of 250<sup>3</sup> aboriginal languages that are still spoken now moribund, most of those VERY near extinction. It would seem that English-language dominance in the 'English-speaking world' has achieved and continues to achieve the highest documented rate of destruction, approaching now 90%. In comparison, Russian domination has reached 90% only among the small peoples of the North; in the Russian Republic itself, 45 of 65 indigenous languages, or 70%, are moribund, while for the entire USSR the total is more like 50%.

For the world as a whole it is, as implied above, much easier to estimate the number of languages still spoken than to estimate the number of those still spoken by children. Voegelin & Voegelin (1977) were able to list 4,500 languages (living and dead), Ruhlen 1987 estimates 5,000 living languages for the world, while the Grimeses in 1988 list 6,000 and now have 6,500, a difference partly in language-vs.-dialect definition. Most linguists I have consulted who have contemplated this question on a worldwide scale have agreed that 6,000 is not an unreasonable round estimate, and that will do nicely as a base figure for our purposes.

The distribution, though, is very uneven. All the Americas together have only 900, as noted, or 15%. Europe and the Middle East together have only 275, or 4%. The other 81% of the world's languages are in Africa (1,900) and in Asia and the Pacific (3,000). For figures from which we may derive some sense of their viability, we are again most indebted to the Grimeses, who pro-

<sup>2</sup> Note, however, that 187 languages comprise only a very small proportion of the world's languages, about 3%. For this and much of the following I am most indebted to Barbara and Joseph Grimes and their *Ethnologue* (1988), together with some late 1990 updates (personal communication). This work provides by far the most detailed worldwide survey of languages yet available, and it is also a project continuously being updated. In keeping with the estimated nature of statistics, I have generally rounded the Grimeses' figures.

<sup>3</sup> The Grimeses' updated figures now include over 100 more very nearly extinct Australian languages listed in Wurm & Hattori 1981 but not in the 1988 *Ethnologue*.

vide relevant information largely in terms of Bible translation. Altogether for a total of about 50% of the world's languages, they specify that Bible translation work has already been done, is ongoing, or is needed, implying for at least most of these sufficient viability to warrant the work. For the rest, the condition of about 40% is inadequately known, and 10% are classed as 'nearly extinct' or 'highly bilingual', not warranting translation work. Allowing that a good majority of the unknown 40% may still be viable, the Grimeses themselves might agree that as many as 20% of the world's languages are already moribund. However, two other linguists with wide experience have both independently guessed, along with me, that the total may be more like 50%,<sup>4</sup> or at least that the number of languages which, at the rate things are going, will become extinct during the coming century is 3,000 of 6,000.

For us to guess whether the mortality is already more like 50% or more like 20%, it will help to consider the conditions under which these languages now exist, by country. The nine countries which each have over 200 languages account for 3,500 of the 6,000. The big two are Papua New Guinea with 850 and Indonesia with 670; then Nigeria with 410 and India with 380; then Cameroon (270), Australia (250), Mexico (240), Zaire (210), and Brazil (210). Another 13 countries have 160 to 100 languages each. In roughly descending order they are Philippines, USSR, USA, Malaysia, PRC, Sudan, Tanzania, Ethiopia, Chad, New Hebrides, Central African Republic, Burma, and Nepal. These top 22, including overlap, may account for 5,000 languages. The circumstances that have led to the present language mortality known to us range from outright genocide, social or economic or habitat destruction, displacement, demographic submersion, language suppression in forced assimilation or assimilatory education, to electronic media bombardment, especially television, an incalculably lethal new weapon (which I have called 'cultural nerve gas'). And if we consider what has gone on and is now going on in the 22 countries just alluded to, we can more readily predict how many languages will die during the coming century. We need only think of present conditions in Indonesia (e.g. Timor, 20 languages), Brazil, Chad, Ethiopia—to mention only those I've heard a little something about—to draw a grimly pessimistic conclusion about the number of languages which soon will be counted among those no longer learned by children, if they are not already in that state of decline.

'Soon will be ...': this brings us to the subject of those languages which, though now still being learned by children, will—if the present conditions continue—cease to be learned by children during the coming century. These are the languages that I term merely 'endangered', in a sense similar to the biological. The number of these is even more difficult to calculate, of course. Let us instead take the approach of calculating the number of languages that are neither 'moribund' nor 'endangered', but belong to a third category, which I shall term 'safe'.

<sup>4</sup> Ken Hale wishes to point out that the figures attributed to him in *Time* magazine, September 23, 1991, are from Mike Krauss's presentation in the LSA Endangered Languages symposium of January, 1991.

For this third category we may identify two obvious positive factors: official state support and very large numbers of speakers. The first does not presently account for much, as there are, as of 1990, only about 170 sovereign states, and the, or an, official language of the majority of these is English (45 cases), French (30), Spanish or Arabic (20 each), or Portuguese (6), leaving only about 50 others. The total could be raised to something over 100 by including regional official languages of the USSR or India, for example. Considering now sheer numbers of speakers, there are 200 to 250 languages spoken by a million or more, but these of course greatly overlap with those of the official languages category. By including languages with down to half a million we might raise the total by 50, and by going down to 100,000 as a safety-in-numbers limit, we might perhaps double the total to 600 'safe' languages. Remember, though, the case of Breton, with perhaps a million speakers in living memory but now with very few children speakers, or Navajo, with well over 100,000 speakers a generation ago but now also with an uncertain future. Moreover, the recent decline of both of these has taken place under steady pressure, but not under genocidal or cataclysmic conditions. If this can happen in Europe and North America, then in Indonesia or Brazil or Africa—with urbanization, deforestation, desertification, and AIDS, to mention only a few newer trends on top of those already mentioned—will conditions be BETTER for minority language survival? Bear in mind, moreover, that the MEDIAN number of speakers for the languages of the world is nowhere near 100,000, but rather 5,000 or 6,000. Therefore, I consider it a plausible calculation that—at the rate things are going—the coming century will see either the death or the doom of 90% of mankind's languages. What are we linguists doing to prepare for this or to prevent this catastrophic destruction of the linguistic world?

Now let us compare the biological world situation. For this we have nicely comparable numbers, also well known. The most endangered category is mammals. Of 4,400 mammal species, 326 are currently on the 'endangered' plus 'threatened' list—'endangered' being 'species that are in imminent danger of extinction' and 'threatened' being 'species that in the foreseeable future will be in imminent danger of extinction'. The next most endangered category and also the most visible to us is birds, with 231 of 8,600 species endangered or threatened. Thus 7.4% of mammals and 2.7% of birds are endangered or threatened. I should add that in both cases the majority are only 'threatened' and not 'endangered'. Interestingly, however, for political and economic reasons it is difficult to get an animal officially listed, and Alaskan biologists I've talked to concur that in view of this underlisting, especially for birds, the total of endangered or threatened mammals may be 10%, and birds 5%.

Why is there so much more concern over this relatively mild<sup>5</sup> threat to the

<sup>5</sup> As this goes to press, I note the article 'World of the Living Dead' (*Natural history* 9/91:30, 32–37) by the biologist Jared Diamond, who takes the Javanese bird situation as an example to illustrate his view, held by many biologists, that 'half of the world's species will be extinct or on the verge of extinction by the end of the next century'. Thus the enormity of the impending biological catastrophe may come much closer to matching that of the linguistic catastrophe than one might believe from the official endangered species listings.

world's biological diversity than over the far worse threat to its linguistic diversity, and why are we linguists so much quieter about it than biologists? For the animals we have, at the international level, the UN's International Union for the Conservation of Nature, the private World Wildlife Fund, and about 40 others. Nationally we have federal agencies such as the US Fish and Wildlife Service, the National Park Service, US Forest Service, the Environmental Protection Agency, and the Bureau of Land Management, all of which have responsibilities for the protection of wildlife. And privately we have organizations such as the National Wildlife Federation, National Audubon Society, Sierra Club, Wilderness Society, Greenpeace, and at least 300 more, engaged in education, publicity, research, lobbying, and monitoring, and in activism for the survival of animal species. What do we have for languages?

Surely, just as the extinction of any animal species diminishes our world, so does the extinction of any language. Surely we linguists know, and the general public can sense, that any language is a supreme achievement of a uniquely human collective genius, as divine and endless a mystery as a living organism. Should we mourn the loss of Eyak or Ubykh any less than the loss of the panda or California condor?

Seeing the present situation, I think that, at the very least, it behooves us as scientists and as human beings to work responsibly both for the future of our science and for the future of our languages, not so much for reward according to the fashion of the day, but for the sake of posterity. What we need to do now stares us in the face. If we do not act, we should be cursed by future generations for Neronically fiddling while Rome burned.

We must obtain adequate information on the condition of the languages of the world, better than we have now, and use it to plan priorities for linguistic work in a rational and coordinated way. SIL (Summer Institute of Linguistics/Wycliffe Bible Translators), which has come closest to doing this, still has insufficient information even for its own purposes in 40% of the languages, as noted.

Obviously, for scientific purposes, it is most urgent to document languages before they disappear. The urgency increases with the proximity to extinction. And, within that framework, the more isolated a given language is genetically or typologically, the more urgent is the need for its documentation. By documentation I mean grammar, lexicon, and corpus of texts. This is a tradition well proven in the history of linguistics. To this we can now add documentation on audio- and videotape. There must also be a network of repositories and centers for safeguarding and using this documentation, of which our Alaska Native Language Center is an example.

This work is potentially of equal or even greater importance for social purposes; not only is the documentation valuable for science, but it is also a national treasure for the people whose languages are thus preserved. The very existence of a book on a shelf or an archive of manuscripts can be of crucial symbolic value. Moreover, without such documentation the language must irrevocably disappear into oblivion, and very likely so also the national identity in the long run. With such documentation, however, it remains always possible

to maintain or establish a limited crucial role for the language institutionalized within the society, e.g. in schools or ceremonial life. From that position, even after the last native speaker has died, it is possible—as shown by the case of Hebrew and perhaps others, such as Cornish—for that limited role to expand back to first-language use, where the WILL of the people is strong enough. For this purpose, adequate documentation is most certainly feasible.

For those 'unsafe' languages still being learned by children—i.e. those merely 'endangered'—there is an equal need for us to support and promote their survival. Here again, similar criteria would apply: the smaller the number, or especially proportion, of speakers, and/or the more adverse the conditions, the more such involvement is needed. We should not only be documenting these languages, but also working educationally, culturally, and politically to increase their chances of survival. This means working with members of the relevant communities to help produce pedagogical materials and literature and to promote language development in the necessary domains, including television. And it involves working with communities, agencies, and, where possible, governments for supportive language planning. Where necessary, and this may be most often the case, we must learn from biologists and conservationists the techniques of organization, monitoring and lobbying, publicity, and activism. This we must do on local, regional, national, and international scales.

Who is going to do all this work, and what is the role of linguistics in it? Nowadays, SIL is doing more than any other group in relation to endangered languages. Their current capacity is 850 languages, cumulatively so far 1,200—within their own agenda. Besides SIL we have a few regional centers, such as our Alaskan one; education programs dedicated to specific languages, such as the Hualapai and Rama projects described elsewhere in this collection; for Native American languages, national organizations with educational or scientific purposes, such as NALI (Native American Language Institute) or SSILA (Society for the Study of Indigenous Languages of the Americas); and, at the level of discussion, centers for speakers of Native American languages, also described in this collection.<sup>6</sup> Internationally we have the Permanent International Committee of Linguists and UNESCO; significantly, language endangerment has been chosen by that Committee as a main theme for the next International Congress, Quebec 1992. So a movement is finally taking shape within linguistics itself, but only a beginning.

Let me conclude by asking what the role of professional linguistics will be in relation to these issues. Universities and professional societies have crucial

<sup>6</sup> As this goes to press, in addition to the political support of the federal Native American Languages Act of 1990 (described below by Watahomigie & Yamamoto), new federal legislation is proceeding that is to include appropriations: S. 1595, the Alaska Native Languages Preservation and Enhancement Act of 1991, introduced by Senator Murkowski of Alaska in July, 'to preserve and enhance the ability of Alaska Natives to speak and understand their native languages', passed by the Senate in November; and S. 2044, the Native American Languages Act of 1991, 'to assist Native Americans in assuring the survival and continuing vitality of their languages', introduced by Senator Inouye of Hawaii in November.

influence in determining research and educational priorities. To what extent are endangered languages a priority in modern linguistics? Which languages of the world receive the most attention? Are graduate students encouraged to document moribund or endangered languages for their dissertations? How much encouragement is there to compile a dictionary of one? How many academic departments encourage applied linguistics in communities for the support of endangered languages? How many departments provide appropriate training for speakers of these languages who are most ideally suited to do the most needed work? Obviously we must do some serious rethinking of our priorities, lest linguistics go down in history as the only science that presided obliviously over the disappearance of 90% of the very field to which it is dedicated.

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### **Local reactions to perceived language decline\***

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1. INTRODUCTION. In schools, from kindergarten through high school, the language of instruction was English. When students who had been taught in English left school, they were speaking English. When they married, they spoke English to their children. 'Indians' no longer spoke their native languages as their primary means of communication.

This was the perceived state of affairs in relation to the Hualapai language in the mid 1970s. Many members of the community thought that English was taking over their ancestral language and that their traditions were about to disappear. In response to this threat of rapid language decline, a long and tedious process of forming a community language team began, with the Hualapai Bilingual/Bicultural Program as its central force.

This essay will deal in part with the language maintenance efforts of the Hualapai group. However, programs of this sort succeed or fail not only because of processes that develop and function within a local community but also because of structures and processes that develop in the larger environment. Thus, we will also discuss two initiatives which are of regional and national significance in relation to the situation of endangered local languages. These are (1) the American Indian Languages Development Institute and (2) the Native American Languages Act, Public Law 101-477.

\* We wish to thank all the members of the Hualapai Language Team for their enthusiasm in discussing the content of this paper when we were preparing a draft. We also benefitted a great deal from our work with generations of the AILDIs participants, especially with Ofelia Zepeda and Teresa McCarty, Co-Directors of the recent AILDIs at the University of Arizona. We also want to acknowledge the constant support and encouragement from the linguistics community, especially Ken Hale and Margaret Langdon. Without this support, our work with Native American communities would not have reached such a healthy state.

China is facing a language endangerment crisis, with half of its languages decreasing in number of speakers. This article contributes to the understanding of language endangerment in China with a case study of the Gochang language, which is spoken by about 10,000 Tibetans in western Sichuan. We describe Gochang as an "invisible" language "one that is overlooked by the state's ethnic and linguistic policies and thus is more vulnerable to the social transformations wrought by statist development." *Journal of Asian Pacific Communication* 16(2), 237-257. Moseley, Christopher (ed.). 2010. *Atlas of the World's Languages in Danger* (3rd ed.). Paris: UNESCO. <http://www.unesco.org/languages-atlas/>. Nettle, Daniel, and Romaine, Suzanne. English will be the world's lingua franca for cross-culture communications for at least the next 15 or 20 years; Mandarin and other languages will continue to expand their influence, thus English will not "take over"; linguistic diversity is good, and the internet can help preserve it; all languages evolve over time. Until translation technology is perfected and pervasive, people must find other ways to communicate as effectively as they can across cultures. Former InfoWorld editor Stewart Alsop wrote: "English will not displace or replace the other major languages in the world, including French, Spanish, Japanese, Germanic, Hindu, etc." And communication technologies researcher Mark Poster wrote: "Chinese might be emerging as the new lingua franca." next great threat to minority languages. *The world's languages in crisis: A 20-year update* 2. 1. Introduction. In 1991, Michael Krauss and others participated in a symposium on endangered languages at the annual meeting of the Linguistic Society of America. The compilation of the presentations at that symposium was published a year later in the journal of the society and constituted a call to arms. that global linguistic diversity has declined 20% over the period 1970-2005. *The world's languages in crisis: A 20-year update* 3. Krauss noted in his LSA presentation that "statistics on language viability are very hard to come by" (Krauss 1992:4) and in many respects that continues to be the case 20 years later.