

Endangered Languages



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ENDANGERED LANGUAGES†

On endangered languages and the safeguarding of diversity*

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Like most people who have done linguistic field work for thirty years or so, I have worked on languages which are now extinct, eight of them in my case, and I have studied, and continue to study, many languages which are seriously imperiled. My experience is far from unusual, and the testimony of field workers alone would amply illustrate the extent of language loss in the world of the present era.

It is reasonable, I suppose, to ask what difference it makes. On the one hand, one might say, language loss has been a reality throughout history; and on the other, the loss of a language is of no great moment either for science or for human intellectual life.

I think, personally, that these ideas are wrong and that language loss is a serious matter. Or, more accurately, it is part of a process which is itself very serious.

From what I have been able to learn, based on the model of early-modern and contemporary hunting and gathering and mobile agricultural peoples, the process of language loss throughout most of human history, i.e. the period prior to the development of large states and empires, has been attended by a period of grammatical merger in situations of multilingualism, in geographically confined areas, and among quite small communities—as, for example, in parts of Arnhem Land and Cape York Peninsula, Australia, and in the bilingual Sumu and Miskitu communities of Central America. By contrast, language loss in the modern period is of a different character, in its extent and in its implications. It is part of a much larger process of LOSS OF CULTURAL AND INTELLECTUAL DIVERSITY in which politically dominant languages and cultures simply overwhelm indigenous local languages and cultures, placing them in a condition which can only be described as embattled. The process is not unrelated to the simultaneous loss of diversity in the zoological and botanical worlds. An ecological analogy is not altogether inappropriate. We understand to some extent the dangers inherent in the loss of biological diversity on this earth. It is correct

† [Editor's note: In November 1989, as an outgrowth of discussions with Colette Craig and Ken Hale, I asked them as well as LaVerne Masayesva Jeanne and Nora England to consider writing brief essays on the topic of 'responsible linguistics' for publication in *Language*. Since this theme is closely related to the topic of the 1991 LSA Endangered Languages symposium organized by Hale, other speakers at the symposium were also invited to contribute to the collection presented here—namely, Michael Krauss and Lucille Watahomigie & Akira Yamamoto. The message of these essays is urgent and vital; I urge all linguists to study them carefully. Ken Hale collected and edited the entire set of essays, and he deserves the profession's gratitude for carrying out this project.]

* I wish to express my gratitude to my co-authors for their contributions to this collection and to the field; to Marilyn Goodrich for her help in preparing the manuscript; and, especially, to the many speakers of endangered languages with whom I have worked.

to ask, I think, whether there are also dangers inherent in the loss of linguistic diversity.

This and other aspects of language endangerment in these times are addressed in the present collection of papers which, except for England's, were delivered at a symposium entitled 'Endangered Languages and their Preservation' held on January 3, 1991, as part of the 65th Annual Meeting of the Linguistic Society of America.

It is in the nature of these essays that they are necessarily brief. We could not hope, therefore, to cover much of the ground which ultimately must be covered to advertise adequately the full range of factors that are relevant to an understanding of language loss and language maintenance. Fortunately, however, concern with these matters enjoys some currency both among linguists and among language communities, and voices are being heard with greater and greater clarity. The recent collection entitled *Patrimoine culturel: Langues en péril* appearing in *Diogenes* No. 153 (1991) treats in detail many issues we are not able to deal with here, with geographic coverage including the language situations in Africa, the Soviet Union, and the United States, and with special attention to factors that have been responsible for language loss.

We have not attempted here to be truly representative either geographically or topically. Instead, we attempt to represent as forcefully as we can two facets of the situation of language endangerment—namely, (1) the reality of language loss and decline as a condition of the modern world and (2) the response to language imperilment on the part of various entities, e.g., above all, the communities directly affected by language loss. Our examples come from North and Central America.

MICHAEL KRAUSS was given the daunting task of preparing the first essay, a report on the realities of language loss for the world as a whole. This is our sole attempt to present a global perspective on the matter. Although, as Krauss notes, it is impossible now to be completely accurate in assessing the language situation in the world, it is clear that language extinction has reached an extraordinary level in recent times and that the outlook for an impressive percentage of the world's surviving languages is very poor.

These indications are certainly not heartening. But it is important, we feel, to counterpoise these realities with another, more encouraging reality—that of the great energy, courage, good sense, and optimism which many endangered language communities and allied support organizations are bringing to the formidable challenge of ensuring in this era a position of strength and dignity for their linguistic and cultural wealth.

We formulate this aspect of the situation in terms of responses, or reactions, to language endangerment, and our examples range from local, or community, responses to responses on the part of governments and institutions. In relation to these responses and reactions, the relevance of linguistics and of linguists is brought out in the various essays.

A local response to perceived language endangerment is exemplified here in the essay by LUCILLE WATAHOMIGIE and AKIRA YAMAMOTO, which describes the Hualapai Bilingual/Bicultural Education Program, of Peach Springs, Arizona, recognized as one of the very best in the country. The essay goes on to

describe the manner in which this local community program played a central role in the development of regional and national movements affecting Native American languages and their speakers—specifically, the creation of the American Indian Languages Development Institute and the formulation and passage of the Native American Languages Act.

It happens occasionally that a responsible government, responding to the legitimate demands of its indigenous and ethnic populations, accepts as a proper part of its program the establishment of instruments and institutions designed to promote the development and use of the local languages under its authority. The essay by COLETTE CRAIG discusses the Rama Language Project in the context of the Autonomy Project incorporated into the Nicaraguan constitution by the Sandinista government of the last decade. While constitutional measures do not, in and of themselves, safeguard the linguistic heritage of a local community, the Nicaraguan example shows that such measures foster an enabling environment for progressive language maintenance programs—even in time of war.

In the United States there are no institutions in which speakers of Native American languages, on the basis of authoritative knowledge of those languages alone, can obtain secure tenured positions which would enable them to pursue life-long careers studying and teaching their native languages. LAVERNE MASAYESVA JEANNE describes an institution which, among other things, would serve the important function of providing such positions. This is at the stage of discussion at this time, but it represents the dream of a large number of Native American scholars. Its realization, perhaps on the model of the Proyecto Lingüístico Francisco Marroquín in Guatemala, will play a crucial role in the future of Native American linguistics. The same can be said, of course, for other parts of the world where indigenous languages are spoken.

Guatemala presents one of the world's very best examples of the productive involvement of linguistics and linguists in helping to define the processes that form a strong and vital tradition of linguistic research and language development. The essential feature of Mayan linguistics in Guatemala is the fact that Mayan speakers themselves are defining and forming Mayan linguistics in that country, a fact which may not yet have made itself felt as fully as it surely will in the course of time. The essay by NORA ENGLAND describes the extent to which Mayan linguistics in Guatemala directly confronts notions that professional linguists have traditionally held to be beyond question. The lessons of Guatemala imply certain obligations, which England attempts to articulate from the vantage point of her many years in Mayan linguistics.

In the final essay, I present an example of the kind of material that we can expect to lose with the loss of a language. I have chosen an example involving language and the expression of intellectual life, to emphasize the fact that the loss of a language is part of the more general loss being suffered by the world, the loss of diversity in all things.

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.¹ 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

¹ 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.² 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 250³ 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-

² 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.

³ 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%,⁴ 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'.

⁴ 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 mild⁵ threat to the

⁵ 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.⁶ 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

⁶ 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 AILDI 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.

2. THE HUALAPAI BILINGUAL/BICULTURAL PROGRAM. When Yamamoto began his research on Hualapai, he had the good fortune to meet a resourceful and enthusiastic Hualapai speaker, the late Jane Honga, in her 60s at the time. The two worked together during the summers of 1973 and 1974 to produce several bilingual booklets for children. Mrs. Honga's grandchildren were surprised to find that Hualapai could be written—written into books—and they were even more surprised that they could read them and make sense out of them by sounding out the written words. They read these booklets to their parents. Their father, Earl Havatone, was the principal of the Peach Springs Elementary School and became excited about written Hualapai. And in 1975 Watahomigie, then the only certified Hualapai teacher, was appointed as the Director of the first Hualapai Bilingual and Bicultural Education program. Havatone, Watahomigie, and the Hualapai tribal council and elders all agreed that it was important to implement some form of Hualapai language and culture maintenance program in the school.

There were many obstacles to the development of a Hualapai language program, among them the belief on the part of many people, teachers included, that the language was incapable of expressing abstract ideas and, therefore, inappropriate for use in the school. Watahomigie and Yamamoto took this as a challenge and set about demonstrating to everyone that Hualapai is a language as complex and prestigious as English and as effective a means of communication as English, and that Hualapai is often more perfectly suited to the Hualapai context, just as English is often more appropriate in non-Hualapai contexts.

In 1981, after six years of practice and the achievement of many positive results, the School Board adopted the Hualapai Bilingual/Bicultural Curriculum as the official core curriculum of the district. The Board also mandated that all educational development be structured according to the linguistic and cultural needs of the students. This mandate responds to the continued sense of urgency in relation to Hualapai language maintenance. Their concern was justified in 1982 when 59 home visits were made in order to interview the parents of 157 students of the school. It was found that 92% of the students came from homes where Hualapai was the primary language of communication. But it was clear from the interviews that, while Hualapai was the predominant language of the community, children were speaking primarily English at school and at home, even though adult family members were speaking primarily Hualapai.

The Hualapai Bilingual/Bicultural Program has succeeded, we believe, in re-establishing pride in Hualapai language and culture among children and adults in the community, in encouraging the active use of Hualapai and English at school and at home, in developing a body of knowledge about the language and culture, and in developing skills in teaching these materials. The program has also had a very positive influence beyond the Hualapai community itself by making it known to other Indian communities that bilingual/bicultural education programs work for Indian children.

The success of the Hualapai program has come in large measure from its commitment to a collaborative model in its everyday work—in planning, in

implementation, in evaluation, and then back again to planning, implementation, and so on. Coöperation and collaboration are total, involving bilingual staff, teachers, school administrators, parents, community leaders, district school officials, government officials, and academic professionals (see Brandt 1988 for a fuller discussion of the collaborative model).

This approach precludes the possibility of specialists coming in from the outside to 'do the work for the community'. What the Hualapai program encourages is COLLABORATIVE research. This entails that no one person does the work for any other person or group; rather, members of a collaborative team do the work with other team members. In the domain of research, the principles of the collaborative model go beyond any specific research project. The goal of collaborative research is not only to engage in a team project but also, and perhaps more importantly, to provide opportunities for local people to become researchers themselves. As Watahomigie & Yamamoto state (1987:79), 'It is vitally important that anthropologists and anthropological linguists undertake the responsibility of training native researchers and work with them to develop collaborative language and cultural revitalization and/or maintenance programs.'

The logic of the collaborative model that evolved in the Hualapai Bilingual/Bicultural Program had clear educational implications. It became evident to the director at an early point that development of an effective bilingual staff would require resources that did not exist in the community itself. In fact, it would require the CREATION of a regional education resource which could meet the training needs of developing bilingual programs of the area.

In 1977 Watahomigie and a Yuman linguist, Leanne Hinton, with the help of the late John Rouillard, then the chairman of the Indian Studies Department at San Diego State University, obtained a grant from the National Endowment for the Humanities for a three-year Yuman languages institute for Yuman language speakers. And in the following year the first summer training program under this grant was held, entitled the 'American Indian Languages Development Institute' (AILDI). This began a tradition of summer training programs, effectively extending the collaborative principles of the Hualapai program to a much larger region, initially to the other Yuman communities and eventually to an area containing dozens of communities in which American Indian languages are used.

3. THE AMERICAN INDIAN LANGUAGES DEVELOPMENT INSTITUTE. The AILDI has held a basic view toward language and culture teaching. Language is not taught as mere word lists and grammatical drills. And native literature is not fully appreciated by pupils if it is presented in translation. Language and literature can be taught most effectively by teachers who are native speakers of the language and are trained to teach in elementary and secondary schools with language materials and literature produced by native speakers of the language.

This view of language and literature has become a strong motivating force for education among American Indian communities. They see formal education

not only as a way to lead into the mainstream culture but also as a way to maintain contact with community values and traditions, i.e. as the best way to learn the best of two cultures. This conviction is encouraged by abundant evidence showing that the positive self-image that children gain from knowing the value of their local history, language, and life-style is extremely important to their future success as individuals, whether or not they choose to continue to remain and identify with their respective communities as adults (cf. Watahomigie & Yamamoto 1987).

The overall goal of the Institute has been to turn linguistic knowledge into curriculum. The Institute aims at achieving two broad objectives: to train native-speaking teachers and parents in linguistics and curriculum development so that they develop curriculum and teaching materials for their schools and classrooms, and to train academic professionals, such as linguists, so that they may engage in mutually beneficial research and teaching activities in American Indian communities.

There were twelve Institutes during the period extending from 1978 through 1991. A total of 832 teachers (including English and local-language teachers) and parents have been prepared to become researchers, curriculum specialists, materials developers, and, in general, effective practitioners in the teaching of language and culture in their own communities. Many of the participants were able to attend an average of two Institutes. The aim was always to select capable and dedicated teachers and community resource persons and to provide them with further skills and knowledge so that they could, in turn, train other teachers and local people. The need for regional collaboration in the training of personnel in American Indian bilingual and bicultural programs is evident not only from the response to the Institute but from available statistics, including the fact that Arizona alone has 18,106 families in which an American Indian language is spoken. This figure positively dwarfs the total number of families whose members have so far had the opportunity to participate in education programs involving their native languages.

In response to new community needs, several schools and colleges of education include a native language or multicultural component in their elementary and secondary teacher training programs. Unfortunately, however, such higher-education opportunities have not been utilized extensively by the American Indian population. Typically, American Indian people who might wish to receive educational training have families, and many have existing school-related or other political, economic, or ceremonial responsibilities in the home community, making it extremely difficult for them to enroll in a full-time program of study (see Hale 1972). Because of this, many individuals attend summer schools or short-term workshops over a period of many years. These courses and workshops are characteristically not well sequenced and do not provide them with professional-quality training. Thus, new programs which can offer systematic training for such individuals, training designed to meet their particular needs as well as the needs of the home community, are an urgent priority. The American Indian Languages Development Institute was designed to meet

just such needs, and it has continued to provide American Indian and non-Indian teachers, administrators, and parents with relevant and systematic training.

AILDI is based in the Southwest. There is also an international organization, the Native American Language Issues Institute (NALI), of closely similar philosophy and purpose, which will begin shortly to sponsor summer institutes in Oklahoma for 35 (Indian-English) bilingual education programs in that state.

During its first thirteen years of existence, the American Indian Languages Development Institute covered in its programs a wide range of linguistic and cultural issues which have been integrated into school curricula and materials. Linguistic topics have included phonetics, phonology, morphology, syntax, comparative and historical linguistics, lexicography, oral and written literature, sociolinguistics, and language acquisition. These topics have been integrated into content areas so that they become part of culturally relevant educational processes. The AILDI staff believes that it is especially important to give participants an appreciation of the interplay between universality and diversity in language and culture. This is of crucial importance in understanding that any given group of people is part of the human community and, at the same time, forms a unique group contributing to human diversity. The most effective way of driving these notions of universality and diversity home is to study the languages themselves and to learn how people use them.

During the past decade, in conformity with the general theme of collaboration, the AILDI staff and participants have evolved a philosophy regarding the nature of language and the requirements that an effective bilingual/bicultural education program must meet.

At every Institute, participants engage in discussions and in hands-on experience so that they become keenly aware of the nature of language. The concept of 'completeness' figures prominently in AILDI thinking about language:

We need to think of language not merely as an academic subject, but as a central and driving force for children's total development.

Thus:

Language is not 'complete' if it is not used by people in their everyday life.

It is not complete if it is not used for communication among people.

It is not complete if it does not allow us to be creative and imaginative.

It is not complete if it is not a means to explore the environment and world around us, and learn who we are and who we are not.

It is not complete if it does not help us satisfy our physical, psychological and social needs.

It is not complete if it does not assist us in changing behaviors and thinking of ourselves and others.

It is not complete if it does not provide us with a means to carry out interactions and to establish and maintain relationships with other people.

Thus, we must emphasize how we use our language if that language is to be useful. We, therefore, do not teach language just as an academic subject; we teach language as part of our total existence and as a basis for meaningful existence.

And the AILDI position on the requirements for effective teaching in bilingual/bicultural programs includes the following:

In order for us to be able to teach language in this manner, we need to keep in mind at least the following:

1. We cannot teach language simply because we are speakers of that language. We must know what our language is like—its structure and functions in our everyday existence.
2. Even when we know these things about our language, we cannot teach it effectively. We need to know how our language may be acquired by our children. If we know the process, we have a better framework with which we can develop curriculum and teaching materials.
- 3 We need to know what a curriculum should include, in what sequence, and how much.

The AILDI model has two integral parts, linguistic and educational. Within the linguistic component, the major goals are to enable the students to (1) look at their language objectively, (2) identify what aspects of language must be focused on in teaching, (3) prepare a well-organized data base for each of these aspects, and (4) use these aspects of language as inputs for the next phase of the work, namely the development of curriculum, the creation of teaching materials, and the incorporation of the language curriculum into the total school curriculum. This means that language is not learned and acquired through teaching a word list, by teaching how to say numbers in native languages, or by teaching how to name colors. It means that language is taught as an integral part of students' total development.

The relationship between local bilingual/bicultural education programs and organizations like AILDI represents one of the mechanisms that permits the collaborative principle to operate in an expanded domain. And the relation between the American Indian Languages Development Institute (AILDI) and the international Native American Language Issues Institute (NALI) extends the principle further, to the nation and to the western hemisphere. In the following section we describe a project which was initiated in a joint AILDI/NALI conference and which is a political initiative of great potential importance to the endangered languages of this country.

4. THE NATIVE AMERICAN LANGUAGES ACT: PUBLIC LAW 101-477. In June of 1988 the International Conference of the NALI was held in Tempe, Arizona, having been planned in such a way that the participants of the AILDI could be involved. In the course of the conference all Indian and non-Indian participants, including Hawaiian representatives, worked together to formulate resolutions concerning Native American languages and cultures. The resolutions approved by the conference were sent to a number of policy makers, and many native American tribal and governmental bodies also made their support of the resolutions clear to appropriate policy makers.

In September, a copy of the resolutions was sent to the Select Committee on Indian Affairs, chaired by Senator Inouye, who, in the same month, formed the resolutions into a bill which he introduced as Joint Resolution 379. This was then referred to the Select Committee on Indian Affairs.

During the following several months and through the next year, as revisions were being made in the resolution, with NALI and AILDI input, various academic organizations were contacted and asked to consider similar resolutions in their business meetings. These included the Linguistic Society of America,

the Modern Language Association, the American Anthropological Association, and the Society for the Study of the Indigenous Languages of the Americas.

In April of 1990, the Senate passed bill S. 1781, embodying the resolutions on Native American languages. The House incorporated this in amendment S. 2167 to H.R. 5040, the Tribally Controlled Community College Assistance Act. In October, the bill was passed by the Senate and the House, and it was signed by President Bush. The legislation is known as Public Law 101-477 Title I—Native American Languages Act.

The enactment of this legislation expressing the principle of Native American linguistic rights was the product of a collaborative effort involving ultimately a wide range of people, including students, parents, and other community people, educators, administrators, linguists, anthropologists, state officials, senators and representatives, tribal elders, and tribal government personnel. It was a collaborative effort with local, regional, and national implications.

The language of the bill expresses many of the central concerns of educators and linguists who are involved with communities that use one or more Native American languages:

'It is the policy of the United States to—

(1) preserve, protect, and promote the rights and freedom of Native Americans to use, practice, and develop Native American languages; ...

(3) encourage and support the use of Native American languages as a medium of instruction in order to encourage and support—

(A) Native American language survival,

(B) educational opportunity,

(C) increased student success and performance,

(D) increased student awareness and knowledge of their culture and history, and

(E) increased student and community pride;

(4) encourage State and local education programs to work with Native American parents, educators, Indian tribes, and other Native American governing bodies in the implementation of programs to put this policy into effect;

(5) recognize the right of Indian tribes and other Native American governing bodies to use the Native American languages as a medium of instruction in all schools funded by the Secretary of the Interior; ...

(7) support the granting of comparable proficiency achieved through course work in a Native American language the same academic credit as comparable proficiency achieved through course work in a foreign language...'

The bill also states that 'Nothing in this title shall be construed as precluding the use of Federal funds to teach English to Native Americans'.

5. CONCLUSION. The development of bilingual/bicultural programs in the Southwest and the ancillary growth there of summer workshops and institutes have had a number of effects that are important for all of us who are concerned about the future of local languages. One is to provide an example of coöperation and collaboration, an example for all to see of what can be done to ensure that the intellectual wealth of local communities can achieve a position of dignity in education and other aspects of life. Another effect, in some areas at least, is to bring local language literacy to people who have never before experienced it, to enable people to express themselves in the written form of their own

languages, even if only to give voice to feelings of mild despair (from Watahomigie & Yamamoto 1983):

Danyu:d'u:k
qechdik
danyu:d'u:k
nyada:yk
danyu:d'u:k
ba nyada:yk
danyu:d'u:k
gwadva yu:mo

Going to school
 when i was little
 i attended school
 when older
 i attended school
 when i become an old man
 i may be still attending school

—Philbert Watahomigie, Sr. (Hualapai)

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**A constitutional response to language endangerment:
 The case of Nicaragua***

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1. INTRODUCTION. The scene is Nicaragua's Atlantic Coast, the eastern half of this Central American country. It is a multilingual region where, besides Spanish, English Creole and various indigenous languages are spoken by populations of speakers ranging from tens of thousands of Miskitu (Misumalpan) to thousands of Sumu (Misumalpan) to barely two dozen Rama (Chibchan) and a mere handful of Garifuna (Arawakan).

The time is the decade of the 1980s and of the Sandinista Revolution, during which the legal, educational, and social status of these coastal languages changed through the process of establishing an autonomy statute for the region, a development that is sometimes referred to as the second Sandinista Revo-

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lution. This Autonomy project was a response to the war situation that developed on the Atlantic Coast, as both indigenous and Creole people rejected the Sandinista Revolution in its original form.

From the start, linguistic matters were at the forefront of the confrontation. Local populations opposed the massive Spanish literacy campaign of the new revolutionary government and were granted the right to a literacy campaign in their own languages. Local demands were then extended to issues of bilingual education and to the official recognition of the languages of the Coast. Thus, concerns of language and culture preservation were central to the agenda of the Autonomy project and were raised with all the communities of the Coast as grassroots consultation about autonomy proceeded.

The Autonomy Statute, which ultimately became part of the National Constitution of Nicaragua in 1987, asserts that one of the functions of the Autonomous government is 'to promote national culture, as well as the study, preservation, promotion, development, and dissemination of the different cultures and traditions of the Atlantic Coast's communities, including their historical, artistic, linguistic and cultural heritage' (chapter 1, article 8.4). For the largely Mestizo Spanish-speaking population of the Pacific Coast of Nicaragua, the Autonomy Statute meant the recognition of the multi-ethnic and multilingual nature of the 10% of the Nicaraguan population that lives in the Atlantic Coast region. For the people of the Atlantic Coast, it sanctioned linguistic rights, a reality several years in the making.

As a result of the Autonomy process, several language-planning projects were implemented, each commensurate with the degree of language endangerment. These projects have included basic linguistic documentation and research, development of bilingual education programs, the translation of official documents, and the production of a body of native written materials. U.S.-trained professional linguists calling themselves 'Linguists for Nicaragua' have been working on a number of these projects through the Nicaraguan Center for Research and Documentation of the Atlantic Coast (CIDCA), dealing at various times with the Ministry of Culture, the Ministry of Education, and the Central American University, as well as the Sandinista government at both national and regional levels. Grammars and dictionaries of Miskitu, Northern Sumu, Southern Sumu (Ulwa), and Rama have been published or are currently being published. CIDCA also coöperates with the Ministry of Education in implementing bilingual programs in English, Miskitu, and Sumu which now reach up to the fifth grade in some schools. In spite of the recent change in government, the work of Linguists for Nicaragua continues in coöperation with the Ministry of Education and with CIDCA.

This essay will focus on a single example of the kind of language and culture program that came into existence and developed in the context of the Nicaraguan Autonomy project. The example is that of the Rama Language and Culture Project, a rescue attempt for a language at a very advanced stage in the process of extinction. This project was felt to be of the utmost urgency and importance by both the Rama themselves and the Sandinista authorities. In the midst of discussions of autonomy and indigenous cultural rights, the Rama

language was stressed as one of the key elements of the ethnic identity of the Rama people, and their right to its preservation was affirmed, regardless of the small number of people involved.

The Rama language at the beginning of the decade of the Sandinista Revolution fit the most dire profile of an endangered language. While its imminent disappearance had already been lamented by Lehmann (1914) and Conzemius (1929), by the mid-1980s it was said that only a few older men still spoke it out of a population of about 900. A 1986 survey of the last speakers revealed a somewhat less dire picture. The island of Rama Cay, where most of the population lives, had a few more speakers than commonly believed, but most of the two dozen speakers identified came from a very isolated mainland community.

Besides the shrinking number of speakers, another aspect typical of language obsolescence was present—a negative attitude toward the language, in the minds of both the Rama and the non-Rama populations. The swift shift from Rama to English enforced by Moravian missionaries in the second half of last century had left its mark on the people. The last speakers of Rama Cay had absorbed the belief that Rama was ‘no language’ and was ‘ugly’, and were ashamed of speaking it. Talk of the rescue and revitalization of Rama was therefore characterized by much contradiction and deep ambivalence about the language itself.

In the following sections I will discuss certain aspects of the Rama Language and Culture Project which I feel are important in considering any comparable endeavor. To the extent that the project can be said to be successful, this is due to the convergence and mutual interaction of three key factors: the involvement of the Rama community, the constitutional context of the Autonomy project, and the coöperation of professional linguists.

2. INVOLVEMENT OF THE RAMA COMMUNITY. The first element in the Rama Language Project is a community searching for a way to recapture its ethnic language, and the key in the dynamics of this community is a Rama Cay woman in her late sixties who has a deep awareness of the urgency and importance of the work: Nora Rigby, known as ‘Miss Nora’. All language rescues have heroes of this sort, who, as in this case, are very often not even native speakers of the language they want salvaged.

The involvement of Nora Rigby with the present Rama language project is her third try at rescuing the language. Her first attempt took place in the 1970s, before the Sandinista Revolution, when she opened her house to Barbara As-sadi, then a member of a research team surveying the endangered languages of Central America, under the directorship of Lyle Campbell. No extensive linguistic analysis resulted from this first effort, but a lasting bond was established between the two women. Her second experience was part of a community effort at rescuing the Rama language that sprung out of the demands for a literacy campaign in indigenous languages mentioned earlier. The effort was led by Rama community leaders involved with MISURASATA (MIskitu, SUmu, RAma, and Sandinista United, an organization that originally supported

the Revolution but later opposed the Sandinistas). It involved a young German internationalist who set out to produce Rama materials and to make a dictionary, with Miss Nora as a language informant. This attempt at reviving the language came to a sudden end when he was expelled from the region by the Sandinistas for political reasons having to do with his involvement with MISURASATA, which was to become one of the major Contra forces in the region. These two attempts left Miss Nora deeply worried about her linguistic ability and very concerned that maybe something was really wrong with the language, something that made it unlearnable and unanalyzable. In addition, the second attempt left deep scars in the community, adding confusion, frustration, and anger to the persisting love-hate feeling the Rama had toward their ethnic language. Despite these two aborted attempts, however, Miss Nora did not hesitate to give her dream another chance when Barbara Assadi recommended me to her in the summer of 1984.

The project has progressed as a result of a number of Miss Nora's initiatives. Aware of the limitations of her own knowledge of Rama, she arranged early on for a native speaker from the mainland community to join the project. She later orchestrated with that speaker visits by half of the two dozen native Rama speakers to the CIDCA-Bluefields offices. This was a very important step in bringing out a sense that there actually was a community of Rama speakers. Also, as soon as an elementary analysis of the language had been achieved, Miss Nora initiated a series of community events—some informal, some very formal—to bring awareness of the project to the Rama Cay community. There was an official presentation of the first dictionary, with a demonstration of the writing system, followed by several gatherings with most of the last Rama speakers from the island, meetings with leaders and school teachers, and multiple drop-in visits to the offices of CIDCA-Bluefields by Rama people that she kept inviting to come and see for themselves how we worked. Two years into the project, again on her own initiative, Miss Nora began teaching some Rama in the school with the one teacher who was then willing and interested. By 1990, school children from kindergarten to third grade were receiving some form of instruction in Rama, and all six teachers at the school were asking to be part of the project.

After five years of single-handedly carrying the primary responsibility of making the project a community project, Miss Nora is now looking for reassurance that her efforts will be continued. She is placing her hopes on the recent and possibly decisive addition to the project of a Rama speaker in his fifties, whose return from exile in Costa Rica a few months before the 1990 elections had been eagerly awaited by the community and members of the Rama Language Project. As the only native speaker of Rama who has some literacy skills, he represents the only real candidate for the role of community language specialist literate in Rama. Only time will tell whether this man will take on the leadership role in the Rama Language Project that the community in general, and Miss Nora in particular, want to bestow on him.

Although the mobilization of the Rama community around the Rama Lan-

guage Project developed slowly, it has been growing steadily the past six years. By now both the island and the mainland communities are involved, and both of them have the key people that such a project needs. These include a determined language rescuer like Miss Nora, community leaders who are on the whole supportive beyond their occasionally contradictory discourse and behavior, the school teachers and the school children, and a large sample of the last speakers, as well as members of the community at large.

3. THE CONSTITUTIONAL CONTEXT OF THE PROJECT. The second key ingredient of the Rama Language Project is its constitutional dimension. The project was cast from the start as a response on the part of the Sandinista government to demands formulated by the Rama community.

The Autonomy Statute represented a constitutional context that was crucial to the development of the Rama Language Project: the uncommon matching of the letter of the law with the real possibilities in the field provided it with a supportive and safe space in which to operate. This situation was in stark contrast with field linguists' recent experiences in other Central American countries.

One important manifestation of this political will was the physical safety of all the people involved, a major concern for a project developing in the middle of a war zone, at the height of the Contra war. There were brushes with the militarized situation: I was once momentarily held by MISURASATA Contras on Rama Cay, and the Rama Cay representative was later kidnapped for a week by the same Contras for his involvement with Sandinista projects. Miss Nora and one of her sons were questioned by the Sandinista security forces in Bluefields about what we were actually doing. All this happened at the time of the grassroots discussions of the Autonomy project, and nobody was hurt, jailed, disappeared, or tortured. This is said in the context of previous fieldwork and human-rights work in other countries of the region, which had left me quite unimpressed with the value of written laws.

The nature of the Autonomy project as a peace and reconciliation project for the Atlantic Coast is also what made possible the return of a key Rama speaker to Rama Cay and his subsequent integration into the Rama Language Project. This was accomplished within the framework of efforts to reintegrate those who had joined the anti-Sandinista fighting forces in exile into their native Coast communities.

Another sign of the political will that became law was the strategic support the project received in the form of travel permits and transportation to Rama Cay, as well as access to food distribution and health services for the Rama members of the project in a time of scarcity and general hardship. This became crucial when up to 32 Rama from the jungle gathered in Bluefields during the month we carried out a census of the last Rama speakers of that community. A more intangible aspect of the constitutional context was the prevailing atmosphere of open discussion and willingness of institutions and government to listen and be briefed about little-understood linguistic and sociolinguistic

matters. This attitude of openness and respect turned the whole project into an exciting experiment where much creativity was released at the grassroots level and where accomplishments were granted recognition.

4. THE LINGUISTIC TEAM. The third key element of the Rama Language Project is its team of professional linguists. A key factor in the failure of the two previous attempts was the lack of professional training of the persons on whom the linguistic analysis fell. The strength of the linguistic team involved in the present project consists in the complementarity of talents and skills necessary to deal with all aspects of the project. The team comprises the author, a professional linguist experienced in field work in Central America, and two research assistants, one of whom lived among the Rama for several years, both on Rama Cay and with the mainland community, and thus provides a natural link to the community and its recent history. In addition to this invaluable link to the community, the skills jointly represented by the Rama Language project team include fundraising, administration and organization, and computer competence, as well as the very necessary range of skills in technical and theoretical linguistics. The basic linguistic research part of the project, which aims at documenting the language by producing a grammar, dictionary, and text collection, was started with seed money from the University of Oregon; its principal support has come from the National Science Foundation and, in part, from the Wenner Grenn Foundation for Anthropological Research.

Language rescue is a very complex task, both from the viewpoint of linguistic research and from the viewpoint of community work, and the Rama project has certainly constituted a very challenging fieldwork situation. The complexity of the task, however, has clearly been counterbalanced by the benefits of working on a project with constitutional, institutional, and governmental support.

5. ABOUT THE 'SUCCESS' OF THE RAMA LANGUAGE PROJECT. It is never easy to address the issue of whether any language rescue is a success. Given such an extreme case of language endangerment as that represented by the Rama situation, one wonders what can really be done, and what is really happening in a project of this sort. It is clear that the project is not accomplishing what the Rama people themselves were saying they wanted, or what the Sandinistas were telling me they wanted me to make happen: to revive the language and create a new generation of native speakers. Yet it is just as clear too that the Rama Language Project in its present form is considered one of the most successful of the linguistic and community-development projects of the Atlantic Coast. It has grown steadily in spite of Contra war, Hurricane Joan, economic chaos, and political turmoil of one sort or another. In the electoral campaign of 1990 it was an item of the regional Sandinista platform, and the very first item of the platform presented by the Rama Cay representatives.

Although I am convinced that it is not for us, outsiders, but rather for the Rama themselves to determine whether the project is a success, I am willing to outline what constitutes success for me. For one thing, there is the concrete evidence of the linguistic documentation of the language, in the form of dictionary and grammar, phrase books, calendars, alphabet, and articles in the

local and national press. There is also the daily presence of Miss Nora in the school of Rama Cay over the last three years, and now dozens of children who can name familiar objects in Rama and please their parents with their knowledge. The new awareness of the value of the language is also palpable. This awareness can be articulated by some of the last speakers, as well as teachers, leaders, and community members—that the language is a ‘good’ language, that it has enough words for a dictionary, that it can be written, that it can be learned, that it has rules of grammar. On the external front, the battle to reintroduce respect for the language was also seemingly gaining ground beyond the Rama community.

I also consider as one large measure of the project’s success its being appropriated by the Rama community. This is evidenced by the fact that the project has survived in the face of much adversity, and that the participants of the project represent today an intricate interweaving of Rama speakers and non-speakers, Rama people from the island of Rama Cay and the mainland community, leaders and community people, Sandinista and Contra supporters, cutting across a number of well-established dividing lines in the community.

Success to me is also the emergence of a new discourse among key Rama people of the project who were also principal actors in the previous attempt at language salvage. The depth of the satisfaction some of them feel now—satisfaction about their new awareness of the Rama language and satisfaction about what they are accomplishing through the project—takes them back to their longstanding longing to save the language. Linking the present experience to a recent past which none of them would talk about a few years ago contributes to making the project theirs rather than the Sandinistas’ or a foreign linguist’s. Recognizing their past initiative as their starting point, they are now reflecting on the feelings of confusion and shame that the previous failed attempts produced and contrasting them with new feelings of satisfaction and relief, that something actually could be, and is being, done.

6. CONCLUSION. And so it is that, in a small corner of the Atlantic Coast of Nicaragua, a very threatened language is being rescued. The revitalization is not about recreating a community of native speakers; it is rather about issues of self-respect and empowerment, and about reclaiming one’s ethnic identity—issues of human value which cannot necessarily be measured in number of words or phrases learned.

The point of this essay is that it took three converging factors to make the project the success it has been. It took a visionary language rescuer like Miss Nora and an interested community slowly developing a relation to the project through her efforts. It also took the historical time of the Sandinista Revolution and the constitutional framework of the 1987 Autonomy Statute of the Atlantic Coast region, including the official commitment to the linguistic and cultural rights of the local populations, regardless of their size or the state of their language. Finally, as previous failed attempts at rescuing the Rama language have shown, it also took the skills, good will, and resources of professional linguists committed to working with the community in its effort at salvaging

and revitalizing its ethnic language within the constitutional context of the Sandinista Revolution.

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**An institutional response to language endangerment:
A proposal for a Native American Language Center**

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This essay will deal with a special type of center devoted to the documentation and teaching of the linguistic traditions of contemporary Native American communities. In my remarks, I will concern myself with the needs that such a center would satisfy in North America—in particular the United States, with which I am most familiar, although some of what I will have to say applies in other parts of the world, of course. While centers possessing many of the qualities I wish to champion here exist in other parts of the world, an impressive example being the Centro Lingüístico Francisco Marroquín in Guatemala, there is none that closely approximates this model in the United States.

There are two features which distinguish the kind of center I wish to contemplate here: (1) the staff and directorate consist primarily of scholars who are native speakers of Native American languages, and (2) the programs and projects of the center are determined primarily by the linguistic vision, scholarship, and concerns of Native Americans.

Native American languages have historically formed an important part of the core of linguistic research in the United States. Indeed, anthropological linguistics has its origins in the work of such figures as Boas, Sapir, and Bloomfield, who based a significant portion of their work on the study of Native American languages. But despite the large contribution of Native American languages to formal language scholarship, tribal communities themselves have been involved primarily as a source of data and have not reaped the benefits of Native American language scholarship which could, in principle, accrue to them. There are, of course, exceptions, an especially impressive one being the Hualapai program described elsewhere in this collection.

A major reason for the failure just alluded to derives from the circumstance that meaningful scholarly communication between professional linguists and native speakers of Native American languages has been thwarted by the lack of opportunities for members of Native American communities to become fully involved in language scholarship. This in turn is due to a number of factors, the most important of which is the fact that many aspects of formal linguistic research are not directly relevant to the more immediate concerns of Native American peoples who are engaged in language planning.

I believe that the relevance and appropriateness of linguistic research are defined largely by professional and university interests, which are in and of themselves legitimate and important. However, progress in Native American

language scholarship must now respond to legitimate and important perceptions of relevant scholarship that are being defined with greater and greater clarity by Native American communities who have been intimately involved in language work for the past twenty years.

Native American peoples are the possessors of a rich but imperiled intellectual heritage, of which their linguistic traditions are a most important and supremely vulnerable part. Any definition of responsible linguistic research must take this fact into consideration. The people who understand this situation best are the Native American peoples themselves. During the past two decades numerous measures have been taken by Native Americans to address the conditions of their languages and to further their maintenance or recovery. What has been lacking, however, is the sort of sustained support system that exists for traditional academic language scholarship. That is to say, there exists no secure and perpetual institutional framework within which Native American language scholars can pursue the kinds of activities—training, research, and development—which are necessary for them to be directly involved in building a Native American linguistics that is truly responsible and responsive to the needs defined by Native American communities.

It is my belief that an important part of the response to the linguistic needs of contemporary Native American communities will consist in the establishment of the necessary institutional framework, in the form of centers specifically devoted to the cultivation of language scholarship by speakers of Native American languages. Such Native American language centers would contribute to a much-needed integration of academic and community-based language scholarship and, most importantly, they would permit the development of programs that respond, not to the requirements of the traditional academic structures in which linguistics is normally pursued, but to imperatives that come from, and are defined by, Native American communities and knowledgeable speakers of Native American languages.

An essential function of these Native American language centers would be the establishment of a mechanism through which talented speakers of Native American languages would be given positions that would enable them to develop and pursue careers in the study and teaching of their languages, on the analogy of tenured faculty positions in colleges and universities. As matters now stand in the United States, the number of language scholars who are native speakers of Native American languages remains small, the merest fraction of the number of non-Native American linguists whose careers have been built wholly or in part on the study of Native American languages. This is not to say, of course, that Native Americans have been inactive in linguistic research and teaching. I am saying, rather, that few Native Americans are involved in careers which relate primarily to the investigation or teaching of their native languages.

In addition to providing permanent career positions, the centers would serve as facilities that Native American language workers and scholars could utilize on a visiting basis to carry out specific projects or for the purpose of receiving training in particular language-related skills. This visiting scholar component

is intended for people who wish to engage in work on their native languages but who would not wish to reside at the center permanently or for prolonged periods. Typically, such scholars would have a particular purpose in mind, such as the acquisition of a skill or the completion of a project. The visitor category would also be used for non-Native American scholars who would work at the center in a teaching capacity or as researchers in a cooperative arrangement with members of the permanent staff. In either case, the visiting scholar mechanism would be used to enhance the educational functions of a host center by incorporating into the agreement for visiting status an appropriate service (e.g. teaching a course or skill) to be rendered by the visitor.

The core functions of the centers would be research and teaching, with special attention to the language-related needs of Native American communities. Thus, the permanent staff of each center would have responsibility not only for pursuing the research activities corresponding to their particular interests, but also for using their capabilities in the service of the language communities that they represent and of the educational community generally. Such services would, of course, include the traditional work of language scholarship, such as the preparation of grammars, dictionaries, pedagogical materials, literacy materials, and compilations of traditional narratives. In addition, however, the staff would be available to teach and help organize linguistic workshops and training sessions as needed in the relevant communities.

The stable and constant feature of each center would be its staff and its facilities for research and teaching. The more fluid and changing aspect of a given language center would be the visiting scholars and the community people (teachers, parents, etc.) making use of it, as well as the particular mix of activities going on at a given time. In addition to basic research by staff and visitors, the range of responsibilities that the center would assume would include the following:

- (a) summer institutes devoted to Native American linguistics from various perspectives (e.g. applied linguistics, language and education, literacy, language maintenance, and lexicography);
- (b) conferences on topics of importance to various constituencies within the Native American linguistics community (e.g. language family conferences and language competence assessment);
- (c) practical courses (e.g. dictionary making, alphabet construction, production of pedagogical materials and language courses, use of computers in linguistic work, and the use of current technologies and the media in language maintenance);
- (d) maintenance of a resource library and research facilities, including a language laboratory, a computer center, and a Native American language audio-visual center;
- (e) technical publications (e.g. text collections, dictionaries, grammars, and textbooks), publication of Native language texts (stories and history) for the general public and for use in schools, translation of documents and informational materials into Native languages, tapes and videos;
- (f) training of speakers of Native American languages in theoretical and practical linguistics, training of Native American bilingual education teachers and other language workers;
- (g) assistance to social scientists, film makers, and others whose work requires dealing with Native American languages;
- (h) training and consultant services for school districts, materials development centers, and state agencies involved in bilingual education;

(i) coöperative programs and initiatives with other organizations concerned with Native American languages, e.g., among others, the Alaska Native Language Center (ANLC), The Native American Language Issues Institute (NALI), the American Indian Languages Development Institute (AILDI), the Society for the Study of the Indigenous Languages of the Americas (SSILA), tribal and other community-based language programs, linguistics departments which concentrate on the study of Native American languages, and, in addition, the counterpart organizations in Canada and Mexico.

In broad outline, the elementary structural features of the Native American language center as envisioned here are not new. The structure is essentially that of a university or college. But in other respects, the Native American language center is new in conception. It is unlike existing institutions in respect to its staff, and it is unlike most other institutions in its mode of operation.

The staff would be recruited not only from the small but growing number of Native American doctoral graduates in linguistics but also from the rather large group of Native Americans whose credentials derive from their experience and recognized contributions to community and regional language programs and initiatives. Credentialing and tenure cannot be defined exclusively in terms of existing institutional instruments of accreditation. This is true perforce, because the most crucial intellectual requirement for effective work in a Native American language center—namely, extensive and sensitive native knowledge of a Native American language—is often mutually exclusive with the conventional measures of academic accomplishment, i.e. one or more advanced degrees, multiple publications, and so on.

And as for mode of operation, apart from research and teaching which might proceed according to some sort of annual schedule, most of the work of a Native American language center would be 'responsive'. That is, it would be defined, designed, and carried out in relation to the needs of Native American communities, schools, teachers, families, educational organizations, and individuals—in short, the work would be carried out in relation to the needs of any entity having a reasonable project falling within the range of competences of the center. In this respect, the language center would be like the extension service of a university or community college, except that, in the case of the language center, this responsive component would occupy a primary position within the institution: outreach, interaction with Native American communities, and fundraising would be constant features of the center's operation.

There are many extremely difficult questions that must be addressed in planning for the establishment of a language center—including, of course, the matter of funding; the issue of whether to begin small and grow, as opposed to starting with a fully staffed organization; the question of best location and physical plant; the nature of the administrative structure; the question of whether a center should be connected to an established institution (college or university); and many other questions.

Although some of these problems are large and daunting, and although each of them requires careful attention, they are not insurmountable. And there are at least two very good reasons to begin now to consider seriously the establishment of Native American language centers.

The state of imperilment that characterizes the situation of many Native American languages is extreme, and it is a condition shared, in fact, by most of the languages of the world, as Michael Krauss so clearly demonstrates in his contribution to this collection. It is appropriate that responses to this condition should happen now, before the situation becomes much worse. Even in the most dire cases, it is possible to do something concrete and productive in relation to endangered languages—the Rama Language and Culture Program, described here by Colette Craig, is an example of the best sort. The responsive function of Native American language centers is directly relevant here, since a principal purpose of any language center would be to work with Native American communities to construct appropriate programs of language recovery and maintenance.

The other reason for acting now in establishing Native American language centers is that, in one respect at least, the opportunity to do so exists, to a greater extent than in the past. It is possible to staff a Native American language center with accomplished scholars, teachers, and other language workers who are native speakers of Native American languages. This circumstance is the result of efforts during the past two decades on the part of (1) a few linguistics departments, or associated centers, which have trained native-speaking linguists and, most importantly, (2) the various training institutes that have already exist, such as the American Indian Languages Development Institute (see the essay above by Lucille Watahomigie & Akira Yamamoto). These institutes have produced some of the most capable bilingual/bicultural educators in this country, not only as a direct result of their summer training programs but also by virtue of the staff-training process implicit in the administrative and organizational experience gained through launching and directing those programs.

An effective response to language endangerment, here and elsewhere in the world, will require a wide range of efforts on the part of entities of all sorts—schools, communities, local, regional, and national governments, colleges and universities, and individuals of various backgrounds, including linguists, educators, writers, and parents. No one entity can be expected to mount an effective response. I would argue strongly that language centers of the type briefly described above must figure in the business of language recovery and maintenance. Language centers, like universities, would have the property of relative permanence, and they would serve both as a home for ongoing research and teaching programs and as a base from which progressive initiatives could be launched on behalf of endangered languages.

Most importantly, Native American language centers, in their training and outreach functions, would contribute to the effort—begun by organizations such as AILDI and NALI—to create the mechanisms that will enable Native American communities to achieve autonomy in matters having to do with their native languages.

Doing Mayan linguistics in Guatemala

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Linguists working in Guatemala in recent years have had the benefit of being able to work with an increasingly linguistically sophisticated, politically aware, and culturally concerned population. Mayas have been quite forthright about informing linguists about what they believe to be the proper sort of linguistics to do. In 1985, for instance, a group of Mayas participating in the VIII Mayan Linguistics Workshop in Antigua Guatemala called on linguists ‘not to contribute to the internal division of each Mayan language, not to promote or officialize Spanish borrowings in those languages, not to marginalize speakers of Mayan languages in the investigation of their own languages, and not to monopolize or reserve for themselves linguistic methodology and knowledge’ (Cojtí Cuxil 1990:3).¹ It was perhaps a shock to some linguists, as it was to me, to realize that good will and good relations with the individual collaborators in our past research, a dedication to sound scientific principles of linguistic research, and even instruction in literacy and linguistics on the part of many of us were not enough to avoid rather severe criticism of our role in Mayan linguistics.

The criticism, which was voiced again even more strongly in the XI Mayan Linguistics Workshop in 1989 in Quetzaltenango, Guatemala, and which is eloquently (and devastatingly) developed in Cojtí Cuxil 1990, addresses several different issues. First, it assumes that doing linguistics is essentially political. Second, it fundamentally questions some of the tenets that have guided many linguists in research, principally the idea that an adequate description simply reports ‘what is there’. Third, it proposes, both explicitly and implicitly, a set of standards and obligations for linguists to follow in their research on minority languages. All of the issues raised are germane to linguistics in general and not just to Mayan linguistics. I will take them in order.²

1. THE POLITICS OF LINGUISTIC RESEARCH. Mayas make the point that linguistics is not done in a political vacuum. Someone pays for research, and the

¹ Translations of quotes from Cojtí Cuxil and of statements from the XI Mayan Linguistics Workshop are mine.

² My thinking about these issues is heavily influenced by my work with Mayas over the last twenty years, but especially in the last five years. I have benefitted from many critical conversations with my students, colleagues, and co-researchers. I would especially like to recognize the contributions of the members of the classes Jun Iq’ and Jun Ajkem to my thinking on these matters; of my research colleagues Pakal, Saq Ch’en, Nik’te’, Waykan, and Saqijix of the group Oxlajuj Kej; and also that of Guillermo Rodríguez Guaján, Demetrio Rodríguez Guaján, Irma Otzoy, Luís Enrique Sam Colop, and Demetrio Cojtí Cuxil. Needless to say, they are not responsible for what I have done with our conversations and would not necessarily agree with me. Cojtí Cuxil’s 1990 article, ‘Lingüística e idiomas Mayas en Guatemala’, is an extraordinarily clear and profound work on the politics of Mayan linguistics. It is the principal publication by a Maya in this field, but it reflects, I think, the thoughts of many other individuals as well.

reasons for funding one kind of research rather than another can be political. The personal motives that linguists have for choosing a research topic and a language or place for doing research are varied and certainly cover nonlinguistic considerations, including political ones. Doing research can affect various local situations, such as language maintenance, language shift, expanding literacy, and increased bilingualism, all of which enter into the local political equations. When linguists are foreigners in their research area, as is the case with the vast majority of Mayan linguists, then the possibility that they represent some foreign governmental position arises. Similarly, because of the work of the Summer Institute of Linguistics and other missionary groups, foreign linguists are often thought to represent religious interests. Furthermore, the language under investigation is spoken by people who are members of a linguistic community and also a political community. Any research undertaken in that community may affect or be affected by the political status of the group.

At the XI Mayan Linguistics Workshop, in a panel discussion on the role of foreign linguists in Mayan linguistics, a number of the public questions addressed politics directly or indirectly. In particular, Mayas asked about ulterior motives for research: 'Why are foreign linguists interested in Mayan linguistics?' 'What goal does the research done by foreigners have in their own country?' 'The work of the linguists is limited solely to research ... or perhaps they are really working for the politics and ideology of their government.' They also made explicit reference to the political status of Mayan communities in relation to linguistic research: 'Does knowledge of Mayan languages contribute to the subordination of the Mayan population?' 'Is it possible for the foreign linguist to contribute seriously to the total elimination of the distinct tentacles of internal and external colonialism that currently envelops the Maya?'

Many of us have been used to thinking that our work is pure science—that the most compelling reasons for doing linguistics are to know how specific languages work and what language is. The widely accepted Western idea that knowledge in and of itself is valuable for society is often the only justification we need to do what we do. And if the people we work with do not or cannot understand that, it is because they are poor and do not have the luxury of being able to think about the universal benefits of science, or it is because they are uneducated or unsophisticated. The Mayas who spoke at the XI Workshop may be poor, but they are not uneducated nor unsophisticated. What they are saying is that the conduct of social science research, in which category they definitely place linguistics, can have negative or positive consequences for the group where that research is carried out, and that an evaluation of the possible consequences must start with a consideration of the political status of the group in question. In the case of the Mayas of Guatemala, this must take into account that they are a politically subordinated set of communities that have been subject to five hundred years of colonialist policy. Language is part of that policy, for instance in the differential legal and customary statuses accorded to Mayan languages and Spanish. It is also part of the political reality of the communities, indicating at the same time both the autonomous origin of those communities and their current subordinate position (Cojtí Cuxil 1990:4).

Linguists working in Guatemala, then, have the option of doing and presenting their research in a manner that supports the dominant political group, which has an interest in the elimination of Mayan languages or at least in the spread of Spanish, at whatever cost; or in a manner that supports the well-being of Mayan languages. Almost all of our activities, no matter how politically neutral we may consider them, are seen by Guatemalans as falling into one camp or the other. The choices we have do not include neutrality, and are presented quite clearly by Cojtí Cuxil (1990:19):

'It is difficult, above all in Guatemala, where Ladino colonialism reigns and where the very Political Constitution assigns informal functions to Mayan languages, for linguists to define themselves as neutral or apolitical, since they work on languages that are sentenced to death and officially demoted. In this country, the linguist who works on Mayan languages only has two options: either active complicity in the prevailing colonialism and linguistic assimilationism, or activism in favor of a new linguistic order in which equality in the rights of all the language is made concrete, something that also implies equal rights for the nationalities and communities.'

2. THE ROLE OF LINGUISTIC RESEARCH. We have been taught to be true to our data, to report it as accurately as we possibly can, and to be as exhaustive as possible in descriptive linguistics and as honest as possible in using descriptive data in theoretical work. We have not been as well drilled in sociolinguistic sensitivity; to be both honest and accurate requires taking the broad social situation into account. Every time we write an article about a language we do several things: we make an analysis of some body of linguistic data, we discuss that analysis in the light of current pertinent theory, we select examples of speech to illustrate our points, and we bring that language into at least momentary prominence according to the analysis, the theory, and the selection of data. Language prominence resulting from linguistic research has many non-linguistic consequences, and selection of data is guided by a multiplicity of nonlinguistic as well as linguistic factors.

Selection of data is a thorny issue. First of all, unless we are native speakers of the language we work on, we automatically select the data that we *KNOW* from among the possible set of data. Additionally, we select data that illustrates the point we wish to make. Furthermore, we select a great deal of data that is wholly tangential to the point we wish to make because it accompanies the data that does make the point, and that is the way we elicited or received it. We also select speakers to give us the data we work on, for all sorts of reasons including availability, intelligence, compatibility, age, sex, linguistic ability, community leadership, and so on. And sometimes the result is that the examples we use are disliked by or even offensive to the community we work with. Our defense usually is that they are examples of real language taken from natural language situations, that they are scientifically accurate, and that it would be unethical and unscientific to change them. I do not believe that a request to use additional selection criteria for examples involves an unscientific tampering with the data; it instead is a plea for sensitivity in the presentation of data, and in many cases it is a plea for more accurate reporting of data.

One of the points raised by Mayas in the 1985 workshop was that we should

not promote or officialize Spanish borrowing in Mayan languages. Another point raised was that our choices of example words in paradigms and elsewhere were on occasion infelicitous. Examples given included the choice of 'flea' to illustrate a noun paradigm in one of the workshop papers, and the frequent choice of 'kill' as the paradigmatic transitive verb. The essential point being made here is that choice of examples, especially in minority languages or languages without a grand written literary tradition, does much more than illustrate a linguistic point: it also characterizes a language socially by providing it with an official, scholarly, and WRITTEN personality. Frequently, the only information on a minority language available to the outside is what linguists write about it, since it may have no written and published autochthonous literature. Our seemingly casually chosen examples, representing as they do the most minimal portion of the total language, can quite inadvertently distort the social portrait of the language in question.

Responding to requests to use certain kinds of examples or to refrain from using other kinds of examples is not unethical or unscientific. It simply adds another factor to the myriad of factors that guide us in our choice of examples. If we write a grammar with thirty illustrative sentences containing transitive verbs, and twenty-five of those sentences are about violent actions, it seems reasonable for a speaker to ask why we chose those particular sentences and to wonder whether we were trying to achieve a certain unpleasant portrait of the people who speak the language. It might not be obvious that 'kill' and 'hit' are verbs that lend themselves extremely well to certain kinds of explanations, since they can, among other things, take subjects and objects of any person and number.

Borrowings raise another point. Mayas feel that the high percentage of Spanish borrowing to be found in the speech of some individuals is a sign of political domination and language morbidity. Although we can point to languages (like English) that have survived very nicely a period of accelerated borrowing, the point is certainly valid in that many threatened languages do, in fact, exhibit a high level of borrowing. There are words that are of foreign origin but fully incorporated into a language and that lack an adequate 'native' equivalent, and there are words that are even preferred to their native equivalents. However, there are also speakers, of Mayan languages at least, who use many fewer borrowings than other speakers. We can add that as a factor to consider in our choice of people to give us data on language. Where the borrowings that we collect are not central to the matter under discussion, they can often be changed without damaging the rest of the example. And where we are explicitly discussing borrowing, or have no alternative but to include borrowed words in our examples, Mayas suggest that we discuss and comment critically on the sociolinguistic situations that result in borrowing.

The issue here is not simply one of accommodating to certain isolated requests for changes in our examples. I believe that Mayas are challenging the whole idea of descriptive accuracy, and are suggesting that adequate description must take into account sociolinguistic and political factors as well as linguistic facts. That is, a description of a language provides part of a social

description of the people who speak that language, and the speakers, and hence the language, also exist in a political context. The information that our linguistic descriptions give about social matters should be as accurate as the information they give about linguistic structure; and we must be aware of the political implications of what we write and, in a situation like that of Mayas in Guatemala, consciously take sides in a political confrontation. If we are forced to recognize that a language is of low prestige, or contains a great many foreign borrowings, or is otherwise politically or socially 'weak', then Mayas would have us explain and attack those facts, not merely report them.

We are used to being the arbiters of our own choices, and defend those choices valiantly. We are sometimes offended when others suggest that we must re-examine decisions that seem to us to be purely linguistic and more within our competency than that of any other person. We also tend to regard the languages we work on as personal property, or at the best as public property. Mayas challenge that notion as well: 'Mayan languages are the collective property of their speakers, and it primordially pertains to the speakers to study them and to decide their destiny' (Cojtí Cuxil 1990:20). Mayas not only criticize some of our choices, they also defend their right to do so.

Thus the role of linguistics can be seen as a scholarly role WITHIN a given political and social context. In many cases, this implies working with a SUBORDINATE language, which further implies intellectual, scholarly, and political responsibilities to that language and the people who speak it. These responsibilities are not the same as those we have when we work with dominant languages. We are asked, at the very least, to recognize the social and political roles we play and not to pretend that our role is 'purely scientific' and neutral. We are additionally asked, and this is much more difficult for us, to accept that speakers of the languages we work with, not professional linguists except insofar as they coincide, are the ultimate judges of what should or should not be done with their languages.

3. THE OBLIGATION OF LINGUISTIC RESEARCH. Many of the comments at the XI Mayan Linguistics Workshop reflected an underlying resentment of foreign, which is to say non-Mayan, control of linguistics. A number of people asked why we publish so much in languages inaccessible to them: 'Why are all the investigations only written in English and you don't leave a copy for the Mayan community in their own languages or in Spanish?' Others questioned our willingness to do linguistics under the control of the speakers: 'Would you be willing to do work in conjunction with Mayan groups or associations, working with them in an equitable manner?' 'If speakers of Mayan languages come to have power over the destiny of Mayan linguistics, would the foreign linguists accept being subject to rules established by the speakers, leaving aside their personal and institutional differences?'

Other criticisms of foreign linguistics that also deal with control include a widespread feeling that we do not do enough to share our specialized knowledge with speakers of Mayan languages. One of the Maya panelists asked the question: 'Do we need foreign linguists?' His answer was: 'Yes, unfortunately.'

However, Mayas are suggesting, more and more frequently, that the proper role of the foreign linguist is to teach speakers of Mayan languages how to do linguistics. This comment is directed not only to descriptive linguists who work on Mayan languages, but to theoretical linguists as well. Those theoreticians who do not have direct contact with communities of speakers of subordinate languages may have thought, up to now, that the matters under discussion do not particularly pertain to them. Mayas believe, however, that at least some speakers of their languages must study linguistics at the highest levels, in order to have real control over Mayan linguistics. This implies, of course, that we may have a responsibility to make sure that our students who are speakers of subordinate languages receive the opportunity for a first-rate linguistic education, even when faced with problems of language, nationality, and formal educational preparation. Because it is so very much more difficult for anyone who is a member of a subordinate language community to reach the point of being ready for university or graduate education in a foreign country, it is an even greater responsibility to nurture those few students who do reach that point. The role in instruction that Mayas ask us to assume is not an easy one. It requires a great amount of unaccustomed effort, time, bureaucratic manipulation, and financial sacrifice.

Given that foreign linguists do control Mayan linguistics so far, our production is not seen as all that wonderful, either. Cojtí Cuxil (1990:21–22) lists among our weaknesses and failures those of: ‘Doing partial and simplistic studies of Mayan languages for reasons of economy, ease, preference or incompetence’ and ‘Reflecting incompletely the lexical repertory of each of the Mayan languages.’ How many of us have been dismayed on hearing someone assure us that language X (in my case it was Quechua) is a primitive language, since we try so hard to dispel the notion of ‘primitive’ languages? I was much more dismayed to discover that, in the Quechua instance, the person had a seemingly legitimate reason for his idea: that there are only 5,000 words in some dictionary of the language. And who was responsible for writing the dictionary? Worse yet, I have heard a number of linguists claim that we should not have anything to do with prescriptive grammars, tainted as they are by linguistic impurity and incomplete description. Prescriptive grammars are NECESSARY for developing literacy, and if linguists refuse to involve themselves in writing them or teaching people how to write them, they are bound to be, unnecessarily, linguistically inaccurate.

I believe that our obligations can be subsumed under four major areas:

(1) Recognizing the political and social context for our research and, where necessary, taking the part of the language we study and its speakers.

(2) Recognizing the rights of speakers of politically subordinate languages over those languages, and paying attention to their expressed wishes for the public presentation of facts about their languages.

(3) Contributing to the training of linguists who are speakers of subordinate languages, at every level from the empirical to the theoretical.

(4) Publishing descriptions and analyses of the languages we work on that

are of the highest possible quality, and making those publications available to speakers of the language.

How to meet our obligation depends on the specific situation in which we work. The particular contexts for each language differ significantly. It seems to me that what Mayas are suggesting is applicable to a much wider set of languages around the world, however, and that we can all benefit from reflecting on their comments in the light of our own research experiences. Trying to meet the challenges they pose can be extraordinarily rewarding as well, and, when all is said and done, leads to better linguistics.

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Language endangerment and the human value of linguistic diversity

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Linguists typically celebrate the tension that plays between two realities of human linguistic knowledge, universality and diversity. But linguistic diversity is not something whose future can be taken for granted. Many local languages and cultures find themselves in great peril in this era, a fact well documented elsewhere in this collection.

In the following paragraphs I will be concerned with the idea that linguistic diversity is important to human intellectual life—not only in the context of scientific linguistic inquiry, but also in relation to the class of human activities belonging to the realms of culture and art.

From the perspective of linguistic science, arguments for safeguarding the world's linguistic diversity require no special discussion in this journal. Suppose English were the only language available as a basis for the study of general human grammatical competence. We know enough about the latter to be able to say now that we could learn a great deal about it from English alone. But we also know enough about linguistic diversity to know that we would miss an enormous amount.

If English were the only language, we could learn a lot about the fundamental principles of grammar, but we could only guess at the nature of that which can vary, except to the extent that this is evident from the varieties of English itself. And this would amount to missing an important point of human linguistic competence. By itself, English would supply a mere hint of the complexity of the system of principles and parameters which permits content questions to be formed either by movement (as in English) or by retention of the question word in situ (Japanese, and English in multiple questions). Considering just English, the category of number—as represented in *cat* vs. *cats*—tells us little about the opposition involved. Only the especially curious might wonder whether the theory of grammar defines the number contrast as [\pm singular] or as [\pm plural]. And where English is the only language, this is probably a meaningless ques-

tion. But the question is not meaningless in a world which also has Hopi. There, it can be argued, determiners show the first contrast, while verbs show the second, dual number being the intersection of the minus values. At every turn, in every domain of grammar, the value of language diversity to the work of linguists is evident. The point does not need belaboring.

The notion that the world's linguistic diversity is a precious resource does not derive solely from linguistic science, of course. Language is much more than grammar. The term 'language' embraces a wide range of human competences and capacities, and it is not clear that it makes sense to think of it as a single entity.

Of supreme significance in relation to linguistic diversity, and to local languages in particular, is the simple truth that language—in the general, multifaceted sense—embodies the intellectual wealth of the people who use it. A language and the intellectual productions of its speakers are often inseparable, in fact. Some forms of verbal art—verse, song, or chant—depend crucially on morphological and phonological, even syntactic, properties of the language in which it is formed. In such cases the art could not exist without the language, quite literally. Even where the dependency is not so organic as this, an intellectual tradition may be so thoroughly a part of a people's linguistic ethnography as to be, in effect, inseparable from the language.

In this circumstance, there is a certain tragedy for the human purpose. The loss of local languages, and of the cultural systems that they express, has meant irretrievable loss of diverse and interesting intellectual wealth, the priceless products of human mental industry. The process of language loss is ongoing. Many linguistic field workers have had, and will continue to have, the experience of bearing witness to the loss, for all time, of a language and of the cultural products which the language served to express for the intellectual nourishment of its speakers.

In the remainder of this essay, I would like to describe one such product of a people's intellectual work. This is a tradition whose decline and virtual disappearance I witnessed in the course of field work in Australia. It was the treasure of a small group of Australian Aboriginal people, the Lardil, living on Mornington Island in North Queensland.

While working on the syntax and lexicon of Lardil in 1960, I heard of the existence of an auxiliary language, called *Damin*, which some initiated men in the community could still use. Most men could not, since the mission administering Mornington Island during the early decades of this century had forbidden the practice of initiation many years earlier, and it was in the context of initiation that *Damin* was learned. Only men initiated before the mission was established had had the opportunity to learn *Damin*, and only a few of those men were still living in 1960.

I was not able to work on *Damin* until 1967. An anthropologist working with the Lardil people sent me a tape of *Damin* while I was working in another community farther south. When I heard the tape, I knew that *Damin* was something very special, so I arranged to visit Mornington Island again. The feature of *Damin* that first caught my attention was its phonology. It departs drastically

from the phonology of Lardil, and it has sounds in it which do not exist in any other Australian language. For example, it has click consonants, otherwise found only in Africa—in the Khoisan languages, for example, and in the Nguni languages of the Bantu family, languages with no historical connection to Lardil. The use of clicks in Damin developed locally. Damin has the appearance of an invented language, and it is attributed, in fact, to a legendary figure named Kalthad (Yellow Trevally). If it was invented, then it is a clever invention, indeed, because it is almost unheard of for an invented language to depart radically from the phonological constraints of the ordinary language of the inventor. The impression that Damin is an invention is strengthened by the fact that it not only has sounds absent elsewhere in Australia, but it also has sounds found nowhere else in the world—as true phonological segments, that is. These include an ingressive voiceless lateral and a labio-velar lingual ejective.

Although its sound system is spectacular, the extraordinary genius of Damin is to be found in its lexicon. In its original purpose, Damin was an ‘auxiliary language’, in the sense that it was used in place of Lardil when this was necessary for ritual reasons. An idea of its nature can be gained from a consideration of how it was learned and used. According to the accounts of surviving *Demiinkurlda*, or ‘Damin-possessors’, as they were called, Damin was learned by novices in the advanced phase of men’s initiation. Men who went through this stage were called *Warama*, and in theory only *Warama* learned Damin. In practice, however, since it was used in public, many people who were not *Warama*, both men and women, had passive knowledge of it. Its purpose, apart from the intellectual pleasure it gave, was to serve as a vehicle of communication between *Warama* and all individuals involved in their initiation. The use of ordinary Lardil with these people was forbidden, until they had been repaid the ritual debt owed to them by the *Warama* as a result of initiation. Damin is a lexicon, not an entire language. The rule in using Damin correctly is this: each lexical item of Lardil must be replaced by a Damin item; the inflectional morphology and syntax of Lardil remains intact. An example of this lexical replacement procedure can be seen in 1 below, in which the first line is in Lardil, the second is the Damin equivalent, and the third is a literal gloss of the morphemes in the sentence:

- (1) *Ngithun dunji-kan ngawa waang-kur werneng-kiyath-ur.*
n!aa n!n!a-kan nh!nh!u tiitith-ur m!ii-ngkiyath-ur.
 my WiYBro-GEN dog go-FUT food-GO-FUT
 ‘My wife’s younger brother’s dog is going hunting (lit. going for food).’

As this example shows, the syntax and morphology of Damin and Lardil are the same. Both use the same case system. The genitive (glossed GEN) is exemplified here, as well as the nominative, which is not overtly marked—*ngawa*, *nh!nh!u* ‘dog’ is in the nominative. And the two share the same system of verbal tenses; the future, glossed FUT, is seen here. And finally, they use the same system of derivational morphology, exemplified here by the verb-forming allative ending *-(ng)kiya-* (glossed GO). This element converts the noun *werne*,

m!ii 'food' into a verb meaning 'to go after food, to hunt'. This sentence also illustrates the click consonants of Damin. All Damin clicks are nasalized. That is to say, the velar occlusion associated with the production of clicks is released as a velar nasal. In the first word, the click articulation (itself symbolized !) is in the alveopalatal position (symbolized by using [n] for the nasal component). The other clicks are the dental [nh!], as in the word for 'dog', and the bilabial [m!], as in the word for 'food'. In some items the click is reduplicated, as in the words for 'dog' and 'wife's younger brother'.

While inflectional and derivational morphology is the same for Lardil and Damin, the lexicon is totally different. Thus, each noun, verb, or pronoun in the Lardil of 1 matches a distinct item in Damin. It is the nature of this replacement lexicon which is extraordinary. It is constructed in such a way that, in principle, it can be learned in one day. In practice, it is said, learning Damin took place over a longer period, though one could, in fact, learn it in a day. The lexicon can be learned in one day, yet, in combination with Lardil syntax and morphology, it can be used to express virtually any idea. How can a lexicon be SMALL enough to learn in one day and, at the same time, be RICH enough to express all ideas? A moment's reflection on this question can only inspire admiration, in my judgment.

The answer, of course, is abstractness. The Damin lexicon cannot be rich in the usual sense of having large numbers of lexical items denoting concepts of great specificity (like the ordinary Lardil or English vocabulary, for example). Rather, the richness of Damin is of a different sort, the opposite of this in fact. Damin lexical items are abstract names for logically cohesive families of concepts. The richness of Damin resides in the semantic breadth of its lexical items, permitting a small inventory (less than 200 items) to accommodate the same range of concepts as does the much larger ordinary vocabulary (of unknown size).

The example given in 1 above can be used to illustrate the basic point of Damin abstractness. Consider the first word of that sentence. In Lardil, this is a form of the first person singular pronoun, and, as such, it is involved in a rich complex of oppositions expressed by a set of 19 distinct pronouns. There are three persons, three numbers (singular, dual, plural), an inclusive-exclusive distinction in the first person dual and plural, and in all nonsingular pronouns there is a two-way distinction among the pronouns for generation harmony. There can be little doubt that ordinary Lardil is rich, in the sense of highly specific, in this domain. By contrast, Damin reduces all of this to a single binary opposition:

- (2) (a) *n!aa* 'ego'
 (b) *n!uu* 'alter'

The first of these is used to refer to any set which includes the speaker, including the set which includes only the speaker. The second refers to any set which does not include the speaker.

The abstraction represented by 2 is actually greater than what I have indicated, since the entire set of determiners (i.e. demonstratives, as well as pro-

nouns) is subsumed in this opposition. This means that each of 2a, b is more abstract than any of the actual Lardil words that it covers. There is, in ordinary Lardil, no single word that corresponds either to 2a or to 2b. Nor is it likely that there is any such word in English, or any other language, for that matter, setting aside the highly technical vocabularies of fields in which deictic reference is of central importance (e.g. *ego* and *alter* of kinship studies, a close, but not exact, correspondence).

The domain of time is analyzed in the same fashion. Thus temporal reference, like pronominal reference, employs a fundamental binary classification, opposing the present to all other times:

- (3) (a) *kaa* 'present, now'
 (b) *kaawi* 'other than present, other than now'

The first of these terms is used in place of Lardil words such as *yanda* 'now, today' and *ngardu* 'presently', while the second corresponds to such words as *bilaa* 'recently (in the past)', *bilaanku* 'tomorrow', and *diwarrku* 'yesterday'. Again, the terminology here involves an abstract classification of the domain, and each of the terms is more abstract than any Lardil lexical item.

Our example sentence 1 contains further examples of abstraction. The term *nh!nh!u* 'dog' is one of the few terms in Damian that refers to a narrow class of entities (the class of canines, dingos and dogs). It would appear to be a counterexample to the general principle of abstraction. However, the term is, in fact, used to refer to an abstract set, that of domestic animals—it combines with *ngaa*, a term referring generally to animate beings, especially humans, and to mortality, to form *ngaa-nh!nh!u* 'horse', and it combines with *wiijburr*, a term referring to wooded plants, to form *wiijburr-nh!nh!u* 'cattle'. The study of the semantics of Damian compounds is in its infancy, I am afraid, and it is not clear how the components of the compounds just cited yield the meanings given. It is clear, however, that *nh!nh!u* refers to domestic animals in general (the dingo being classified with the domestic dog). And, as usual, this usage is not matched by that of any Lardil lexical item.

Sentence 1 also illustrates the most abstract of the Damian verbal lexical items, *titi* 'act'. This is the generalized active verb in Damian. It corresponds to both transitive and intransitive verbs of Lardil—e.g. *jitha* 'eat', *jidma* 'lift', *kirrkala* 'put', *matha* 'get, take', *murrwa* 'follow', *wutha* 'give', *wungi* 'steal', *jatha* 'enter', *kangka* 'speak', *lerri* 'drip', and *waa* 'go'. The Damian verb is used in reference to activities other than those resulting in harmful effects. Verbs of harmful effect are represented in Damian by *titi*, with a short initial syllable, rather than the long syllable of the generalized activity verb. However slight this phonological difference might seem to be, it is real and rigidly observed in Damian usage—*titi* corresponds to such Lardil verbs as *barrki* 'chop', *betha* 'bite', *bunbe* 'shoot', *derlde* 'break', *kele* 'cut', and *netha* 'hit'. This does not exhaust the verbal inventory of Damian, but it covers the vast majority of active verbs in Lardil. And each of these Damian verbs is, as expected, more abstract than any Lardil verb.

While abstraction is the general rule in Damian, exceeding that of Lardil lexical

items, in some cases the Damin terminology corresponds to abstract terms in Lardil itself. This is particularly true in certain domains having to do with foods. Thus, the Damin term *m!ii* applies to foods in general, particularly vegetable foods, and corresponds closely to the Lardil term *werne* 'food'. Likewise, certain seafoods are classed in the Lardil manner—thus, *l*ii* 'bony fishes' (with *l** representing the ingressive lateral consonant) corresponds to Lardil *yaka*; Damin *thii* 'cartilaginous fishes, sharks and stingrays' corresponds to Lardil *thurarra*; and Damin *thuu* corresponds to the interesting heterogeneous Lardil class *kendabal* 'sea turtles and dugongs'.

The Damin lexicon must achieve a balance between abstraction and expressive power, since it must satisfy two essentially contradictory requirements. It must be such that it can be learned quickly and, at the same time, it must be such that it can be used, in coöperation with Lardil inflectional morphology and syntax, to express any idea which Lardil itself can be used to express. It cannot be too abstract, therefore.

The Damin kinship terminology exemplifies this point well. The system has five terms (including *n!n!a*, seen in 1 above). This amounts to a massive reduction from the Lardil kinship terminology, which, like most Australian systems, is very large. There is a mystery in the reduction, though, since the logic of the classificatory kinship system would lead one to expect an even number, say four. But while this would be appropriately abstract, it would require merger of one of the most important kinship distinctions in Lardil society, that between second-cross cousins (*n!n!a*), the class that includes the preferred marriage partners, and first-cross cousins (*jii*), the class of alternant marriage partners. The Damin terminology strikes the optimal balance between abstraction and expressive power.

It is clear from what little we know of Damin that it involves a sophisticated semantic analysis of the lexical resources of Lardil. The system of abstractions lays bare aspects of lexical semantic structure to a degree which, quite possibly, is not achieved by any other system of analysis that attempts to accommodate an ENTIRE vocabulary.

The last fluent user of Damin passed away several years ago. The destruction of this intellectual treasure was carried out, for the most part, by people who were not aware of its existence, coming as they did from a culture in which wealth is physical and visible. Damin was not visible for them, and as far as they were concerned, the Lardil people had no wealth, apart from their land.

We cannot say that the Damin tradition is utterly lost to the Lardil people. However, it is all but gone, since revival of its would be from recorded sources; and if revival were to be attempted, a NEW Damin tradition would be initiated, necessarily, since the cultural context of the original tradition is irrecoverable—there are no survivors of that period. The development of a new Damin tradition is not a bad thing, of course; in fact it would be an exciting thing. But the old Damin tradition is effectively lost. And the destruction of this tradition must be ranked as a disaster, comparable to the destruction of any human treasure.

It is perhaps of little use simply to bemoan the loss of a treasure. The example of Damin is offered as an instance of the nature of things that have been lost

and of what can be lost if linguistic and cultural diversity disappears. On the other hand, the safeguarding of linguistic and cultural diversity does not guarantee the perpetuation of existing traditions of intellectual endeavor, of course. In fact, a living tradition implies change. And it is precisely the development of new traditions which is most consonant with the human purpose. And it is precisely where local languages are viable that new traditions develop. Thus, for example, in the Southwest of the United States, beside the continuing traditions of sung verse, a new tradition of poetry is developing, in Papago, Pima, Yaqui, Navajo, and Hualapai, for example, in the context of the growing use of the written form of these languages (encouraged by such institutions as AILDI, described elsewhere in this collection).

If the foregoing discussion is at all reasonable, then certain things follow. While it is good and commendable to record and document fading traditions, and in some cases this is absolutely necessary to avert total loss of cultural wealth, the greater goal must be that of safeguarding diversity in the world of people. For that is the circumstance in which diverse and interesting intellectual traditions can grow. Consider again the case of Damin. We have a small record of that auxiliary language, enough to appreciate its worth. But we have no idea what it would have become, how it would have changed, or, most important, what kind of role it might have played in Lardil intellectual life in this or the next decade. It might have disappeared, of course. That would have been their business. But it might have led to something even greater. We will never know, since the necessary condition has not existed—namely, an environment safe for cultural diversity which would have permitted the Lardil people to learn and use Damin into the next century.

REFERENCES

- BRANDT, ELIZABETH. 1988. Applied linguistic anthropology and American Indian language renewal. *Human Organization* 47:322–29.
- COJTI CUXIL, DEMETRIO. 1990. *Lingüística e idiomas Mayas en Guatemala. Lecturas sobre la lingüística Maya*, ed. by Nora C. England and Stephen R. Elliott, 1–25. Guatemala City: Centro de Investigaciones Regionales de Mesoamérica.
- CONZEMIUS, EDOUARD. 1929. Die Rama Indianer von Nicaragua. *Zeitschrift für Ethnologie* 59:291–362.
- GRIMES, BARBARA F. (ed.) 1988. *Ethnologue: Languages of the world*, 11th edn. Dallas: Summer Institute of Linguistics.
- HALE, KENNETH. 1972. Some questions about anthropological linguistics: The role of native knowledge. *Reinventing anthropology*, ed. by Dell Hymes, 382–97. New York: Vantage Books.
- LEHMANN, W. 1914. *Vokabular der Rama-Sprache*. Munich: Abhandlungen der Königlich Bayerischen Akademie der Wissenschaften.
- RUHLEN, MERRITT. 1987. *A guide to the world's languages*, vol. 1: Classification. Stanford: Stanford University Press.
- VOEGELIN, C. F., and F. M. VOEGELIN. 1977. *Classification and index of the world's languages*. New York: Elsevier.
- WATAHOMIGIE, LUCILLE J., and AKIRA Y. YAMAMOTO. 1983. *Gigyayk vo:jka (Walk strong!): Yuman poetry with morphological analysis*. Banning, CA: Malki Museum Press.

- , —. 1987. Linguistics in action: The Hualapai Bilingual/Bicultural Education Program. Collaborative research and social change: Applied anthropology in action, ed. by Donald D. Stull and Jean J. Schensul, 77–98. Boulder, CO: Westview Press.
- WURM, S. A., and SHIRO HATTORI. 1981, 1983. Language atlas of the Pacific area, parts I and II. Canberra: The Australian Academy of the Humanities in collaboration with the Japan Academy.

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