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 [± singular] or as [± 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 administrating 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 that 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 Damin 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 Damin 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 Damin verbal lexical items, *tiiti* 'act'. This is the generalized active verb in Damin. 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 Damin verb is used in reference to activities other than those resulting in harmful effects. Verbs of harmful effect are represented in Damin 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 Damin 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 Damin, but it covers the vast majority of active verbs in Lardil. And each of these Damin verbs is, as expected, more abstract than any Lardil verb.

While abstraction is the general rule in Damin, 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.

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[Received 30 April 1991;
revision received 1 October 1991;
accepted 17 October 1991.]