

**THE ECOLOGY OF LANGUAGE:  
NEW IMPERATIVES IN LINGUISTICS CURRICULA**

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Language endangerment is undoubtedly among the most current topics in linguistics today. My review of the literature suggests a number of shortcomings in the way linguists have discussed the subject matter and some inadequacies in the kinds of remedies that have been recommended for the problem. I conclude that compared to our counterparts in ecology, who have been concerned with endangered species, we in linguistics have done little basic research about the life of a language and are therefore ill-prepared to recommend adequate solutions to the problem. We should do more research on the subject matter and offer more courses in our curricula to prepare future generations of linguists better for the question of language endangerment.

The 1990s will undoubtedly be remembered in the history of linguistics as the period during which awareness of language endangerment and death increased among linguists. It will also be remembered by the kinds of concerns expressed over this state of affairs; chief among these is linguists' primary focus on loss of diversity — very much in the interest of their profession, based at least on the way Krauss 1992 and Hale 1998 present the subject matter. There have also been several expressions of solicitude about the relevant populations losing their ancestral traditions along with their languages, but concern over loss of linguistic diversity seems to stand out. This response is in contrast with linguists' marginal interest in the balance sheets of costs and benefits from the perspective of former or current speakers of the dead or dying languages, respectively.<sup>1</sup>

Hale 1998 characterizes the primary concern of linguists correctly as 'self-serving.' Over a decade earlier, Fishman 1982 had expressed a similar concern, arguing that language policies in the Western world have promoted shifting to major languages of domination at the expense of minor languages (for the purposes of developing nations that are monolingual). Remarking that there is beauty in diversity, he stated that the loss of languages spoken by smaller communities of speakers is an expensive price for humanity to pay. Interestingly, linguists have seldom criticized themselves for advising Third-World countries, in the 1960s, to promote national official languages (qua languages of wider communication), which would allegedly foster national unity and expedite their development. This was indeed a central concern of the sociology of language then, as expressed by some essays in Fishman 1968.

The 1990s will also be remembered as the period during which most of the literature on language endangerment was written by theoretical and anthropological linguists working on languages spoken in small communities, typically non-Western languages with 'uncommon' structural features and world views, languages which are likely to contribute more to our understanding of linguistic and cultural diversity. The main argument is that if the minor languages may be preserved — regardless of the living conditions of their speakers (I may add) — we can learn more about language typology and inversely about the architecture of Universal Grammar.

Less vocal during this period have been students of the ethnography of communication. This state of affairs reflects scanty ecology-based research on language evolution.<sup>2</sup> It also reflects insufficient understanding of language shift as an adaptive response to changing ecologies, which could explain how in the first place so many languages have become endangered, for instance, during the post-colonial, rather than the colonial, period in North America.<sup>3</sup> The limited literature that is ethnographically informed, such as Dorian 1998 and Hale 1998, is itself still very much dominated by a Western European perspective. Responding to what Dorian identifies as 'ideology of contempt,' this literature attributes the demographic and/or structural attrition of the endangered languages typically to their speakers' loss of pride in their ancestral languages and cultures.

The Western bias can likewise be detected in one of the most common solutions linguists have proposed to halt, or slow down, the erosion of the endangered languages: development of a writing system and of literacy. *Pace* Hinton's 1995 'success story' about California Native American languages, this kind of solution does not help a language thrive. Instead, it helps the language be cherished and be preserved as a fossil, or in the frozen ritualized form of some ancestral ceremonies. A language does not thrive unless there is a requisite socio-economic ecology that nurtures it, making it useful to speakers for their survival. In fact, such an ecology has little to do with size of the population that speaks it, nor with whether the relevant population dominates another or is dominated. There are many cases, especially in rural Africa, where a language spoken by a small ethnic enclave has thrived for as long as the ambient socio-economic or political ecology did not change to the disadvantage of its speakers. Such cases are more common in places where there is no global economic system, which is itself an explanation of why fewer sub-Saharan African than Native American languages have been endangered by European colonial languages. (I return to this question below.)

With respect to domination, aside from the case of the belated endangerment of Native American languages (compared to the earlier losses of African and several European languages to specific European languages in the Americas), note the case of Irish, for example. Although Ireland was colonized by the English long before the Norman Conquest in the 11th century, it is only since the 17th century that the Irish have been shifting to English as their vernacular. In fact, the trend did not become quite pronounced until the 19th century, with changes in

the socio-economic integration of the indigenous population. I return to this aspect of language endangerment below.

Regarding the role of literacy, as Dorian (1998:11) observes, Irish has been losing ground to English despite its rich literature. Note also that the most celebrated dead languages, viz., Hittite, ancient Greek, Latin, and now Sanskrit, all had rich literary traditions.<sup>4</sup> Hinton's 'success story' is thus more or less like protracted death, rather than real language survival. It is in a way ironic that linguists would place so much faith in developing literacy and writing systems when we have professed all along that even in literate societies language is primarily spoken.<sup>5</sup>

The 1990s will also be remembered as a period during which linguists compare poorly with those population geneticists who are concerned with endangered species. The latter have sought solutions by recommending actions on the ecologies that have disadvantaged the endangered species. It would make little sense to release, for instance, bald eagles raised in captivity to an environment that would not be a hospitable niche to them, enabling them to survive or to reproduce themselves. To be sure, if one subscribes to Mufwene's 1999 position that languages are parasitic species — more specifically, of the symbiotic kind — linguists too have been working on the ecologies of the endangered languages, focusing on their host, the speakers. Unfortunately, they have avoided dealing with the larger socio-economic ecologies to which the speakers have been adapting themselves at the expense of their ancestral languages. It is not just a matter of focusing on some ecology, it is also a question of focusing on the relevant ecology.

Interestingly, when one looks at the big picture, quite a number of new language varieties have been emerging while several others — and more, to be sure — have been endangered. Silence on the new varieties, which have contributed to more diversity, also reflects poorly on linguistics, viz., absence of a well-articulated body of knowledge that should enable us to distinguish ecological conditions that are conducive to language endangerment from those that either maintain the status quo or lead to speciation, hence to more linguistic diversity. More generally, from an academic perspective, it is also lack of time depth in the literature on language endangerment that is striking, viz., the absence of an important historical dimension that would prompt us to investigate and isolate more accurately ecological conditions which have disadvantaged some — to be sure, a large proportion of the world's languages — and those conditions which have favored some others.

We have little sense of why multilingualism has produced language attrition in some societies, but has not in some others, for instance, why so many Native American languages are moribund whereas African-American English seems to be thriving, as stigmatized as it is. Nor do we have much sense of how language mixing has become symptomatic of culture loss in some communities, but has not in others (Woodbury 1998). A careful reading of Dorian 1989 would suggest investigating several and diverse situations more closely, so that we may be better

informed on differing outcomes of language competition. I conjecture that in North America Native American languages have belatedly joined the club of several European languages that have lost to English; they are dying not because their speakers have lost pride in them but because, after being integrated, or just involved, in the socio-economic mainstream (more or less like other European Americans who are not of English descent), they have had to adapt to a changing socio-economic ecology in which English is required for their survival.

This contextualization of the general issues should help us also address questions such as why, like Appalachian English, African-American English (including Gullah) is not endangered, at least not yet, whereas Ocracoke English is. Yet all of them are stigmatized, and the stigmatization of Gullah is compounded by the ethnicity of its speakers! Appalachian English is not dying yet because it continues to be isolated from the mainstream of the American population. There have been more emigrations from than immigrations by economically better-off outsiders to where it is spoken. Gullah has survived so far because the affluent Americans, mostly Whites, who have immigrated to the Sea Islands of South Carolina and Georgia have not lived together, nor interacted regularly, with the local African Americans who speak it (Mufwene 1997). The Sea Islands are now as residentially segregated as American cities, where African-American vernacular English thrives. As the situation is presented by Wolfram & Estes 1995, Ocracoke English is endangered just for the opposite reason: its White speakers have been influenced by the more affluent White Americans from the mainland, with whom they interact on a regular basis and intermarry. What is evident in this bigger picture is that even dialects of the same language are sometimes endangered, albeit quite selectively. This should prompt us to better understand the ecology of language endangerment, which should also help us understand why, for instance, Native American languages have not been endangered all at the same rate.

Alas! the 1990s may also be remembered as the decade during which the experts had little that is quite informed to offer on the subject matter of language endangerment. To be sure, there are reports of success stories about language re-introduction or promotion in specific ecological settings with high ideological commitment, such as Israel with Hebrew, Quebec with French, Wales with Welsh. These are isolated cases which reveal not our academic understanding of how language competition is resolved by laws of nature, so to speak, but rather instances of ad-hoc interventions by laypeople against those natural laws. What makes them significant and relevant to our concerns with language endangerment is that they show that restoring or revitalizing a language requires not encouraging speakers to develop (more) pride in their heritage but (re)creating an ecology which is hospitable to it.

Let's face it, the massive loss of languages, as well as the rise of new language varieties, are far from being peculiarities of the 20th century, or of the colonization and domination of the rest of the world by Europe over the past five centuries. If we just reflect more on language evolution in Europe alone, from the perspective of language competition, we may not be surprised to learn that Europe must have had several small languages that succumbed to the spread of

West Germanic and Latin, for example. The Melanesian multilingual situation described by Mühlhäusler 1996, with its multitude of small languages, was probably more typical of pre-medieval Europe than the current situation in which minority languages such as Breton and Gaelic are holding on a thin thread for their lives. English has prevailed in England at the expense of Celtic languages. So have the Romance languages in Western Europe. English itself is a novelty compared to the languages that the Jutes, the Angles, and the Saxons brought to England. It is the outcome of the development of those West Germanic languages into a new one, or rather a set of new dialects, just like the Romance languages are new phenomena compared to Vulgar Latin, from which they developed.

What genetic linguistics has generally not highlighted is an account of the specific ecological conditions under which all these interesting developments have taken place, which would enable us to better understand language evolution, including cases of language endangerment and death today. Language change and language endangerment appear to be different facets of the same more general process, viz., language evolution in an always changing ecology in which every language and every structural feature coexists and competes with others and may be affected by the changing ecological factors (Mufwene 1999).

More or less the same kinds of language evolutions as in England and Romance Europe have taken place in the territories colonized by Europeans over the past five centuries. In especially North America and Australia, as well as New Zealand, European languages, notably English, have won pyrrhic victories over the indigenous languages. While eliminating or just endangering the latter, they have prevailed generally in restructured forms, including not only those kept in the old franchise and recognized as (dialects of) Western languages (e.g., American English, Canadian French (Québécois), Latin American Spanish or Portuguese), but also those disfranchised varieties treated as children out of wedlock, whose genetic status has been more controversial, such as Saramaccan, Jamaican, and Haitian Creoles, and Gullah.<sup>6</sup> The literature on new and indigenized Englishes and on creoles, for instance, has plenty to teach us about language evolution from the point of view of competition and selection, not only on the level of features from the same pools identified socially as languages, but also on the level of languages competing with each other for monopoly over domains of usage.

From an ecological perspective, what is also quite interesting regarding the European colonization of the rest of the world, is the varying ways in which indigenous languages have been affected. While Western languages have endangered each other and indigenous languages in the Americas, in Australia, and in New Zealand, they have failed to do so in Africa and Asia. I surmise that differences in dominant colonization styles, rather than just a matter of colonial attitudes toward the indigenous languages, account for these differences in the linguistic consequences of European colonization. In all European colonies, the same 'ideology of contempt' identified by Dorian 1998 has applied, but only in some kinds of colonies have indigenous languages been endangered by European languages.

Settlement colonies have generally endangered the ancestral languages of the colonized, whereas exploitation colonies have not. There are, of course, some exceptions to this rough observation. For instance, the languages of European settlers in Zimbabwe and South Africa, viz., English in both and Afrikaans in the second, have not endangered the indigenous African languages. The explanation of these cases lies in the refusal of the settlers to assimilate the indigens to the colonial culture and to involve them fully in the same global economic system. Pronounced boundaries between the life styles of the settlers and of the indigens, associated with different languages, have not aroused generalized motivation for the indigens to acquire the settlers' languages, except among the minority who have been prepared to serve at some lower levels of the colonial socio-economic system. As a matter of fact, it is mostly after independence that European colonial languages in Africa have become more competitive in comparison with African *lingua francas* lexified by indigenous languages. Even so, because the average worker in sub-Saharan Africa has not participated in the global economy in the same way as the average worker in the 20th-century Americas and Australia, and because he or she can function in the socio-economic system without knowledge of the colonial language in his or her polity, European languages have not had the same kind of attraction everywhere. That is, pressure on the indigens to use European colonial languages as *lingua francas* or, most of all, to shift to them as vernaculars, has not been the same in different parts of the world, not even among the elite who have had a lot to gain from the adoption of the *lingua franca* or from the shift of vernaculars. In sub-Sahara Africa, the degree of commitment to the European colonial languages among the elite has not been the same, even within the same polity. For instance, there is more commitment to French in Gabon than in the Democratic Republic of Congo, where the vast majority of children of the elite are still reared in the national languages.

The relevance of assimilationist colonial policies to language endangerment applies also to the spread of Arabic in North Africa (since the 7th century), where it has produced the attrition of several indigenous non-Semitic languages such as Berber and Tuareg, and undoubtedly the loss of several minority languages. Although the Arabs settled North Africa by force, they allowed the indigens to assimilate to their culture; in fact they made it possible for the colonized to Arabize by adopting their religion and economic system. In East Africa, the Arabs generally assimilated to the local culture, though they maintained their religion, for which Arabic is required for the Quran, and their economic system, which they were able to conduct in the extant indigenous *lingua franca*, Swahili. Consistent with such variation in colonization styles, Arabic has been adopted as a religious language everywhere in Islamic Africa, but only in North Africa has it vernacularized among those who are not Arabs by race. It is thus clear what a central role socio-economic integration, rather than pride or literacy, plays in language endangerment. The speciation of Arabic into so many dialects in Africa today is apparently a consequence of speakers of so many different languages shifting to it.

The above divergent linguistic impacts of colonial languages in Africa has led Mazrui & Mazrui 1998 to treat Arabic, justifiably or not, as a language indigenous to Africa, not because it has been in Africa much longer, but because it has replaced several indigenous African languages as a vernacular. Since under both forms of colonization, Arabian and European, the indigenous African languages were kept at the bottom of the ethnographic scale, one can also see that the ideology of contempt, pride, power, literacy, and most of the classic explanations advanced by linguists for language endangerment and loss do not account for these processes. At best, such explanations are a small part of a complex phenomenon.

Such mistaken notions also explain why we have no sure solutions to help endangered languages survive, or thrive again, healthily. Dauenhauer & Dauenhauer 1998 observe at the beginning of their essay that most of what they report are cases of failure rather than of success. One may note without fearing to be seriously mistaken that so far linguists seem to have proposed ways of protracting the deaths of the endangered languages rather than helping them thrive in hospitable ecologies. Other actions must be taken that can create socio-economic ecologies that are more hospitable to them and more adequate research is definitely needed for this.

Let me emphasize that while some language varieties have been dying over the past two thousand years — and undoubtedly over a longer period of time — some new varieties have also been emerging. To be sure, we still cannot determine on structural grounds alone whether the new varieties (such as Saramaccan and Gullah) are languages or dialects of their lexifiers. However, it is worth noting that the Stammbaums of genetic linguistics would have little empirical justification if languages just died out and no new varieties developed from some of the older languages. The genetic speciation which they represent are justified by the emergence of new varieties. Unfortunately, on the balance sheet, the numbers and types of dead and dying varieties in particular geographical areas do not necessarily balance out with those of the new varieties, nor are the dying structural types to be found necessarily in the emerging varieties. Regardless of whether or not deaths and births even out, the bidirectionality of this state of affairs is part of the general process of language evolution, in which some older forms or structures are replaced by new ones, while losses and innovations co-occur in linguistic systems.

If such evolution has not bothered linguists before, from the point of view of linguistic diversity, perhaps we should explain more adequately why loss of some structural peculiarities through the disappearance of some languages today should become such a threat to the linguistic research enterprise and how such languages must be helped to thrive without inhibiting the adaptive responses of their speakers to their changing socio-economic ecologies. It may even be more critical to explain why actions are being taken on the victims rather than on the victimizers and the ecologies that the latter have created. It is also worth explaining why there has been more interest in loss of cultural heritage than in what the concerned populations hoped to gain in shifting to the dominant languages of their new socio-economic ecologies.

At the same time, let me also hasten to explain that I do not hereby argue for no action to be taken about language endangerment. I just wished to point out that wanting to preserve a language just so that linguists may learn more about language diversity without wanting to determine what its speakers have to gain or lose from the status quo, or from the status ad quem, may leave the impression, justified or not, of being a self-serving disposition.

It is also noteworthy that several languages have had different fates in different ecologies. For instance, although rated ethnographically at the bottom of the scale both in Africa and in the New World, transplanted African languages have not thrived in the New World, whereas only a few of them are now being endangered in Africa. Moreover, as suggested above, those African languages that are endangered are not losing to European colonial languages but rather to other African languages, most typically to the new African lingua francas. In this connection, note also that those languages which have survived in ecologies novel to them have done so in different ways. For instance, French has developed into Québécois in Québec, but into Cajun and French Creole in Louisiana; English has developed into so many new varieties in North America.

Equally noteworthy is the fact that some Native American languages have died faster than others, just as some Celtic languages have resisted French and English replacement longer than others. Likewise, it is noteworthy that Yiddish would survive longer in North America than in Israel, while Hebrew has vernacularized in Israel but remains a classical and religious language in North America. All in all, we should pay more attention to what distinguishes one ecology from another relative to both the languages that have thrived in one form or another and to those languages that are endangered. Only after this kind of groundwork can we feel as confident as our population geneticist counterparts in dealing with language endangerment. We could thus decide whether we should let speakers of the endangered languages handle their own matters in the same ways they have so far, or whether we should help the relevant societies in which they evolve create more nurturing ecologies for the relevant languages, without making it more difficult for their speakers to adapt to changing socio-economic conditions.

Undoubtedly, what we have recommended in the present decade reflects the state of our scholarship and the training we have provided in linguistics programs and departments, with only marginal interests in the lives of languages. Surely, there are scholars such as Grenoble & Whaley (1998:22) who can observe that 'Speakers abandon their native tongue in adaptation to an environment where use of that language is no longer advantageous to them'. I am just afraid that we have not learned much about the ecological conditions under which a minority's language may thrive and those under which it may not thrive, nor about the conditions under which advantageous languages endanger other languages, and those under which they do not, nor indeed about those conditions under which languages not so advantageous thrive at the expense of their cohorts in the same polity.

The bottom line is: more research is needed and linguistics curricula should be adapted to respond to these research needs. As we do all this, let us remember that languages are not independent of the speakers who host and speak them, our interest in the continuity of languages should not lose sight of the need for speakers to be well-adapted to the changing socio-economic environments in which they also wish to succeed. To help the endangered languages thrive again, it will take more than teaching pride and other positive attitudes to their speakers.

### NOTES

<sup>1</sup> Wolfram & Estes 1995 argue persuasively that linguists should also be concerned about dialect endangerment. This is very much among my concerns, although, in order to cut down on the number of coordinate and disjunctive phrases, I will not mention 'dialect,' except where such mention is absolutely necessary. Almost all the comments I make about language endangerment in this essay also apply to dialect endangerment, where the situations are more or less the same.

<sup>2</sup> I am referring here mostly to language-external ecology (Mufwene 1999), which includes historical and current socio-economic and political conditions in which a language has been spoken. I use *language evolution* here to cover changes not only in the structure of a language but also in its vitality, which may decrease, increase, or remain the same, owing to changes in the ethnographic conditions of its usage.

<sup>3</sup> The colonial period was marked by decreases in the numbers of speakers of several languages, for reasons such as relocation, diseases brought over from the Old World, and warfare, novel ecological factors under which several Native American languages died. However, there was no pressure yet on the indigenous populations to shift to European colonial languages as vernaculars. Native Americans were generally marginal to the novel socio-economic systems that were developing and did not need the European languages even for trade, which was often conducted in contact varieties of their own languages, e.g., Pidgin Delaware and Chinook Jargon. I return to this aspect of language endangerment below.

<sup>4</sup> There are scholars who subscribe to the position that Latin and Ancient Greek are not dead but continue in mutated forms through the Romance languages and Modern Greek, respectively. Note, however, that these modern languages have developed not from the standard varieties of Classical Latin or Greek, which have bequeathed us rich literary legacies, but from their nonstandard and contact varieties, viz., Vulgar Latin and Greek Koiné. Such developments are proof that vitality of the spoken language is an important factor in its continuation or survival.

<sup>5</sup> This observation is not intended to undermine efforts to increase literacy around the world as one of the tools that should enable more people to adapt to changing socio-economic ecologies. However, specific choices made for implementing literacy have often also contributed to language endangerment, generally to the

disadvantage of languages that have not been used for literacy (Dixon 1997). Several countries around the world cannot afford to implement literacy in all their languages. The setup of economic systems around the world has made implementing literacy in all languages an onerous burden for would-be speakers of some of those languages.

<sup>6</sup> An interesting homolog of this in population genetics is speciation, which takes place when part of a species which has relocated develops new characteristics (by loss, addition, of dominance of some traits) in response to its new ecology.

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