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LANGUAGE BIRTH AND DEATH

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■ **Abstract** Since the late 1980s, language endangerment and death have been discussed as if the phenomena had no connection at all with language birth. More recently the phenomena have been associated almost exclusively with the intense and pervasive economic globalization of same period, a process that some authors have reduced too easily to the McDonaldization phenomenon. Moreover, the relation of globalization to different forms of colonization has been poorly articulated. As a matter of fact, little of the longer history of population movements and contacts since the dawn of agriculture has been invoked in the literature on language endangerment to give some broader perspective on the mechanisms of language birth and death and on the ecological factors that bear on how they proceed. This review aims to remedy these shortcomings in our scholarship.

INTRODUCTION

Linguistics publications on language endangerment and death have increased since Dorian's (1989) *Investigating Obsolescence* and more so since the 1992 publication of a special issue of *Language* (the Linguistic Society of America's journal) on the subject matter. Books alone include the following: Fishman (1991), Robins & Uhlenbeck (1991), Brenzinger (1992, 1998), Hagège (1992, 2000), Mühlhäusler (1996), Cantoni (1997), Dixon (1997), Grenoble & Whaley (1998), Hazaël-Massieux (1999), Reyhner et al. (1999), Crystal (2000), Nettle & Romaine (2000), Skutnab-Kangas (2000), Hinton & Hale (2001), Maffi (2001), Mufwene (2001), Swaan (2001), Dalby (2002), Harmon (2002), Joseph et al. (2003), Maurais & Morris (2003), and Phillipson (2003). Experts will undoubtedly notice some omissions in this list, but one cannot help noticing the strong interest the subject matter has aroused among linguists over the past two decades.

Research and publications on new language varieties have interested linguists in a less dramatic way, despite the high visibility of Bickerton (1981, 1984), Thomason & Kaufman (1988), and Chaudenson (1992, 2001). This asymmetry may reflect the concern among linguists—stated in numerous publications—about the increasing loss of linguistic materials that should inform them about typological variation. It also may be due to the following: Although genetic linguistics has

always been about speciation, researchers have typically focused on whether particular language varieties descend from the same ancestor and can thus be claimed to be genetically related—hence the central methodological role accorded to the comparative method. Linguists have not connected research on the development of creoles, pidgins, and indigenized varieties, which is obviously on the birth of new language varieties, to genetic linguistics. Thus, because of the way linguists think contact exerted an unusually major influence on these cases of language divergence, Thomason & Kaufman (1988), for instance, are more interested in showing how the development of creoles, pidgins, and the like deviates from what they see as the normal or usual kind of language change and speciation than in explaining the process of language birth itself.

Overall, the way that scholarship on language loss and birth has developed reflects in some ways the fact that genetic linguistics has assumed scenarios in which language contact has played an incidental, rather than catalytic, role. Such scenarios seem so artificial when one recognizes, for instance, that the diversification of Indo-European languages has been concurrent with the gradual dispersal of Indo-European populations in Europe and parts of Asia. The dispersal was a long migratory process during which these populations came in contact with non-Indo-Europeans. Because they did not relocate at the same pace, nor along the same routes, they often subsequently came in contact with each other. For instance, the Romans, speaking an Italic language, came in contact with the Celts, as would the Germanics some centuries later, though most of the Celts would already be Latinizing during that time. Little has been said about how languages vanished in Europe while Proto-Indo-European was speciating into so many modern languages.

Since the late 1980s, research on language loss has focused primarily on the indigenous languages of European ex-colonies and to some extent on minority languages of the European Union—languages such as Breton, Occitan, Basque, Sami, and Gaelic, which are still endangered by the official and dominant languages of their nations. The almost-exclusive association of language death and birth either with the emergence of modern European nation states united by single national languages or with Europe's colonization of most of the world since the sixteenth century has led to the illusion that both processes may be recent developments in the history of mankind.[1] The overemphasis on worldwide economic globalization as the primary cause of language loss has prevented any fruitful comparisons between, on the one hand, recent and current evolutions and, on the other, what must have occurred during the earliest political and economic hegemonies in the history of mankind. The closest thing to what I suggest can be found in Hagège (2000).

Although current research on language birth and death is well grounded in population contacts, the relevant literature does not highlight the fact that these

[1]Indeed there have been attempts to compare with "creolization" the development of Romance languages (e.g., Schlieben-Lange 1977) or that of Middle English (e.g., Bailey & Maroldt 1977), but such studies have been negatively criticized for good and bad reasons (e.g., Thomason & Kaufman 1988, regarding English).

processes usually have occurred under the same, or related, socioeconomic conditions identified by Mufwene (2001) as "ecological." For instance, the birth of creoles in the plantation settlement colonies of the Atlantic and Indian Oceans is a concomitant of language shift among the African populations who developed them. Likewise, the emergence of American English(es) is concomitant both of the gradual loss of especially continental European languages that came in contact with English in North America and of the restructuring of English varieties brought over from England (regardless of whether linguists factor in influence from the other languages).

In this review, I elaborate on these observations, focusing especially on the concern that scholars such as Nettle & Romaine (2000), Skutnab-Kangas (2000), and Maffi (2001) express about loss of "biodiversity" applied to the coexistence of languages. I historicize both colonization and economic globalization to show how they are related and provide differential ecologies for language birth and death. I highlight speakers as the unwitting agents of these phenomena, while also questioning the adequacy of terms such as language war, killer language, and linguicide.

My approach is generally the same as that taken in Mufwene (2001),[2] largely inspired by population genetics, with languages considered as populations of idiolects and, in respect to their evolutionary characteristics, as analogous to parasitic, viral species. Space limitations preclude justifying this position here. To suffice, the following assumptions are central to most of the discussion in the rest of this review: (*a*) languages are internally variable (between idiolects and between dialects); (*b*) they do not evolve in uniform ways, as changes may proceed faster or differently in one segment of a population of its speakers than they would in another; (*c*) the same language may thrive in one ecology but do poorly in another; (*d*) like biological species, their vitality depends on the ecology of their existence or usage; and (*e*) like viruses, language features may change several times in their lifetime. But we should start by articulating the meanings of language "birth" and "death" more explicitly.

THE MEANINGS OF BIRTH AND DEATH APPLIED TO LANGUAGES

The notions birth and death actually provide more arguments for treating languages as species. Languages are unlike organisms in the way they are born or die. As well noted by Chaudenson (1992, 2001, 2003) in the case of creoles, and Szulmajster

[2]Readers familiar with Harmon (1996) (with which I was not familiar until after completing this review) will notice several differences in our conceptions of the "linguistic species" and how he and I apply it to language evolution, as complementary as our positions are. For instance, my justifications here, as in Mufwene (2001), are quite different from his (which are also repeated in Harmon 2002).

(2000) regarding Yiddish, languages as communal phenomena cannot be issued birth or death certificates. The relevant processes are protracted, spanning several generations. The concept of "language birth" is in fact a misnomer of some sort. The birth involves no pregnancy and delivery stages, and the term refers to a stage (not a point in time!) in a divergence process during which a variety is acknowledged *post facto* as structurally different from its ancestor. For instance, no particular point in time can be associated with the emergence of creoles as separate vernaculars from the colonial European languages from which they evolved. Unlike in the case of organisms, but as in the case of species, language birth cannot be predicted. The recognition of separateness is made possible by a cumulative accretion of divergence features relative to an ancestor language, regardless of whether linguists consider contact with other languages.

Likewise, language death is a protracted change of state.[3] Used to describe community-level loss of competence in a language, it denotes a process that does not affect all speakers at the same time nor to the same extent. Under one conception of the process, it concerns the statistical assessment of the maintenance versus loss of competence in a language variety among its speakers. Total death is declared when no speakers are left of a particular language variety in a population that had used it.[4]

An important question nowadays has also been whether Latin—whose standard variety (Classical Latin) is still the lingua franca of the Vatican and whose vernacular, nonstandard variety (Vulgar Latin) has evolved into the Romance languages—is really a dead language (Hagège 2000)? If so, what is the most critical criterion to identify a language as dead? Is language death predicated on the presence of native speakers and on its transmission from one generation of speakers to another without the mediacy of the scholastic medium?[5] And in the case of the evolution

[3]To be sure, cases of sudden language death by genocide have been attested (see, e.g., Hagège 2000 and Nettle & Romaine 2000), but they are rare compared to the other cases most commonly discussed in the literature. They are not really part of natural evolution by competition and selection, as explained in the conclusions section below. They are not discussed in the present section.

[4]It is less clear whether a language is still alive, just moribund, or simply "in poor health" when it is used by semispeakers, individuals who claim they speak it but mix its vocabulary and grammar with another language system. Dorian's (1981) discussion of Scottish Gaelic has made such cases an important part of understanding language "obsolescence."

[5]Space limitations prevent the author from pursuing this issue here. Assessing the vitality of a language variety in relation to its association with native speakers would, for instance, entail questioning the legitimacy of identifying pidgins as languages. The status of makeshift languages such as Esperanto would also become problematic. Likewise, it would be misguided not to include the school system among the mechanisms of language transmission. Not doing so would make it difficult to account for the spread of major European lingua francas such as English and French around the world. It would also call for a reassessment of the status of Irish in Ireland as a natural language being passed by one generation to another.

of a language into a new variety, what is the relationship between language death and language birth? Can these processes be considered as two facets of the same process? Needless to say these are aspects of death that are untypical of organisms. More benefits from conceiving of languages as species or populations of idiolects become obvious below.

QUESTIONING SOME USUAL ACCOUNTS OF LANGUAGE BIRTH AND DEATH

As noted above, the birth of new language varieties is central to creolistics, to the study of indigenized varieties of European languages, and to historical dialectology.[6] The list of titles is too long to include here, and any choice of a representative list would be biased. Consistent with the genetic linguistics tradition, few scholars are interested in the birth process itself, except that in the case of creoles and indigenized varieties, some linguists acknowledge language contact and the influence of non-European languages on the European targets as important ecological factors.

As in the case of creoles, the emergence of new dialects in former settlement colonies has not been correlated with the concurrent erosion and death of other European languages that did not become the official languages of the relevant colonies, for instance, French, Dutch, Danish, Norwegian, and German, among a host of others, in the United States. Works such as Haugen (1953) and Clyne (2003), to cite two chronological extremes, are based more on language obsolescence than on the emergence of new varieties of the dominant language. That language contact is seldom invoked to account for the divergence of these new, colonial dialects of European languages—which has implicitly contributed to making the development of creoles so curious—remains an intriguing matter. Linguists have generally overlooked the topic of their birth itself, which very well can be discussed in relation to that of indigenized varieties of the same languages (see, e.g., Thomason & Kaufman 1988, Thomason 2001, Winford 2003). One important exception to the above bias, insofar as the evolution of English is concerned, is the growing literature on Hiberno-English, as represented, for example, by Kallen (1997).

[6]The foci have been different in these research areas. Most creolists seek to demonstrate that creoles (and pidgins) are natural and as rule-governed as other languages, whereas students of indigenized varieties argue that these varieties are as legitimate offspring of English as the varieties said to be "native" and are spoken in former settlement colonies such as the Americas or Australia, where populations of European descent are now majorities. (Creoles are associated primarily with island and coastal plantation settlement colonies of the Atlantic and Indian Oceans, where populations of non-European descent are now majorities.) Historical dialectology focuses mostly on the nonstandard vernaculars of former settlement colonies, almost overlooking the fact that the varieties spoken today in their European metropoles are just as new.

More specifically, Thomason (2001) correctly notes that history provides several instances of language death. However, the linguistics literature of the past two decades on language endangerment has rarely included comparisons with older cases in human history. As noted above, the growing scholarship on the subject matter has focused on the recent and ongoing attrition of the indigenous languages of former European colonies. In the vast majority of cases, these languages (especially the indigenous languages of the Americas and Australia) certainly have played a marginal role in the evolution of the European varieties that either have driven them to extinction or are threatening them. Thus it would be unjustified to expect the relevant literature to have related the topic of language death with that of language birth. One can, in fact, expect similar scholarship about Europe to have related these processes with the experience of several European languages that have become *langues minorées*.[7] As described below, capturing these parallel evolutions would have enabled us to better understand why languages have been dying so rapidly since the nineteenth century.

The literature generally has invoked globalization to account for the loss or endangerment of several non-European languages. Unfortunately few have articulated what globalization means. This phenomenon has been confused too often with McDonaldization, i.e., the spread of McDonald stores around the world (see, e.g., Nettle & Romaine 2000). Likewise, the literature says nothing about whether globalization is novel and how it relates to colonization. This connection is critical because the related applied literature on the revitalization of endangered languages seldom refers to the ecology that would be most favorable to the revitalization process. Would commitment on the part of the relevant linguistic communities alone suffice? Or would any conditions other than the precolonial ones, under which most of these languages thrived, be supportive of the revitalization efforts?

The vitality of languages cannot be dissociated from the socioeconomic interests and activities of their speakers. Native Americans have not been shifting from their native vernaculars to those of the European colonists because they have lost pride in their traditions, and the Celts have not either in giving up their indigenous languages

[7]Hazaël-Massieux (2000) reports an important distinction made by French sociolinguists between *langue minoritaire* (minority language) and *langue minorée* (undervalued and/or marginalized language). The latter need not be spoken by a minority population. Like Haitian Creole, it may be spoken by the majority population of a polity but is relegated to ethnographically "low" communicative functions. If this view is taken literally, most indigenous languages in former European colonies fall into this category because they are not associated with the "high(er)" communicative functions of their polities. (See Pandharipande 2003 regarding such situations in India.) Consistent with seemingly precocious predictions that 50%–90% of the world's languages will have vanished by the end of the twenty-first century, the approach misleadingly suggests the same outlook onto the coexistence of languages of the powerless and of the powerful everywhere. However, the history of the world shows that languages of the powerless often have been more resilient, or demonstrated more vitality, than those of the powerful. *Pace* Fishman (2003), there is much more ecological complexity and variability that must be considered on this subject matter, as attempted, for instance, by Pandharipande (2003).

in favor of Vulgar Latin—and later, the Romance languages—or English. The reasons for these shifts cannot be (so) different from those that led numerous Europeans to give up their heritage languages in favor of the dominant ones in the Americas and Australia.

Because language loss and endangerment to date have not been uniformly catastrophic in different parts of the world, one asks whether globalization has been uniform. Why are Native American languages more endangered in North America, where English has been so dominant, than in Latin America? Does any correlation exist between this discrepancy and the fact that in the Americas creoles developed more in former French and English plantation colonies than in Portuguese and Spanish ones? Do the reasons for all these cases of language loss differ from those that caused the loss of African languages in the New World?

Like other populations, language shift among Native Americans seems to be an adaptive response to changing socioeconomic conditions, under which their heritage languages have been undervalued and marginalized. Native Americans recognize the economic value of the European colonial languages supported by the new, global-economy world order. This explanation is consistent also with why indigenous languages in former exploitation colonies of Africa and Asia have been losing grounds not to European colonial languages but to (new) indigenous vernaculars (former lingua francas) associated with new indigenous urban life, such as Swahili in much of East Africa, Town Bemba in Zambia, Lingala in parts of the Democratic Republic of Congo and of the Republic of Congo, Wolof in Senegal, Malay in Indonesia and Malaysia, and Hindi in India. Globalization has not affected former exploitation colonies in the same way it affected former settlement colonies. Several factors contribute to making these new indigenous languages more realistic targets than the European colonial ones, for instance, the high rate of illiteracy, the scarcity of jobs requiring command of European languages, the fact that other jobs are accessible with command of an indigenous lingua franca (which is acquired by oral interaction with speakers of the language), and the fact that an inspiring urban culture is expressed also in the same non-European lingua franca. Below I return to this topic.

Invoking lack of pride or prestige to account for the loss of minority languages and of the *langues minorées* fails to explain why the Romance languages evolved from Vulgar Latin (the nonstandard variety) rather than from Classical Latin; why, where Latin prevailed, it was not offset by Ancient Greek, despite the higher prestige of the latter even among the Roman elite; and why Sanskrit is dead, or dying, despite all the prestige it carries relative to other Indic languages. Other ecological factors exist also that we should endeavor to identify, for instance, why part of the western Roman Empire romanized but most of the eastern part did not, despite the extended presence of the Romans in the territory;[8] or why in areas of the same eastern part of the Roman Empire Arabic managed to impose itself as an

[8]To be sure, Romanian is an important exception, to which must be added Aromanian and Megleno-Romanian, spoken by the Vlah minorities of Albania, Macedonia, and Greece (Friedman 2001). As the names suggest, they are related to Romanian.

important language (at the expense of both Greek and Latin) but nothing like this happened in the western part of the Empire. Answers to such questions should help scholars understand what ecological factors are particularly conducive to language endangerment and death.

Efforts to revitalize some of the endangered languages have been devoted largely to developing writing systems for them and generating written literature. Noble as they are, most of these endeavors have also confused revitalization, which promotes usage of a language in its community, with preservation, which does nothing more than preserve texts in (and accounts of) a language basically as museum artifacts. Classical Latin and Ancient Greek, among others, are cited as dead languages, despite the abundant literature available in them. The absence of a writing system has not led to the extinction of nonstandard varieties of the same European languages that have endangered non-European languages, as stigmatized as the nonstandard varieties have been for centuries now.[9] In fact, the new Indo-European vernaculars spoken in European settlement colonies of the Americas and Australia have developed from the contact of many of these varieties among themselves—not of standard varieties. Such evolutions shows that lack of prestige does not equate with lack of vitality. Likewise, despite numerous predictions of their imminent death, unwritten nonstandard vernaculars such as Gullah and African American Vernacular English have shown much resilience (Mufwene 1994, 1997).[10]

A HISTORICAL PERSPECTIVE ON LANGUAGE BIRTH AND DEATH

The Recent Past

The correlation of language death with globalization as an economic network of production and consumption interdependencies is partly correct. However, it does not uniformly affect the whole world, especially when it is conceived of at the

[9]One should remember here that terms such as *patois* and *brogue* used in reference to nonstandard varieties of French and English, respectively—and the former also in reference to Celtic languages in rural France—have had negative connotations in part because they are generally unwritten. Earlier uses of the term jargon, associated also with some contact language varieties, have similar negative connotations of "unintelligible," "meaningless," or "gibberish."

[10]Since DeCamp's (1971) study, which repeats a hypothesis conjectured already by Schuchardt (1914) and Bloomfield (1933), several creoles have been assumed by linguists to die by a process misidentified as decreolization (Mufwene 1994, 2001). However, varieties such as Jamaican Creole (ironically the focus of DeCamp's own speculation) are not only still thriving but also developing more divergent varieties such as "Dread Talk" (Pollard 2000). Mufwene (1997) argues that Gullah may be dying for a reason independent of "decreolization" qua debasilectalization, e.g., the massive exodus of its speakers to the city, where the variety is given up not only because it is stigmatized but also because it is economically useless in the urban environment.

scale of multinational corporations that run the economies of the most industrial nations of North America, Western Europe, Japan, Australia, and some city-states such as Singapore and Hong Kong. One should bear in mind also that globalization as explained here can be very local, as in the case of many aspects of American industry such as food production. It often applies to regional organizations like the European Union and the Association of South East Asian Nations, in which partners set up privileged trade and/or production relations.

Globalization seems to have exerted the greatest impact on languages at mostly the local level, and the impact has been more disastrous to indigenous languages in former settlement colonies than to those in exploitation colonies. This differential evolution reflects the fact that in settlement colonies the European colonists sought to create new Europes outside their metropoles (Crosby 1986) from which they inherited the ideology of nation-states ideally unified by one single language. As the European populations became the majority in their new nations, they adopted a dominant or official language for branches of their government, in the emergent global industry, and in the school system. The chosen language gradually penetrated the private domains of citizens' lives to the point that it became the vernacular spoken by almost everybody.

To be sure, the shift from other European languages to the dominant one was not sudden, nor did it affect all populations and their respective members concurrently. The slaves everywhere were the first to lose their ancestral languages, not so much because they were forbidden to speak them or were always put in situations so multilingual that they could not do so, but because of the way the plantation societies developed from earlier homesteads. As explained by Chaudenson (1992, 2001), the latter, farm-size dwellings, in which the slaves were the minority and well-integrated into family units, did not favor the retention of African languages. This outcome of language competition resulted because creole children in these settings learned to speak the colonial European languages rather than the language of their African parents. Creole children were mixed and looked after together, regardless of race, while all the healthy adults worked together to develop the colonial economic infrastructure. Moreover, the African-born slaves typically did not form a critical mass to continue speaking their languages among themselves, even if someone who spoke the same language worked in the same or a nearby homestead.

As some of the homesteads became large plantations, in which African-born slaves would gradually become the majority, the creole and, later, the seasoned slaves speaking modified varieties of the colonial languages (be they creoles or other nonstandard varieties) became linguistic models, similar to how city-born children in Africa serve as models for rural-born children. This ethnographic state of affairs played a central role in favoring language shift, and therefore loss, in the settlement colonies. By the founder principle, the newcomers simply found it more practical to learn the vernacular spoken by the slaves who preceded them, even if they were lucky enough to find someone with whom they could speak a common African language in private. The same founder principle accounts for language shift and loss among post-Abolition indentured laborers from Africa and

Asia who gradually assimilated to the creole ex-slaves. Neither their initial social isolation nor their relative ethnolinguistic homogeneity could prevent the change of vernaculars. (See, e.g., Mohan & Zador 1986 and Bhatia 1988 regarding the Indian indentured laborers, Ferreira 1999 regarding the Portuguese, and Warner-Lewis 1996 regarding the Yoruba, all of these cases applying to Trinidad.) In fact, the stigmatization of the identured laborers by the Creoles must have exerted more pressure on them to shift from their heritage vernaculars to Creole. The pressure to avoid the stigma as "uncivilized" was additional to the basic necessity to use the local language to adapt linguistically to the new socioeconomic world order.

For the same reason of adaptation to a changing socioeconomic ecology, the European populations that spoke languages other than the dominant one gave up their ancestral vernaculars, quite gradually, in a process that would continue until the twentieth century. (See, e.g., Haugen 1953, regarding the Scandinavians, and Salmons 2003, regarding the Germans). The main reason for the protracted shift is that the Europeans, especially those who did not come as indentured servants, were nationally segregated (see, e.g., Fischer 1989) and could continue to use their ancestral languages as vernaculars within their ethnic communities. Not only are American cities nowadays still segregated into white and black neighborhoods, but also they have inherited from the pre–World War II period names such as Irish, Italian, and German neighborhoods as a legacy of the way Europeans were segregated even among themselves. While they lasted, the maintenance of these national identities and speakers' abilities within the relevant communities to run local business in their ancestral vernaculars (Salmons 2003)[11] only decelerated the language shift process.

These developments suggest that in losing their indigenous languages Native Americans have followed the evolutionary trajectory already taken by immigrants to their land, who were developing an economic system that made obselete the Native American one. Thus, ecological pressures for survival forced Native Americans to adapt to the new world order, which entailed some command of the local dominant European language to earn a living. The language shift proceeded faster where miscegenation with the newcomers was allowed. It was made possible otherwise by exodus to the city and other places for jobs. Basically language loss among Native Americans has been a concomitant process of Americanization in the sense of departure from their ancestral socioeconomic lifestyles to those belonging to the European immigrants.

The fact that fewer Native American languages have vanished in Latin America than in North America suggests that globalization has not proceeded at the same speed in settlement colonies. The differential evolution seems to reflect the kind of economy that the European settlers developed and/or the kind of physical

[11]Salmons (2003) reports that the Germans in Wisconsin owned parochial schools and published newspapers and other literature in their languages until the readership waned because an increasing number of community members were attracted by the larger, urban American global economy.

ecological challenges they faced in spreading from the Atlantic coast. For instance, the Amazon forest has been difficult and slow for the colonists to penetrate, and the Amazon is precisely where the highest concentration of Native American languages can be found today. It is not by accident that deforestation and the immediate impact of this exploitation on the indigenous population have awakened our awareness of language endangerment, on the model of species endangerment in macroecology. Deforestation has made obvious the fact that changes in the habitat and economic activities of a population bear on the vitality of its language and culture, as its members adapt to new lifestyles. More languages have died in North America because changes in its socioeconomic ecology have been more advanced and have affected its populations more pervasively. Basically the same explanation applies to the extensive loss of indigenous languages in Australia. The less marginalized the Natives are from the local global economy system, the more likely they are to lose their heritage.

This explanation does not apply to former exploitation colonies of Africa and Asia, where relatively fewer indigenous languages are threatened and where they are typically endangered not by the European colonial languages but by other indigenous languages. The latter have sometimes stood in the way of the demographic expansion of their European competitors, as in the case of Lingala in the Democratic Republic of Congo and Swahili in Tanzania. Numerous ecological reasons explain this differential development: (*a*) The European colonizers hardly intended to settle permanently in these continents, although many of them wound up doing so; (*b*) the European exploitation colony system hardly intended to share its languages with the indigenous populations, preferring to teach the colonial languages only to an elite class of auxiliaries that would serve as intermediaries between the colonizers and the colonized (see, e.g., Brutt-Griffler 2002a, 2002b); (*c*) unlike in the earlier cases that produced pidgins (such as in Nigeria, Cameroon, and Papua New Guinea), European languages were introduced in the exploitation colonies in the nineteenth century as lingua francas on the basis of scholastic inputs rather than as vernaculars naturalistically transmitted outside the school system; (*d*) despite the higher status they gained from Western-style education and association with the now-indigenized varieties of the European colonial languages, most of the elite have not severed ties with their ancestral traditions—they have continued to use their indigenous languages as vernaculars and/or as necessary lingua francas for communication with their less-affluent relatives and with the other members of their ethnic groups.

One must remember that while settlement colonization has gradually reduced—though it has not yet fully eliminated—ethnic identities and languages among populations of the new polities (especially among non-Europeans), exploitation colonization has retained them, thus preserving the function of most indigenous languages as markers of ethnic identity. Only the city, in Africa at least, has come close to reducing ethnic identities and languages, acting like sugar cane plantations and rice fields of the Atlantic and Indian Ocean settlement colonies, by being a contact setting in which ethnolinguistically heterogeneous populations interact

regularly with each other in a common language that becomes their vernacular. The gradual obliteration of ethnic boundaries, caused in part by interethnic marriages, is an important factor in the loss of ethnic languages.[12]

Dialogue Between the Recent and Distant Pasts

Languages have been dying for a long time in human history (e.g., Hagège 2000, Mufwene 2001, Thomason 2001). Although linguists have correctly noted that language death has proceeded at an unprecedented pace during the last century, they have still not explained fully why languages die and what or who kills them. As shown above, language death has not been uniform in different parts of the world either. This nonuniformity also may have been the case in the distant past. It should thus be rewarding to establish a heuristic bridge between the distant and the recent pasts to learn what they can tell us about each other. As space is limited here, I focus briefly on language evolution in the western side of the Roman Empire, about which there is ample information on language evolution, and I focus on the Romance countries and the British Isles.

To be sure, the Romans do not seem to have colonized Europe and the rest of the Mediterranean world on the model of recent European exploitation or settlement colonies.[13] If anything, it was likely a combination of both styles, if we consider the army veterans who retired and became land owners in Gaul, for instance, though the economic exploitation of the colonies suggests more of the exploitation style (Bauer 1996). There is little evidence also that the Romans claimed full nationwide geographical spaces as colonies. According to Polomé (1983), the Romans likely took more interest in developing trade and military centers, a practice that leads him to equate the Romanization of these colonies with urbanization. From

[12]Students of creolization in Hawaii should remember that sugar cane cultivation did not proceed here the same way it did in the Caribbean and Indian Oceans. Sugar cane cultivation in Hawaii involved no slavery, the indentured laborers came at different times from only a handful of ethnic groups (Chinese, Japanese, Portuguese, Korean, and Philippino), and they were not mixed on the plantations, where they lived in ethnically segregated houses and continued to speak their ancestral languages as vernaculars. Unlike in the other plantation settlement colonies, Hawaiian Creole English developed in the city, where there was more cross-ethnic interaction, and Hawaiian Pidgin English developed concurrently (not before) on the plantations (Roberts 1998). According to Chaudenson (1992, 2001) and Mufwene (2001), plantation settlement colonies elsewhere produced no ecological conditions favorable to the development of Pidgin either prior to or concurrently with the emergence of Creole. It is thus clear why ethnic distinctions and the related languages have survived among descendants of the indentured laborers in Hawaii but not among descendants of slaves in other settlement colonies (Mufwene 2004).

[13]Trade colonization is not worth considering here because the structure of the Empire seems to rule it out. Roman presence in the Empire was permanent, not sporadic. In recent history, trade colonies generally evolved into settlement or exploitation colonies, which suggests that the same evolution must have happened during Roman colonization. (See also Bauer 1996.)

the military and administrative domination point of view, they created networks of towns interconnected by good road and water transportation infrastructures, all ultimately leading to Rome.[14] The Romans formed alliances with local rulers, whom they coaxed to administer their territories in the Roman style, assisted with their Roman technical expertise (including military), and enticed to work in the economic interest of Rome (Garnsey & Saller 1987). These leaders were taught Classical Latin, their children were sent to Roman schools, they were granted Roman citizenship, and they could compete with the Romans themselves for offices as high as generalship, provincial governorship, and the Roman Senate. Some of them, such as Marcus Ulpius Traianus (born in Spain), Lucius Septimus Severus (born in North Africa), and Marcus Aurelius Antoninus Caesar (born in Gaul), even rose to become emperors.[15]

Indirect evidence that the Romans did not colonize Europe on the settlement model comes from the fact that they left the Western Empire in the fifth century. However, the local rulers, who had Romanized already, maintained Latin as the language of their administrations, while Vulgar Latin continued to be spoken among those who had interacted regularly with the legionaries, whose children conceived with indigenous women took advantage of their knowledge of the colonial language to access important offices. Missionaries and the intellectual elite continued to use Classical Latin, but linguistic evidence suggests that this standard and scholastic variety had little, if anything at all, to do with the development of the Romance languages.

More significant is that Roman colonies were not fully Latinized in the fifth century. When the Romans left, lower classes (the population majority) continued to use Celtic languages, especially in rural areas. According to Polomé (1983), the nonruling classes were largely multilingual in a Celtic language, Latin, and sometimes also Greek. This finding explains to some extent why it took up to the twentieth century before the indigenous population of France, for instance, would become fully francophone. The process of language shift was protracted and did not affect all segments of the population concurrently.[16]

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[14]In a recent, still unpublished manuscript, Chaudenson emphasizes the role of waterways before the invention of trains, planes, and telecommunication in spreading languages outside their homelands. I return to the significance of geographical interconnectedness in economy below. Indeed, the Roman Empire's economic system instantiates some of the early stages of globalization.

[15]One must realize that Rome was too small to provide all the legionaries needed in the Roman army and the manpower necessary to staff its colonial administration. Latin was spread outside Rome largely by foreign mercenaries in the Roman legions, similar to how English is spreading today as a world lingua franca significantly by nonnative speakers using it and teaching it to others in their respective countries.

[16]Bauer (1996, pp. 32) argues that Gaulish (her generic term for Celtic language varieties spoken in Gaul) was already extinct by the seventh century, being replaced by nascent Romance vernaculars similar to Provençal and Occitan. Lodge (1993) presents a similar view. Breton, which was only moribund in the twentieth century, was brought to France

The fact that no Romance language developed at all in England—although Latin continued to be used there until the eighteenth century by the missionaries, by the intellectual elite, and in the Hanseatic trade—confirms not only the above hypothesis but also indirectly that the real shift to Latin as a vernacular for the masses of the populations in today's Romance countries took place only after the Romans had left. The challenge for linguists is to articulate the specific post-Roman socioeconomic dynamics that permitted the spread of Latin within the larger and overwhelming majority of commoner populations, the role of the growing number of towns and schools (noted by Bauer 1996 and Woolf 1998) notwithstanding. The protracted development of the Romance languages under the substrate influence of the Celtic languages is correlated with the gradual loss of the latter, as fewer and fewer children found it useful to acquire the Celtic languages and learned instead the derivatives of Latin now identified as Romance languages. Today the Celtic languages and other more indigenous languages similar to Basque, formerly spoken in the same territories, have vanished. If scholars wish to learn more about language vitality, more specifically how some languages die and some others survive, then it would help to identify the particular socioeconomic conditions that have helped Basque survive.

We could also explore why England, whose native populations during the Roman rule were also Celtic, has Anglicized (i.e., Germanicized) instead. If the use of Latin during the Roman rule proceeded in the same way in England as it did in continental Europe, then it is justified for scholars to assume that the Germanic colonizers (Jutes, Angles, and Saxons), who replaced the Romans, used their nonindigenous languages in their military and political institutions. It is difficult, however, to avoid asking, for the sake of comparison, why Iberia and Gaul continued to Romanize despite the later colonization of the former by the Arabs from the seventh to the fifteenth centuries and that of the latter by the Franks from the fifth to the ninth centuries.

Space limitations prevent me from addressing this question and other related ones in detail here. To suffice, these questions underscore the need to distinguish between different colonization styles and the different ways the colonizers/colonists interacted with the indigenous populations. It now seems necessary also to distinguish between different styles of settlement colonization. After all, the Franks did settle in Gaul and eventually mixed with the Celtic populations. Could it be that the Jutes, Angles, and Saxons had less respect for the Roman legacy than did the Franks, as suggested by Lodge (1993) and Bauer (1996)? The fact that fewer than a handful of their indigenous languages (notably Welsh and Irish) are still spoken

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from England around the fifth century. Why its fate was different from that of the indigenous Celtic languages is not clear. Thus, the term *patois* often used in the history of France in reference to varieties considered unintelligible, chiefly to Parisians, must have applied to many such rural Romance varieties. Regardless of whether the Celtic languages had died by the seventh century, their death was gradual and the evolution of French into its present-day form was even more protracted. Latin was acquired by the masses of the population after the Romans had left.

today confirms the hypothesis that the insular Celts have Germanicized culturally and linguistically. Linguistic evidence suggests that the gradual shift must have occurred mostly after the languages of the Germanic colonizers mixed to produce Old English (see, e.g., Vennemann 2001, 2002), which ultimately evolved into modern English. In contrast, the Franks surrendered their Germanic traditions, embracing the language and religion of the indigenous rulers, Latin and Catholicism. More questions than I can address arise now about the differences in the ways the Germanics colonized the Celts north and south of the Channel. Whether the Arabs colonized Iberia on the model of the Franks or simply applied exploitation colonization is even less clear. Future scholarship should address such questions for linguistics to be better informed about the ecology of language death.

The above cases show also that language birth and death often proceed concurrently, though the balance sheet in almost all these territories likely has worked at the expense of the indigenous languages. This conclusion is plausible, especially when one does not consider the fact that the prevailing languages have evolved into several varieties and we know nothing about their future.[17] The histories of England, France, and Iberia show also that the colonizers/colonists are not always successful in imposing their languages. Like the colonization of Gaul by the Franks, the colonization of England by the Norse, the Danes, and the Norman French did not produce language shifts of any consequence in the history of this territory, except that the Anglicization of the Normans (Lüdtke 1995) led to the development of a standard English, which is largely influenced by French, though the influence of Latin as a scholarly language cannot be overlooked either. No German is spoken as a vernacular in France outside Alsace, and no Arabic is spoken as a vernacular in Spain or Portugal today, except among groups of recent immigrants. And yet today, Arabic is the vernacular of North Africa, which was colonized also by the Arabs in the seventh century. Does this mean that the Arabs applied different colonization styles in different parts of the world, thus perhaps applying a Roman-to-Frankish kind of exploitation colonization in Iberia, settlement colonization in North Africa, and some sort of trade colonization in South and East Asia? The linguistic consequences of Arabic colonization clearly vary in different parts of the world, with Arabic functioning mostly as a religious language east of the Middle East.

CONCLUSION

To summarize the review at this point without leaving out many other important considerations relevant to its subject matter is difficult. I use this section to survey some of them, connecting them indirectly to the above discussions. As noted

[17]At the worldwide scale we have no idea whether 1000 years from today the different varieties of English, for instance, still will be considered the same language. The fact that some of them already have been disfranchised as "indigenized" raises the question of whether some day they may not be considered separate languages all together in the same way that creoles already are.

in Mufwene (2001), parallelisms exist between language evolution in England since the Germanic colonization, on the one hand, and language evolution in North America since the European colonization, on the other hand. In both cases the invaders came to settle new homes (Crosby 1986). Oversimplifying things somewhat, note that in England the languages of the Germanics koinéized into a new variety now called English and gradually displaced the indigenous Celtic languages. In North America, as in other recent settlement colonies, the varieties brought from the major colonial metropole likewise koinéized into new colonial varieties and prevailed over the languages of both other European nations and indigenous populations. The Celtic languages have died as gradually as the Native American languages are dying now, regardless of the difference in speed.

Some similarities appear between former European exploitation colonies of Asia and Africa, on the one hand, and Southwestern Europe as a former constellation of Roman colonies, on the other. The most significant of these similarities may be the fact that in both cases the language of the former colonizer has (initially) been retained after independence as the language for the ethnographically high functions of their societies. From this finding arises the following question: Are the indigenized varieties of European languages likely to displace the indigenous languages in the same way as the indigenization of Latin has in the now-Romance countries?

This is really an open question because a great deal depends on how the economies of the former exploitation colonies fare and how the masses of the population are engaged in them. The emergence of an evolutionary path similar to that of the Romance countries seems possible in economically successful, though small, polities such as Singapore, where political leaders have promoted English as the main language for the overall population. However, one cannot ignore the different language evolution course followed by another successful city state, Hong Kong, where usage of English in the white-collar sector of the economy has had no negative impact on Cantonese. The demographic dominance of the Cantonese in Hong Kong, facilitated by the geographical proximity of Canton, makes this city an endogenous contact setting more favorable to the retention of its major indigenous language. Although the Chinese are an overwhelming majority in Singapore, they speak several Chinese varieties that are not necessarily mutually intelligible, and they are surrounded by Malay-speaking countries, a situation that makes the city an exogenous contact setting more likely to thrive with a colonial language. Unfortunately theories of evolution do not predict the future, and only the future will rule on these speculations.

For the vast majority of former exploitation colonies, one important factor bearing on the fate of the European languages is the concurrent development of indigenous lingua francas that function also as urban vernaculars of the overwhelming proletarian majorities. In kind, these nations share this particular evolutionary trajectory with former plantation settlement colonies, which were indeed ruled like exploitation colonies after the abolition of slavery and where creoles also are the primary vernaculars of their proletarian majorities. To the extent that creoles are

considered separate languages by linguists, the economies of all these places have functioned in more than one language: the indigenized/local standard variety of the European language for the white-collar sector of the economy and an indigenous lingua franca or some variety of Creole (mesolectal or basilectal) for the other sectors of the economy. With the unemployment rate quite high and most of the available jobs limited to the nonwhite-collar sector, most of the populations have had no incentive to speak the European language, even if they learned it at school. The elite continue to speak some variety of Creole—as is obvious in Haiti (Dejean 1993) and in Jamaica (Mufwene 2003)—or any of the indigenous languages to remain in touch with less-fortunate members of their societies.[18] There is thus an ethnographic division of labor that does not make European languages a threat to indigenous ones. However, in the same way that, thanks to the urban lifestyle associated with it, the then-indigenizing Vulgar Latin of today's Romance countries was attractive to rural populations, the urban vernaculars are attractive to rural African populations in particular. (See also Pandharipande 2003 for a similar situation in India). Although one can argue that the prestige of urban lifestyle is having a negative impact on rural lifestyle, the notion of prestige itself, which has been invoked often as an important factor in language attrition, must be reconsidered in rather complex relative terms. Otherwise one would have expected European colonial languages to have given a fatal blow to the relevant indigenous vernaculars.

Although there are undoubtedly several endangered African and Asian languages, it is evident that language attrition is proceeding slower in Africa and Asia than it is in Europe and its former settlement colonies. Predictions of the imminent extinction of non-European languages around the world, as if the process were uniform everywhere, certainly must be reframed in a perspective that reflects the complexity of the present state of competition and selection among the world's languages.

We also must reassess the adequacy of terms such as "language war," "linguicide," and "killer language" in our academic discourse. These seem to be worse misnomers than the terms "competition" and "selection," which I prefer. The latter two terms concern values that speakers, as the immediate ecology of linguistic species (Mufwene 2001, 2003), assign to the languages in their community. These

[18]It is debatable whether the linguistic situation is that different in European countries and former settlement colonies where noncreole varieties of European languages have prevailed. Acrolectal varieties are used in the white-collar sector of the economy, whereas other varieties, including basilectal ones, are used in the other sectors. These nonstandard varieties are not endangered by their acrolectal counterparts. The few in this predicament, like the Ocracoke Brogue, are affected by neighboring nonstandard varieties (Wolfram & Schilling Estes 1995). Conservative, rural varieties of African American English (including Gullah) are influenced more by urban varieties of the same language than by white vernaculars (Bailey & Cukor-Avila 2005, Mufwene 1997, Wolfram & Thomas 2002). In general, non-European languages in former settlement colonies also may have been endangered by nonstandard vernaculars rather than by the standard varieties of the same languages.

values determine which particular language they find more useful to their lives and, conversely, which one they can afford not to speak and eventually do without. A major problem with the former terms is that they overshadow the agency of speakers as those who actually select and give up particular languages (although they are not necessarily aware of their acts), a choice that allows some to thrive and dooms others to extinction.

Languages do not engage in wars either, though they coexist in competition, like biological species. Languages are more endangered when populations speaking them interact peacefully with each other. As noted above, cases of language extinction associated with genocide remain a very small minority in the history of mankind. Moreover, in language competition, populations rarely engage in activities that endanger some languages in a concerted way, certainly unlike sport teams that anticipate some outcomes. Language endangerment is the cumulative outcome of individual practices of speakers, though communal patterns emerge from the ways their individual acts affect the vitality of their languages. The unplanned cumulation of individuals' practices into a communal behavior explains why language attrition and death are such protracted processes. They proceed in nonuniform ways in the relevant communities, affecting only subsets of the relevant population at a time.

We can learn one last thing from language endangerment in England and the Romance countries. It has everything to do with colonization and globalization, with the former interpreted as the political and economic domination of a population by another and the latter interpreted as an economic network in which the more powerful control production and consumption interdependencies. The two seem to go hand in hand but not in the same ways everywhere. Globalization proceeds faster and is more complex in the more recent than in the more distant cases of colonization and is faster and more pervasive in settlement colonies than in exploitation and trade colonies. Globalization cannot be confused with McDonaldization as the worldwide distribution of McDonald's and other fast-food restaurants as symbols of American lifestyle. McDonaldization, which is similar to the French terms *mondialisation* (universalization), is made possible by globalization but not the other way around. Moreover, as noted above, globalization is often local or regional. The smaller number of American fast-food restaurants and the shift of socioeconomic status associated with them in some former exploitation colonies, where one can be invited to McDonald's for a good dinner, is also an indication of the nonuniform way in which globalization has proceeded. Globalization has created economic inequities among the world's nations (Faraclas 2001, Stiglitz 2002, Blommaert 2003), and those inequities seem to be correlated with the uneven way in which language endangerment is proceeding.

I assume that primitive forms of colonization and globalization must have started with the domination of hunter gatherers by agriculturalists (see also Harmon 2002) and that these processes already had become more complex by the time the capitalist system had evolved in Europe, producing nation-states associated typically with single national languages and leading to the European colonization of the rest of the world over the past half millennium. Although political colonization is

no longer in style, economic colonization has become more insidious and globalization much more complex, affecting former exploitation colonies differently from Europe and its former settlement colonies. From the language endangerment point of view, the settlement colonies are almost replicating the experience of Europe, where only 3% of the world languages are spoken today (Mayor & Bindé 2001). We have no clear picture of how language shift will proceed in most former exploitation colonies. However costly language endangerment is to typological research in linguistics, we cannot forget the fact the speakers shift languages as part of their adaptive responses to changing socioeconomic conditions (see also Pandharipande 2003).

Linguists concerned with rights of languages must ask themselves whether these rights prevail over the right of speakers to adapt competitively to their new socioeconomic ecologies. Advocates of the revitalization of endangered languages must tell us whether the enterprise is possible without restoring the previous socioeconomic ecologies that had sustained them. Like cultures, languages are dynamic, complex adaptive systems that cannot be considered independent of the adaptive needs of their speakers. In fact languages are constantly being shaped by those who speak them, precisely what the indigenization of European languages illustrates. Moreover, like features associated with them, languages and cultures at any given point in time are commodities with "market values"—"linguistic capitals" according to Bourdieu (1991)—which are subject to competition and selection. Speakers decide what is useful to them, and they determine history relative to their current needs without any foresight. Such has been history in population genetics, and such is it among humans, despite speakers' occasional consciousness of it. It is much easier to intervene in what affects our surroundings than in what affects ourselves in our spontaneous behavior.

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