Once taken as primordial, ethnic groups are now recognized to be historical creations, products of tangible processes of administrative categorization, political mobilization, and socialization. Although this now conventional wisdom has many origins, studies of colonialism provide a particularly rich source to document it. For example, Howard Wolpe shows that the Igbo of Nigeria were a product of colonial boundaries.\(^1\) Terence Ranger shows that the Manyika of Zimbabwe were “created” by missionaries.\(^2\) Crawford Young traces the origins of the Ngala of present-day Congo to Henry Stanley’s misinformed labeling of the people he encountered on his river explorations.\(^3\) Philip Gourevitch shows that the emergence of Hutus and Tutsis as distinct identity groups in Rwanda was a product of Belgian administrative fiat.\(^4\)

Such studies provide a crucial warning against treating the existence of ethnic groups as unproblematic. They also teach important lessons about the continuing impact of colonialism on postcolonial societies. Missing from them, however, is a story about how colonialism affected not just the formation of ethnic groups, but also their numbers, relative sizes, and spatial distributions. They do not tell how colonial administrative practices were responsible for creating not just groups, but also the landscape of ethnic cleavages that structure contemporary political and social life.

The ethnic landscape is important because the dynamics of ethnic competition and conflict stem not from the existence of ethnic groups but from the geometry of their relative sizes and geographic locations. For example, countries containing a single large ethnic group or two evenly matched groups have been found to be more violence-prone than those containing a larger number of equally sized groups.\(^5\) Countries with a large number of small ethnic groups have been found to have slower rates of economic growth than countries that are more ethnically homogeneous.\(^6\) Indeed, the entire body of research that employs indices of ethnic fractionalization to account for outcomes like economic growth rates, political instability, and the outbreak and duration of civil wars embraces the idea that the numbers and relative sizes of ethnic groups in the political system are central to the explanation; after all, the ethnic fractionalization index measures these factors.\(^7\) Apart from their numbers
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and sizes, groups' physical distribution around the country is also important. Studies that explain ethnic conflict in terms of a “security dilemma” emphasize that the intensity of the dilemma depends largely on how intermixed the groups are. Indeed, whether stated explicitly or not, the link between the characteristics of the cleavage structure and the likelihood of conflict is an underlying assumption in almost all explanations of ethnic politics and communal strife. All explanations of ethnic conflict do not have to include accounts of the ethnic landscape's origins. However, truly comprehensive explanations of the causes and dynamics of communal conflicts must include such accounts, just as they now often include accounts of the origins of the groups themselves.

In present-day Zambia party formation, coalition building, and voting behavior all tend to follow language group lines. Although linguistic loyalties are not the only factor at work, the dynamics of contemporary Zambian politics are shaped by the configuration of the linguistic landscape. The number of major language groups (four), the location of their speakers in the country, and the size of each language community are the building blocks of any explanation of Zambia's politics. Hence it is important to understand how this landscape came into existence. For example, the Bemba-speaking community dominates Zambian politics. The supremacy of the Bemba group is directly related to its large size and its domination of the politically crucial mining towns of the copperbelt. Yet in the precolonial era Bemba speakers accounted for less than ten percent of the population of present-day Zambia and lived more than a hundred miles from the rail line. It is necessary to know how they acquired their present size and geographical location to understand their political weight today, and it is in turn necessary to focus on the cleavage-shaping effects of colonialism. Specific actions and administrative policies undertaken by the colonial state and its missionary and mining company allies helped shape the contemporary Zambian linguistic landscape. These actions and policies led to the consolidation of the language map from dozens to just four and to the four language groups' physical location in Zambia.

The Consolidation of Languages in Zambia

When the first Europeans reached the territory that comprises present-day Zambia, language use corresponded almost perfectly with tribal affiliation. With the exception of a handful of trading peoples who learned regional languages of commerce, Africans tended to speak the single language or dialect of their local community, and each community had its own language or dialect. At the beginning of the colonial era Zambia (Northern Rhodesia at the time) was a Babel of more than fifty languages.

By the end of the colonial era patterns of language use had consolidated considerably. As early as the late 1940s Lord Hailey could report the emergence of a set of distinct regional languages in Northern Rhodesia: Silozi in the west, Chichewa in the
east, and Chiwemba in the north. Although Hailey was silent on the extent of linguistic consolidation in the south, others writing during this period noted the emergence of Citonga as the dominant language there.

By the time of Zambian independence in 1964, Bemba (what Hailey called Chiwemba), Nyanja (Chichewa), Tonga (Citonga), and Lozi (Silozi) had achieved the status of first among equals. By 1990, the first year for which reliable information is available, fully 78.8 percent of the Zambian population used one of these four languages as either their first or second languages of communication. Since probably no more than a quarter of the population spoke these languages a century before, this figure points to a remarkable—and rapid—consolidation of language use.

Figure 1 compares the percentage of the contemporary national population that uses one of seventeen major Zambian languages as a first or second language of communication with the estimated percentage of the population that used each language prior to the colonial era. As indicated, the shares of the population using Bemba, Nyanja, Tonga, and Lozi in the precolonial period (indicated by the white bars) were only slightly larger than the shares using other languages. By 1990, however, these four languages (indicated by the black bars) dominated the others. Close to 40 percent of Zambians used Bemba as their first or second language of communication by 1990; just over 30 percent used Nyanja; about 12 percent used Tonga; and just under 10 percent used Lozi. After these four languages, language frequency dropped off considerably. The next most frequently used languages, Tumbuka and Lamba, were used by only 3.8 and 3 percent of Zambians, respectively.

**Figure 1** Language Use in Zambia/Northern Rhodesia in 1930 and 1990

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*Source: Republic of Zambia 1990 Census of Population and Housing, Northern Rhodesia Annual Report on Native Affairs, 1930.*
Part of the reason why Bemba, Nyanja, Tonga, and Lozi look as dominant as they do is because people came to learn and use these languages in lieu of the languages that were traditionally spoken by members of their tribes. Another important reason is that, over time, Zambians came to develop multilingual repertoires, usually speaking one language at home (often their tribal language) and one or more others for commercial or social exchanges with members of other tribes.¹⁶ Bemba and Nyanja and to a lesser degree Tonga and Lozi emerged, along with English, as the key languages that played this second role. Figure 1 suggests that, while a small part of the growth of these four languages came from stealing shares from others, much of it came from the acquisition of Bemba, Nyanja, Tonga, or Lozi as second languages of communication. Indeed, 25 percent of the people who speak one of these four languages do so as their second language.

How can this dramatic consolidation of language use be explained? Some of it undoubtedly took place between the end of the colonial era and 1990. Yet postcolonial consolidation continues a trend that originated before independence. Three colonial era forces, in particular, were responsible for the consolidation of language use in Zambia: missionary activity, colonial education policies, and labor migration.

**Missionary Activity** Between 1885 and 1945, nearly two dozen different missionary societies set up shop in Northern Rhodesia, establishing more than a hundred mission stations around the country.¹⁷ Although formally established as evangelical outposts, these mission stations had as important an impact on the territory’s linguistic landscape as they did on its religious life. Language was central to the missionary enterprise for a simple reason: in order to teach the gospel, the Bible first had to be translated into the local language. And before the Bible could be translated, the local language itself had to be written down. Early missionaries in Northern Rhodesia therefore doubled as linguists. Many of them devoted as much energy to writing grammars, compiling dictionaries, and translating hymns, religious books, and readers into new written vernaculars as they did to proselytizing.

Because the transcription of an African language required an enormous investment, “it was only natural to amortize it by maximizing the diffusion of the standardized language forms to neighboring groups, where possible.”¹⁸ Missionary societies did this by locating their stations, when they could, in areas where large numbers of people already spoke the same language.¹⁹ In addition, once they had prepared a grammar and translated religious texts into a local language, they extended the use of that language to neighboring peoples who spoke structurally similar dialects. The local vernaculars into which the Bible was first translated and for which grammars and dictionaries were first written were thus “exported” from the domains where they were originally spoken to adjacent areas, where they came to coexist with or replace the languages that were previously in use.²⁰
The principal mechanism through which this “export” of vernaculars came to affect actual language use was mission-sponsored African education. By 1925, the year the colonial government entered the education field for the first time, missionaries were operating close to 2,000 schools throughout Northern Rhodesia with combined enrollments of more than 89,000.21 As “essentially...literacy centers, supplemented by training in whatever skills or interests the particular missionary possessed,” these early schools had an enormous effect on patterns of language use.22 Over time, areas where mission stations proliferated tended to coincide with increasing linguistic homogeneity.

Table 1 reports the results of a statistical analysis of the relationship between missionary educational activities and the standardization of language use in Zambia’s fifty-seven districts. The dependent variable is the ratio of tribal to linguistic heterogeneity in each district.23 A perfect correspondence between tribal affiliation and language use (as I argue was the case at the beginning of the colonial era) yields a value of one. Increasing linguistic homogenization is reflected in progressively larger values greater than one, since the denominator (linguistic fractionalization) decreases as the numerator (tribal fractionalization) remains constant. This ratio thus serves as an excellent indicator of the degree of linguistic homogenization that has taken place in the district since the beginning of the colonial era. An advantage of defining the dependent variable in this manner is that it automatically controls for the tendency of missionary societies to locate their stations in districts that were already linguistically homogeneous.

Measuring the impact of missionary activities, the key independent variable, is somewhat more complicated. I began by identifying the present-day districts in

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<th>Dependent Variable is Ratio of Tribal to Linguistic Heterogeneity in the District</th>
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* significant at the 0.05 level
** significant at the 0.01 level
N=57
which every mission station established in Northern Rhodesia between 1880 and 1960 was located. After recording the number of stations in each district, I weighted this value by the number of decades that each station was in operation, thereby producing a district level count of station decades. Since education was the mechanism through which missionary activities affected language use, I then weighted each station’s impact a second time by the educational commitment of the missionary society with which it was affiliated. Societies strongly committed to African education, like the Free Church of Scotland, the London Missionary Society, and the Universities Mission to Central Africa, received a score of five. Societies with very weak commitments to African education, like the Christian Missions in Many Lands and the South Africa General Mission, received a score of one. These scores were then incorporated into the analysis to produce an educational commitment-weighted station decades value for each district. Finally, to smooth out the differences across districts, I took the log of this value for use in the regression analysis. Because language homogenization in urban areas has a logic of its own, I included a dummy variable to control for whether or not the district was urban.

The results of the analysis suggest, first, that urban location is significant. Urban settings generate a strong standardization of language use. The more important finding, however, is that, controlling for urban location, districts with long histories of exposure to missionary societies that were committed to African education showed significantly greater evidence of language homogenization by 1990 than other districts. Indeed, according to the estimated regression coefficients, the predicted degree of language standardization increased by a factor of four from a district with no mission stations to one with thirty years’ worth of missionary activity by a society highly committed to African education. Missionary activity seems to have led to the consolidation of language use.

Colonial Education Policies
The homogenization of language begun by the missions was reinforced and expanded by the policies adopted by the colonial government when it took over primary responsibility for African education in 1925. Noting that “Northern Rhodesia unfortunately suffers probably more than any other Africa protectorate from a diversity of dialects,” the Acting Director of Native Education decided from the beginning that it was “not practicable for Government to support the production of literature in more than, say, four African languages.” Thus, in 1927 Bemba, Nyanja, Tonga, and Lozi were formally adopted as the principal languages of instruction in African schools. While the government recognized that some pupils initially would have to continue to receive their early primary education in vernaculars other than these four, it was assumed that Bemba, Nyanja, Tonga, and Lozi would eventually become, with English, the sole languages of instruction at all levels.
To give effect to this new policy, an African Literature Committee, the first of its kind in Africa, was established in 1937 to promote the publication of secular school books in each of these languages. During its twenty-three year existence, the committee and its successor, the Joint Publications Bureau of Northern Rhodesia and Nyasaland, published or reprinted more than 1.7 million copies of 484 different titles, more than 92 percent of which were in Bemba, Nyanja, Tonga, Lozi, or English.

The demand for these books was fueled by the rapid growth of African education. Whereas only 25 percent of school age children were estimated to have attended school in 1924, by 1945 the share had reached 75 percent in some rural districts and exceeded that number in many major towns. Efforts were also made during this period to promote literacy among adults, particularly on the copperbelt. Although many areas remained educational backwaters, the general trend was for more and more Africans to be exposed to formal education and for the quality of that education to improve gradually over time. Because the medium of instruction in these schools and literacy courses was Bemba, Nyanja, Tonga, or Lozi, every newly literate student who did not already speak one of these languages became a convert to one of them.

The impact of formal education on language consolidation was reinforced by trends in the popular media. In 1936 the colonial government began to publish the African newspaper Mutende as a response to the Watch Tower Movement, whose authority-questioning literature was, by that time, in wide circulation around the protectorate. Published in Bemba, Nyanja, Tonga, Lozi, and English, Mutende reached a peak circulation of 18,000 during the war years. As with most African newspapers, however, the number of people that Mutende reached was many times its circulation. During the 1950s the mining companies also began to publish monthly magazines for their workers. Although most of the stories in these magazines were initially in English, increasing numbers of articles appeared over the years in Bemba and to a lesser degree Nyanja.

Even more important than newspapers was radio broadcasting. Thanks to the invention and rapid proliferation of the “Saucepan Special,” an inexpensive battery-operated radio set developed specifically for the Northern Rhodesian African population, thousands of Africans had access to radio in Northern Rhodesia by the 1950s. Largely because it knew it had such a big audience of African listeners, the Northern Rhodesian Broadcasting Service was the first radio service in Africa to allocate significant air time—fully 72 percent in 1952—to programming in vernacular languages. Bemba, Nyanja, Tonga, and Lozi were chosen, with English, as the languages of Northern Rhodesian broadcasting. Because radio reached such a large population, the choice of these languages had a critical impact on patterns of language consolidation in the country—more, in all likelihood, than the educational system, which directly touched fewer people. “Over time,” Spitulnik notes, “the
selection and dominance of [these] four languages became mutually reinforcing." Africants learned Bemba, Nyanja, Tonga, and Lozi by listening to the radio and then demanded more programming in them.

**Labor Migration** The third major force that contributed to the consolidation of language use in colonial Northern Rhodesia was labor migration. From as early as the turn of the century, the mines and farms of Southern and Central Africa demanded large numbers of African laborers. In its capacity as the administrator of Northern Rhodesia, the owner of the Southern Rhodesian mines, and the owner of the railroad system that served the Katanga ore body, the British South Africa Company (BSA Co.) controlled both the territory from which African labor was sought and the key enterprises that stood to suffer if the demand for labor was not met. The BSA Co. thus took advantage of its administrative powers to put policies in place that would ensure that an abundant supply of African laborers would be available for the region's industries.

The principal instrument used by the company for this purpose was African taxation. By "consciously [setting] the rate of tax at a level that would successfully draw African males away from their homes to the usually distant centres of white agriculture and industry," the administration forced thousands of Northern Rhodesians out of their villages. As early as the second decade of the century the flow of migrants from rural Northern Rhodesia to the mines and farms of Southern Rhodesia, South Africa, and Katanga was so great that district commissioners in Northern Rhodesia began to complain that their districts were becoming "denuded of their menfolk." By 1938 absentee rates of working age males equaled or exceeded fifty percent in seven of Northern Rhodesia's thirty-three rural districts and approached that level in six others. Roberts estimates that, by approximately that date, "more than half the able-bodied male population of Northern Rhodesia was working for wages away from home." For the first two and a half decades of the century the vast majority of Northern Rhodesian labor migrants traveled outside the territory to find work. But by the end of the 1920s Northern Rhodesia's own copper industry also began to demand large numbers of African laborers. At the urging of the local mining companies, the colonial administration, which had taken over control of Northern Rhodesia from the BSA Co. in 1924, took an increasing interest in ensuring that its own industries were adequately supplied with labor. To make certain, the government adopted a series of measures to channel Northern Rhodesian manpower to its own mines. The resulting intraterritorial labor flows had a profound effect on the country's language map.

A key effect of the administration's policies was to bring an ever increasing number of migrants from the hinterland to the industrial rail line. Once there, migrants' patterns of language use changed. Since both productivity on the job and everyday social interactions required that people be able to communicate with each other, a
single language naturally emerged as a common medium of communication in each urban area. And once such an urban lingua franca was established, newer migrants were obliged to learn it, too. A strong tendency towards linguistic homogenization therefore emerged along Northern Rhodesia's rail line. And the policies that brought thousands of laborers there thus contributed significantly to the countrywide consolidation of language use.

This trend of urban linguistic homogenization is captured by the large and highly significant coefficient on the urban variable in Table 1. The finding is borne out in the wide gulf between the ratios of tribal to linguistic heterogeneity in urban and rural districts of the country. Whereas Zambia’s ten urban districts have an average ratio of 2.23 (indicating that they are much more heterogeneous tribally than linguistically), its forty-seven rural districts have an average ratio of only 1.5. Although some of the linguistic homogenization that these figures reflect undoubtedly occurred after independence, the data still suggest that labor migration affected language consolidation. Since almost all urban residents during the colonial era began as rural dwellers, the different ratios suggest that the act of moving to an urban environment affected the likelihood that a person would speak one of the country’s principal linguae francae. The data support the claim that migration contributed to the standardization of language use.

The Shape of the Linguistic Map in Zambia

Missionary activities and colonial education policies help to explain how the dozens of African languages spoken in the precolonial period gave way to four principal languages of communication by the time of independence in 1964. Labor migration helps to explain how this trend of language consolidation was carried over from the rural to the urban areas. But the causal mechanisms discussed thus far provide few clues as to why the populations that speak each of these languages came to be physically located in specific areas of the country. To be sure, the decision of the colonial administration in 1927 to adopt Bemba as the language of instruction in the northern part of the territory, Nyanja in the east, Tonga in the south, and Lozi in the west tells something about the spatial distribution of these language communities. But it does not explain why different segments of the industrial rail line came to be dominated by different groups. Nor do the mechanisms described above provide insight into each language community’s size and thus political clout. Underlying population densities in each region tell part of the story. But since more than 40 percent of Zambia’s population lives along the rail line, it is necessary to look at the pattern of labor migration to account fully for the shape of Zambia’s contemporary linguistic map. Why did certain language groups dominate certain urban centers, and, in particular, why did Bemba-speakers dominate the copperbelt?
The spatial distribution is captured in Figure 2. It identifies districts in which, according to 1990 census data, more than 80 percent (narrow hatching) and 40 percent (broad hatching) of the population spoke Bemba, Nyanja, Tonga, or Lozi as their first or second languages of communication in 1990. Each language predominates in a particular region of the country: Bemba in the north, Nyanja in the east, Tonga in the south, and Lozi in the west. Also, while Zambia's urban areas may share similarly homogeneous patterns of language use, the languages that dominate each urban setting vary. Bemba emerged as the principal language on the copperbelt and in the mining town of Kabwe, Nyanja in Lusaka, and Lozi in Livingstone.40 Thus, while the circumstances of urban life may have guaranteed the emergence of an urban lingua franca in each town, the dominant language was determined by patterns of migration. The region of the country that supplied the largest percentage of the urban area’s migrant population also supplied its dominant language.41 Patterns of migration from rural to urban areas are thus critical in explaining Zambia’s language map and again require examination of the colonial administration and the mining companies.

**Linking Towns and Languages** The direct link between government and mining company policies and the predominance of specific languages in particular urban areas is most evident in Kabwe and the copperbelt, where conscious policies were enacted to encourage migration from Bemba-speaking rural areas to the mines. In other parts of the protectorate, the government’s concern was simply to stimulate migrant labor flows of sufficient magnitude to allow taxes to be paid in the rural districts. But in the Bemba-speaking northeast—roughly, present-day Northern and

**Figure 2** Language Communities in Zambia
Luapula provinces—the government and the mining companies conspired to ensure that outward labor migration would be channeled to the Kabwe and copperbelt based mines. The dominance of the Bemba language in these areas was a direct outcome of these policies.

A number of factors having nothing to do with government policies ensured that migrants from the Bemba-speaking heartland would be easy to attract. Poor soils, the presence of the tsetse fly in much of the area, and the great distance that agricultural products had to be transported to the rail line ruled out cash cropping and animal husbandry to earn money to pay taxes. Also, because of the dearth of European settlers in the area, local cash employment opportunities were limited. Thus, to an even greater degree than in most other regions residents of the northeast had few alternatives to labor migration.42

While these factors may explain why Bemba speakers were willing to come to the mines for work, they do not explain why the government and mining companies went to such great lengths to target them. They were targeted because of the geography of the labor market in the southern African region. Of all the rural areas of Northern Rhodesia, the Bemba-speaking northeast was located farthest from the South African and Southern Rhodesian mines. In addition, established labor migration routes from Bembaland ran from east to west (to Katanga, via the Northern Rhodesian copperbelt) rather than from north to south (to Southern Rhodesia and South Africa), as they did in the other parts of the protectorate. Thus, at the time when the Northern Rhodesian mines began production in the late 1920s, the Bemba-speaking northeast constituted a labor reserve where the copperbelt companies faced relatively little competition from their better-paying South African and Southern Rhodesian rivals.43 By focusing the bulk of their labor recruiting efforts on the northeast, and by protecting this region from competition by labor recruiters from the south, the Northern Rhodesian mining companies kept the wages less than half the prevailing rates in the rest of the region.44

Evidence from internal mining company documents confirms that wage calculations were the principal motivation for focusing labor recruiting efforts on the northeastern part of the protectorate. A revealing moment came in 1933 when the Union of South Africa withdrew its voluntary embargo on recruiting African labor from Northern Rhodesia. This withdrawal alarmed the copperbelt mining companies, who worried that the already steady flow of Northern Rhodesian migrants to the south might increase to the point where the protectorate's own labor supply would become insufficient to meet local needs. If the labor supply became insufficient, the manager of the Northern Rhodesian Native Labour Association (NRNLA) wrote, "our only means of meeting competition" from the South African mines would be to "increas[e] our wage scale...and the resultant extra costs to our mines would be £225,000 on a year...This extra cost would obviously result in a reduction of profits."45 Anxious to avoid a situation of competitive recruiting with the Rand
mines, the copperbelt companies proposed a deal. They told the Northern Rhodesian government that they would be “prepared to abandon all recruiting activities in the [western part of the protectorate] and to leave that area open to the Rand recruiters provided that, in turn, they would not encroach on any other Northern Rhodesian districts.” The goal, the NRNLA manager made clear, was to make certain that the introduction of South African labor recruiting would “not materially diminish our labour resources in the Northern and Eastern areas.” Recognizing that their tax revenues depended on the profitability of the copperbelt mines, the government adopted the NRNLA proposal to limit Rand recruiters to the western districts.

The mining companies' efforts to forge links between the copperbelt and Kabwe and the Bemba-speaking northeast during the 1930s went far beyond the protection of this area from foreign labor recruiting agents. When the NRNLA began recruiting labor for the copperbelt and Kabwe based mines in 1930, the largest share of recruits was drawn from Bemba-speaking areas. When the mines came back on line in the mid 1930s after the depression, the first rural district officers instructed to lift their restrictions on issuing passes for migrants to travel to the copperbelt were those in Kasama, Fort Rosebery, and Abercorn, three of the most populous Bemba-speaking districts. And when, at the insistence of the colonial government, the mining companies agreed in 1939 to underwrite the construction of rest camps along labor migration routes to the copperbelt and Kabwe, nine of the ten were built along routes from the Bemba-speaking northeast. This decision both recognized the nature of existing migrant flows and invested in perpetuating them.

All of these efforts led by the end of the 1930s to the establishment of entrenched labor migration routes between Bembaland and the Northern Rhodesian mining centers. In 1937 fully 51 percent of the African workers employed at the copperbelt’s three largest mines were from the Bemba-speaking northeast. This figure is remarkable, as the northeast contained less than 25 percent of the protectorate’s total population and was not the closest area from which labor might have been recruited. The number was more than sufficient to tilt the linguistic balance in favor of Bemba as the lingua franca of the mining towns. Given that by the time of independence the mining areas contained nearly a quarter of Zambia’s total population, the role of the colonial government and the mining companies in establishing Bemba as the principal language in the mining towns had a profound effect on the shape of the contemporary Zambian linguistic and also political map.

The government’s role in shaping the languages that came to dominate Livingstone and Lusaka, the territory’s two other major urban population centers, was less direct than in Kabwe and the copperbelt. Although the colonial administration had a hand in encouraging the Lozi- and Nyanja-speaking migrants who came to dominate these towns to leave their rural homes in search of wage employment to enable them to meet their tax obligations, the administration did little specifically to encourage them to settle
in Livingstone or Lusaka. That large numbers of Lozi- and Nyanja-speaking migrants eventually settled in (and lent their languages to) these towns was, more than anything else, an artifact of the limited transportation infrastructure available at the time.

Livingstone became a Lozi-speaking town because it served as the railroad terminus for trains heading south to the mines of South Africa and Southern Rhodesia and because, from before the turn of the century, the Lozi-speaking hinterland had served, with the administration’s encouragement, as a major Northern Rhodesian labor reserve for the southern mines. The construction of the Mulobezi-Livingstone railway, which covered half the distance from the center of Barotseland to Livingstone, further contributed to the close link between Lozi migrants and the town by greatly reducing the cost of and time required for migration to the Livingstone railhead. Thus, when Livingstone-based industries like the Zambezi Sawmills began to require larger numbers of workers in the 1930s and 1940s, existing flows of southbound migrant workers through Livingstone guaranteed that the most plentiful supply of African laborers would be from Lozi-speaking areas. By 1956 two-fifths of Livingstone’s population was from Barotseland. Although Lozi speakers were never a majority, they were by far the largest group in the town, and the Lozi language became Livingstone’s lingua franca.

Nyanja came to play this role in Lusaka for similar reasons. Before the opening of the Northern Rhodesian copper mines the colonial administration encouraged Nyanja-speaking migrants from the eastern part of Northern Rhodesia to forge links with the mines and farms of the south, particularly those in Southern Rhodesia. After the late 1920s the government and mining companies also began recruiting men from this area to the copperbelt. The lack of roads directly linking eastern Northern Rhodesia with either Southern Rhodesia or the copperbelt, however, meant that Nyanja-speaking migrants from the east had to travel along the Great East Road until it met the rail line in Lusaka before they could turn south or north towards their ultimate destinations. Until the late 1940s Lusaka served as little more than a way station for these Nyanja-speaking migrants from the east. By the 1950s, however, both the colonial administration, which had moved to Lusaka in 1935, and the various businesses and industries that had located there began to demand significant numbers of African laborers. Since Nyanja-speakers from along the Great East Road comprised the majority of the available work force, they became the majority of settlers in the town. By 1959 they made up more than 40 percent of Lusaka’s population. And because Nyanja-speakers made up the largest single language group, their language became the lingua franca of the town.

In the case of all three of these urban areas, early patterns of labor migration, generated in one case by conscious policy and in the two others by infrastructure constraints, led to the entrenchment of migration links between each town or segment of the rail line and a different rural hinterland. In each case, the language of the
rural hinterland became the *lingua franca* of the urban area. These linkages are evident in Figure 2, which depicts major roads and rail lines connecting the Bemba-speaking northeast with Kabwe and the copperbelt, the Nyanja-speaking east with Lusaka, and the Lozi-speaking west with Livingstone.

Only the Tonga-speaking language area, which straddles the southern half of the rail line, does not have its own urban enclave. In fact, the single major town located within the Tonga-speaking zone, Livingstone, is a Lozi-speaking area. The reason for the absence of a Tonga-speaking urban enclave is that, in contrast to people living in the Bemba-, Nyanja-, or Lozi-speaking rural areas, Tonga speakers had abundant opportunities for local employment, either on the many European farms located along the rail line or as individual cash croppers or cattle herders. Since Tongaland was bisected by the railway line, crops and cattle raised there could be transported inexpensively to markets in the copperbelt or in Southern Rhodesia. Tongas could thus meet their tax obligations by hiring themselves out to European farmers or through agricultural production. Migration to distant urban employment centers was unnecessary and, for the most part, avoided.55

Figure 2 also reveals an additional map-shaping effect of urban migration. In addition to shaping patterns of language use in the towns, the linking of each urban area with a specific rural hinterland also affected patterns of language use along the routes that the migrants traveled. The Bemba- and Nyanja-speaking zones extended like fingers from their rural epicenters towards their respective urban satellites.56 Over time, the languages spoken in the rural hinterlands were diffused to the areas located between the migrants' homes and their urban destinations.

**Northwestern Province: The Exception That Proves the Rule** Finally, the entire northwestern portion of the country in Figure 2 is unshaded, signifying that none of the four major languages of communication took hold in this area. Not only have Bemba, Nyanja, Tonga, and Lozi been unable to penetrate the northwest, but no single local language has dominated the area. The Lunda, Kaonde, and Luvale languages share first-among-equals status in this part of the country; they are spoken as first or second languages by 34, 28, and 24 percent of the population of Northwestern province, respectively. By comparison, Bemba is spoken as a first or second language by 70 percent of the populations of Northern and Luapula provinces, Nyanja by 86 percent of the population of Eastern province, and Tonga by 79 percent of the population of Southern province. The northwest thus constitutes the great exception to the trend of colonial policy-driven linguistic standardization in Northern Rhodesia. The absence of the factors that explain linguistic consolidation in the rest of the country explains the preservation of multiple languages in northwestern Zambia.

First, missionary societies could not help to consolidate patterns of language use in the northwest because, for reasons of population scarcity and transportation difficulties, very few missions were located there. The few societies that built stations in
this area tended to be evangelical groups that were far less concerned with African education and language work than their counterparts from the mainline denominations located in the other parts of the territory. Indeed, while the average educational commitment-weighted station decades value for all rural Zambian districts is 33.5, the average for the six districts of present-day Northwestern province is just 8.2, significantly lower than any other rural province.

Second, colonial education policies, which had bolstered the positions of Bemba, Nyanja, Tonga, and Lozi by designating them vernaculars of instruction in schools and making them priority languages for book publishing, made no special arrangements for the major northwestern languages and thus did nothing to stimulate their diffusion outside their tribally defined core areas. Only 3 percent of the books published by the government in the 1950s were in Lunda, Kaonde, or Luvale. Although radio broadcasts in Lunda and Luvale were begun in 1954, these two languages were allocated only half the air time of Tonga and Lozi and less than a third of the air time of Bemba and Nyanja. The inclusion of these languages on the broadcasting roster, while no doubt contributing to their prestige, thus probably had little effect on language standardization in the northwest.59

Finally, although large numbers of men from northwestern Northern Rhodesia migrated to the copperbelt, northwesterners never came close to equaling the number of Bemba-speaking migrants in even the most northwestern of the mining towns. According to figures from the Chamber of Mines Year Book for 1961, migrants from present-day Northwestern province constituted only 8 percent of the nonalien work force of the copperbelt mines in that year.60 Lunda, Kaonde, and Luvale, therefore, never challenged Bemba as the copperbelt’s lingua franca. Rather than recruit other language speakers to their own vernacular (as Bemba-speakers did in the mining towns, Lozi-speakers did in Livingstone, and Nyanja-speakers did in Lusaka), migrants from the northwest either adopted Bemba outright or else added it to their language repertoire. Labor migration therefore did not have the same effect on the diffusion of the northwestern languages as it did for Bemba, Nyanja, and Lozi.

Conclusion

Two interesting implications of the foregoing discussion bear mention. First, despite their clear effects on Zambia’s linguistic landscape, none of the colonial era policies and actions were motivated by a desire to affect the sizes or distributions of language groups. They were motivated, instead, by concerns about saving costs and facilitating administration. The missionaries needed to translate the Bible, but they sought to amortize their investments by extending the boundaries of the language communities in which they were working beyond their original confines. The colonial government needed to become involved in African education, but it sought to simplify its task by...
reducing the number of languages used in textbooks and classroom instruction to just four. The government also conspired with the Northern Rhodesian mining companies to promote the profitability of the local copper industry by both implementing tax policies that would generate a steady flow of labor migrants to the urban mining centers and protecting the companies' prized cheap labor pool in the Bemba-speaking northeast from foreign competition. All of these actions had important effects on the shape of the contemporary Zambian linguistic map. Yet their impact must be viewed as an unintended consequence of the government's and missionary societies' policies, an externality of decisions made for entirely different purposes.

Second, politics was absent. In the construction of language communities in Zambia political entrepreneurs did not try to mobilize ethnic groups or assert their supremacy. The communities of Bemba, Nyanja, Tonga, and Lozi speakers expanded, not because of the conscious efforts of their leaders to enlarge them, but because of the independent decisions of individual community members to make the most of the educational and employment opportunities that the acquisition of new languages made available. The growth of the group was the result of actors seeking their own individual enrichment, not the collective betterment of their language community.

Even more conspicuous than the lack of communal mobilization by Bemba, Nyanja, Tonga, and Lozi speakers, however, was the absence of any significant protest by members of the nonfavored language communities. Why was there no backlash against either the speakers of the four privileged vernaculars or the representatives of the colonial regime that granted these languages privileged status? The answer lies in the fact that learning a new language did not require that one turn one's back on one's own. People did not trade in their "old" language for a "new" one but developed language repertoires that included both. And while acquiring another language required an investment, the employment opportunities it afforded were ample compensation. With the emergence of language repertoires the zero-sum assumption implicit in the puzzle of nonprotest did not hold true. Thus, when non-Bemba tribal dancers taunted their Bemba-speaking cousins in the copperbelt, they did so in Bemba. And when Africans protested against the injustices of colonial rule, they did so in Bemba, Nyanja, Tonga, and Lozi, the very languages that the colonial regime had "imposed" on them.

The contours of Zambia's contemporary linguistic landscape—the number of groups, their relative sizes, and their distributions around the country—have their roots in specific policies and actions taken by the Northern Rhodesian colonial government and its missionary and mining company partners. Scholars interested in accounting for patterns of ethnic politics and communal violence, whether they recognize it or not, almost always build their explanations around features of the ethnic landscape. While this landscape is customarily taken as given, it need not be. As linguistic divisions in Zambia illustrate, the structure of a country's ethnic cleavages is not just a social fact but a historical product.
NOTES


12. For example, Elizabeth Colson, The Plateau Tonga of Northern Rhodesia (Manchester: Manchester University Press, 1962).

13. Technically, the prefix “chi” (or “ci” or “si”) is used before the name of the tribe to indicate the language spoken by its members. Deferring to common usage, I drop the prefix when I refer to these languages. Chichewa and Chinyanja are different names for the same language.

14. Calculated from 1990 census data. To guard against double counting, percentages of Zambians speaking Bemba, Nyanja, Tonga, or Lozi as second languages were calculated from the population of people who did not already use one of these languages as a first language of communication.

15. This estimate is based on the assumption that, at that time, the speakers of each language were confined to the tribe’s members. The size of each tribe was taken from the census reported in the Northern Rhodesia Annual Report on Native Affairs for 1930, the earliest data for which reliable and comprehensive figures are available.


17. J. Merle Davis, Modern Industry and the African: An Enquiry into the Effect of the Copper Mines

18. Young, p. 166.
19. It was not always possible for missionary societies to choose the sites of their mission stations. Typically, they located themselves wherever they could get a toehold away from established societies or where they thought they would be received well by the local chiefs.
20. Although economies of scale initially led missionaries to favor using the same language in many settings, the need to justify additional funding from the home society eventually created incentives for translating new languages. The general trend of missionary-led language consolidation, therefore, was offset to some degree by a countertext of (written) language proliferation. Robert Rotberg, personal communication. In some countries, Ghana, for example, missionary activity was actually associated with increased linguistic heterogeneity. See David D. Laitin, “The Tower of Babel as a Coordination Game: Political Linguistics in Ghana,” American Political Science Review, 88 (September 1994), 623.
23. Heterogeneity ratios were calculated from 1990 census data on tribal affiliation and language use by summing the squares of the percentages of every tribe (language group) that comprised more than five percent of the district’s population and then subtracting the sum from one.
24. Data on the presence and location of mission stations are from Reinhard Henkel, “Mission Stations in Zambia: Their Location and Diffusion Patterns,” Zambian Geographical Journal, 35 (1985), 1–18. When mission stations were located on or near district boundaries, I drew a circle with a radius of 50 kms around the station and assigned “credit” to each district in proportion to the share of the circle located within it.
25. The educational commitment of each missionary society was assessed by calculating the average number of schools per mission station and by consulting secondary sources on the activities of the societies themselves. I am indebted to Robert Rotberg for his advice in this coding effort.
27. “Extract from Minutes of the Ninth Meeting of the Advisory Board on Native Education,” July 1927, Zambia National Archives, file RC/1680.
29. Figures calculated from the Publications Bureau of Northern Rhodesia and Nyasaland, Annual Reports (1949–58). These totals also include a small number of books published for the Nyasaland market.
32. Hall, p. 76, n11.
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40. According to 1990 census figures, 90.2 percent of copperbelt residents (excluding Ndola rural district) spoke Bemba as their first or second language. In Kabwe, the figure was 77.1 percent. In 1990 78 percent of Lusaka residents spoke Nyanja as their first or second language of communication. The dominant position of the Lozi language in Livingstone has been undermined since independence by Tonga-speakers who have aggressively pushed the use of Tonga on the grounds that, as the capital of a province whose people are overwhelmingly Tonga-speaking, Livingstone should rightly be a Tonga-speaking town. By 1990 only 44.4 percent of Livingstone residents said that they spoke Lozi as their first or second languages of communication.
41. This logic recalls Schelling’s famous tipping model. See Thomas Schelling, Micromotives and Macrobehavior (New York: Norton, 1978), ch. 7.
43. The cessation of large-scale labor recruitment from Northern Rhodesia by the Union Minière du Haut Katanga in the early 1930s removed the other potential rival for northeastern labor and freed up large numbers of Bemba-speaking men who might otherwise have migrated to Katanga.
44. In 1933 wages in the Rand mines averaged 3/- per shift, while wages in the Northern Rhodesian mines averaged just 1/- per shift. Report of the [Northern Rhodesia Native Labour Association] Manager’s Visit to Livingstone in Reference to Labour Matters, September 20, 1933, ZCCM Archives, file WMA 139.
45. Ibid.
46. Ibid.
47. Ibid.
48. Letter from NRNLAL Manager A. Stephenson to RACM Manager F. Ayer, August 4, 1933 ZCCM Archives, file WMA 139.
49. ZCCM Archives, file WMA 135.
52. At least some Lozis were recruited directly to Livingstone by the Northern Rhodesian government. Intensive missionary education work undertaken in Barotseland at the behest of the Lozi paramount chief made Lozis among the best educated Africans in the early 1900s, especially sought after by the colonial civil service. During the brief period (1924–1935) when the colonial administration was situated in Livingstone, well-educated Lozis were recruited to work as government clerks and interpreters.

55. According to data presented in Hellen, p. 99, 62 percent of the taxable males from the Tonga-speaking Southern province worked locally in 1961, compared with 20 percent of the combined Bemba-speaking populations of Northern and Luapula provinces, 21 percent for the Nyanja-speaking Eastern province, and 25 percent for the Lozi-speaking Barotse province.

56. The absence of a similar bulge from the Lozi-speaking rural epicenter towards Livingstone is largely an artifact of the highly aggregated district-level data from which the map in Figure 2 was created. A map drawn from more fine-grained data would reflect the influence of Lozi-speaking migrants on patterns of language use in the area between Livingstone and the Lozi epicenter.

57. Gadsden, p. 104.


62. See, for example, the 1935 notice pinned to the Nkana beer hall reproduced in Rotberg, p. 161.