The Language and Dialect Atlas of Kenya Project 1973-80

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1. The Project

Work on the language atlas of Kenya (*Sprachen- und Dialektatlas Kenia*), directed by Bernd Heine and Wilhelm Möhlig of the *Institut für Afrikanistik*, University of Cologne, was carried out between 1973 and 1980. This work benefited from earlier field work that the author was able to conduct within the mapping project *Afrika-Kartenwerk* between 1969 and 1971 (Heine & Köhler 1981).¹ Responsibility within the atlas project was divided up between the two directors, in that Wilhelm Möhlig was in charge of Bantu languages and Bernd Heine of non-Bantu languages; the present paper highlights most of all the latter part of the project. The project was carried out in cooperation with the Department of Linguistics and African Languages of the University of Nairobi, to which I wish to express my deeply-felt gratitude for all the support it gave to the project.²

The objectives of the project were quite comprehensive, they included the following goals:

- (a) Document all languages and dialects spoken natively in Kenya;
- (b) Describe their geographical distribution;
- (c) Define the relationship among the languages.
- (d) Search for appropriate models to account for dialect continua;
- (e) Describe the sociolinguistic situation of Kenya;
- (f) Describe the knowledge and use of the two main second languages, Swahili and English, and their role in national communication;
- (g) Document all endangered languages.

Research techniques were based on

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² My thanks are due in particular to Mohamed Abdulaziz, then chairman of the Department of Linguistics and African Languages, as well as to Lucia Omondi, Karega Mutahi, Duncan Okoth Okombo, and many other younger colleagues who contributed to the project in some way or other.

- standard dialectometry, using a standardized list of 640 lexical items,
- a differential list of grammatical categories, taking into account that some categories of Bantu languages differ systematically from those of Nilotic and Cushitic languages,
- a sociolinguistic questionnaire containing 20 questions on language knowledge and language use, relying on salient demographic and sociolinguistic distinctions, and interview procedures as they were available at that time to study dialect geography.

Compared to other African nations, Kenya is linguistically fairly complex.

- First, this applies to the genetic diversity of this country where three of the four language families to be found in Africa, Niger-Congo, Nilo-Saharan, and Afroasiatic, are represented.
- Second, this also relates to structural diversity; for example, all three major word order types that are distinguished cross-linguistically are found in Kenya: There are the verb-initial (VSO) East and South Nilotic languages, such as Maa, Turkana, Teso, and Kalenjin, there are verb-final (SOV) languages, namely all Cushitic languages except Yaaku, while all other languages are verb-medial (SVO).³
- Third, this also applies to the sociolinguistic situation of the nation, which is to some extent the product of a colonial past with a large white settler population and the creation of the linguistically complex "White Highlands", extending from Athi River in the south to Nanyuki in the north and Kitale in the northwest.

2. Results

The outcome of the project was not in every respect satisfactory. The goals envisaged turned out to be too ambitious; rather than streamlining the project by focusing on specific issues there were too many activities yielding an enormous amount of data. The major part of the lexical and grammatical data that were collected in the course of the project work, especially on the Bantu languages of Kenya, is still unpublished. Nevertheless, overall the project yielded a number of findings on the role played by language in this nation, on the relationship between language and society, and on Kenya's linguistic and socio-cultural history.

³ In this paper I am generally omitting prefixes occurring in language names for practical convenience. Thus, instead of Kiswahili, Dholuo, Ateso, etc., I am using the short forms Swahili, Luo, and Teso. I am aware that this convention is not favoured by some of my colleagues, and I apologize to them for having opted for this form of convenient reference.

2.1 Kenya's Language Map

Niger-Congo family	Nilo-Saharan family	Afroasiatic family
Bantu	Nilotic	Cushitic
Coastal group	West Nilotic	Highland East Cushitic
Ilwana, Pokomo (Malachini,	Luo	Burji
Malalulu, Ndura -Ndera, Zu-		C C
baki), Mijikenda (Chonyi,	South Nilotic	Lowland East Cushitic
Chaka, Digo, Duruma, Girya-	Omotik, Kalenjin	Dhasanac, Elmolo,
ma, Jibana, Kambe, Rabai,	(Elgeyo, Kipsikiis,	Boni, Rendille, Somali
Ribe), Swahili (Amu, Jomvu,	Kony, Marakweta,	(Abballa, Abdwak,
Mvita, Pate, Shirazi, Siyu,	Nandi, Ng'oma,	Aulihan, Degodia, Isaaq,
Tikuu, Vumba)	Pok, Pokot, Sogoo,	Leisan, Harti, Murulle,
	Terik, Tuken)	Ogaden)
<u>Taita group</u>		Oromo (Ajuran,
Dabida (including Kasigau),	East Nilotic	Borana, Gabra, Garreh,
Sagala, Taveta	Teso, Turkana	Munyo, Orma, Sakuye,
	Maa (Chamus,	Waata)
Central group	Kore, Maasai,	Yaaku
Kamba (Masaku, North Kitui,	Samburu)	
South Kitui), Embu (Embu,		South Cushitic
Mbeere), Kikuyu (Gichugu,		Dahalo
Kiambu, Mathira, Murang'a,		
Ndia, Nyeri), Chuka, Meru		Semitic
(Igembe, Imenti, Miutini, Ti-		Nubi, a creole
gania), Igoji, Nithi (Mwimbi,		
Muthambi), Tharaka		
Western Group		
Luhya (Bukusu, Idakho,		
Isukha, Kabras, Kisa,		
Marachi, Marama, Nyala,		
Nyore, Ragoli, Tachioni,		
Tiriki, Tsotso, Wanga)		
South Nyanza Group		
Gusii, Kuria, Suba		

Table 1. An overview of the languages of Kenya⁴

⁴ Language names are printed in bold, dialect names in italics, dialect listing is alphabetical, language map as appendix.

One kind of findings relates to the situation of Kenyan languages. Whereas in previous accounts the number of Kenyan languages was given to amount to between 40 and 60, work carried out within the project suggests that there are only about 25 languages spoken natively and actively in Kenya. Table 1 above provides a total list of these languages and their main dialects (see also Map). Note that the taxonomy underlying Table 1 is based on genetic distinctiveness; it does not take into account the sociolinguistic behaviour of Kenya's population. For example, on the basis of language planning considerations it would be appropriate to reduce the number of Bantu languages of the central group from eight to three (Kamba, Gikuyu, Meru). Furthermore, a number of languages that were still spoken at the time when the atlas project was carried out are now moribund or extinct, in particular the following: Burji, Elmolo, Omotik, Suba, and Yaaku.

2.2 Language Typology

Part of the analyses carried out within the atlas project concerned both the internal and external typology of Kenyan languages (Heine 1980: 14-27). While Kenya's linguistic landscape is both genetically and typologically complex, there are a few commonalities. Essentially all Kenyan languages are tone languages - with the notable exception of the national language Swahili. In addition, with few exceptions, Kenya's languages have paradigms of verbal derivational extensions and systems of noun classification, be they of the animacy-based type (Bantu) or of the sex-based type (East Nilotic and Cushitic). Among the features commonly found in Kenyan languages but being less common elsewhere in the world there are implosive consonants; the majority of Kenyan languages have between one and four voiced implosives, and there are vowel harmony structures of the ATR (advanced tongue root) type in all Nilotic and two Cushitic languages (Somali, Boni), though not in the Bantu languages.

2.3 Documentation of Endangered Languages

One of the priorities of the project was seen in the documentation of languages threatened by extinction, and this work yielded a number of publications. All languages that have since died out could be documented at least to the extent that there now exists some grammatical and lexical information on them. These include the East Cushitic language Yaaku (Mogogodo) spoken by traditional hunter-gatherers in Mukogodo Division north of Mt. Kenya (Heine 1974/5), the fellow East Cushitic language Elmolo, spoken by a traditional fishing people on the southeastern shores of Lake Turkana (Heine 1975/6), the South Nilotic language Omotik in Narok District of southern Kenya (Heine 1973/4), and the Kore dialect of Maa, spoken at the Indian Ocean coast opposite the Lamu

archipelago (Heine & Voßen 1979). What the project revealed is that within the relatively short period of three decades, at least four languages, that is close to 20 percent of Kenya's linguistic heritage, have disappeared from the cultural map of this nation.

Furthermore, we were able to provide more information on Kenya's little known languages which, while not immediately threatened by extinction, are spoken by smaller segments of the national population. Such languages include Waata, an Oromo dialect spoken at the Kenyan coast by traditional hunter-gatherers (Heine 1981a), Boni, another traditional hunter-gatherer language spoken at the Indian Ocean coast (Heine 1982b), Rendille, a Cushitic language spoken by camel pastoralists between Lake Turkana and Marsabit (Heine 1975/6), Chamus of Lake Baringo, a dialect of Maa (Heine 1980), Munyo, another Oromo dialect of the Tana River region around Garissa (Heine 1980), and Nubi, a creolized form of Arabic spoken in Kibera, a suburb of Nairobi, as well as in a number of other towns of southern Kenya (Heine 1982a).

2.4 Language Shift Processes

Prior to the project there was little information on the socio-cultural dynamics characterizing some of Kenya's linguistic communities. Research carried out within the project revealed processes that some of the country's societies were undergoing, in particular the linguistic and cultural transition from Burji to Oromo (Borana) identity in Marsabit and Moyale, from Rendille to Samburu identity in the Laisamis area of Marsabit District, or from Suba to Luo identity in South Nyanza, and, more generally, from primarily foraging economies, such as those of the traditional Okiek, Elmolo, or Yaaku, to food-producing economies (Heine & Möhlig 1980).

2.5 Sociolinguistic Findings

Another kind of findings concerned the sociolinguistic ecology of Kenya. In the beginning, our work on language knowledge and language use relied on sociolinguistic surveys that we carried out in primary schools with the assistance of teachers and students. But very soon it turned out that the information gathered in this way was not really representative of the larger part of society since this procedure gave us access only to one particular spectrum of the Kenyan population. Subsequently the author, together with his field assistant Juvenalis Inya, decided to conduct a large-scale survey in all parts of Kenya except the extreme north and the coastal belt. By interviewing people directly in both villages and selected urban areas, information on 15,541 people from all major regions and of all linguistic communities was obtained (53.7 % male and 46.3 % female persons; for details of the survey, see Heine & Köhler 1981).

Sociolinguistic work was concerned most of all with the distinction between the two lingua francas Swahili and English, the former being Kenya's national and the latter her official language on the one hand, and other Kenyan languages, that is, all those languages that were spoken primarily as L1 (first languages) on the other. Contrary to what earlier writers had claimed or implied, our survey suggested that Swahili was clearly the most widely known and spoken language in Kenya. As Table 2 shows, altogether two thirds (65.3 %) of all Kenyans interviewed had some knowledge of this language, while English (16.1 %) or other L1s (13.7 %), such as Kikuyu, Luo, Luhya, Kalenjin and Kamba, were spoken as second languages only by a small fraction of the national population. The figures allowed us to predict with a high degree of probability e.g. that any given Kenyan knowing English would also know Swahili, but not the other way round.

Table 2	
Second languages known in Kenya between 1969 and 1973	
(Percentages; sample: 15,541 persons).	

Second languages known	Percentage of persons
None	33.7
Second L1	0.5
Swahili	42.0
English	0.3
Swahili + L1	7.7
English + L1	0.2
English + Swahili	10.3
English + Swahili + L1	5.3
Total	100.00

Knowledge of Swahili was, however, not evenly distributed among the various segments of the population; as Table 3 shows, it was more widespread in the male than in the female population, and men between age 20 and 39 had the highest and women over 40 years of age the lowest rates of Swahili speakers.

Table 3 Second language knowledge of Swahili according to age and sex in Kenya between 1969 and 1973 (Percentages; sample: 15,541 persons)

Age	Male	Female	Total
Under 20 years	69.0	54.6	62.5
20-39 years	84.7	66.7	76.6
40 years and over	63.3	40.2	51.9
Total	74.1	54.9	65.3

The sociolinguistic survey showed that the two lingua francas were the paramount media of communication in public life but neither has had any remarkable impact on linguistic interaction at home within the family. Still, as Table 4 suggests, Swahili was used at home in some way by nearly every fourth of the persons interviewed while the role of English, like that of vernacular second languages, was negligible.

Table 4		
Use of second languages within the family in Kenya		
between 1969 and 1973		
(Percentages; sample: 15,541 persons)		

Language	Percentage of persons using
	that language at home
Swahili	23.2
English	3.2
L1s	3.2

2.6 Prehistory

One major project activity concerned the use of the linguistic data collected in the course of the atlas work for the reconstruction of aspects of the linguistic and cultural prehistory of Kenya in particular and eastern Africa in general. Major findings concerned the early contact processes between Cushitic- and Nilotic-speaking peoples of northern Kenya, resulting in massive cultural transfer from the former to the latter (Heine, Rottland & Voßen 1979), the traditional fishing culture in the Rift Valley, especially in Lake Nakuru, Lake Baringo, and Lake Turkana (Heine 1982), and the reconstruction of population movements of Sam-speaking peoples in northeastern Africa, leading to the Somali expansion throughout the Horn of Africa. Contrary to earlier assumptions, based mainly on oral traditions according to which the peopling of the Horn started out in northern Somalia, these reconstructions suggest that ancestral forms of the Somali language must have been spoken in southern Ethiopia prior to their spread across the arid lands of northeastern Kenya, southeastern Ethiopia, and Somalia. These linguistic reconstructions also suggest that extensive animal husbandry based mainly on the use of the camel (Camelus dromedarius) in this general region is much older than had previously been thought, presumably having a history of at least two thousand years in eastern Africa (Heine 1978; 1981b).

3. Problems

Problems encountered in the course of this research relate in particular to the mapping of linguistic features as opposed to language/dialect boundaries: More

often than not did clusterings of isoglosses of grammatical or lexical properties not coincide with presumed language or dialect boundaries, especially in the northern and north eastern parts of Kenya with their overwhelmingly nomadic pastoralist populations and fluid linguistic boundaries.

Another problem concerned the description and geographical representation of "mixed" linguistic areas where speakers of many different languages are found. Such areas are on the one hand urban centers such as Nairobi, Mombasa, Nakuru, Eldoret, Nanyuki and more, on the other hand the Kenya Highlands with their highly multilingual populations. We were not able to find appropriate means for cartographical representation of language knowledge and language use in these complex regions.

A notorious problem arising in this kind of project concerns the distinction between language and dialect. Applying various dialect distance tests of intelligibility yielded results which were not always supported by evidence as provided by lexical and grammatical comparisons. The problem was particularly rampant in the classification of the central Bantu group in general and of the linguistic varieties spoken in the Meru District in particular. There is structural evidence to define groupings such as Chuka, Meru, Igoji, and Nithi as distinct linguistic units (Wilhelm Möhlig, p.c.; see Table 1), but intelligibility tests that we were able to conduct among speakers of these groupings suggest that there are remarkable discrepancies between the linguistic and the sociolinguistic evidence.

Much the same kind of complexity was encountered among the varieties of the Lowland East Cushitic languages Oromo and Somali. Whether or to what extent Somali-speaking groupings such as Abdwak, Aulihan, Degodia Leisan and others, or Oromo-speaking groupings such as Borana or Sakuye. are distinct dialects or should be interpreted as socio-cultural or historical identities remained largely unclear.

4. Conclusions

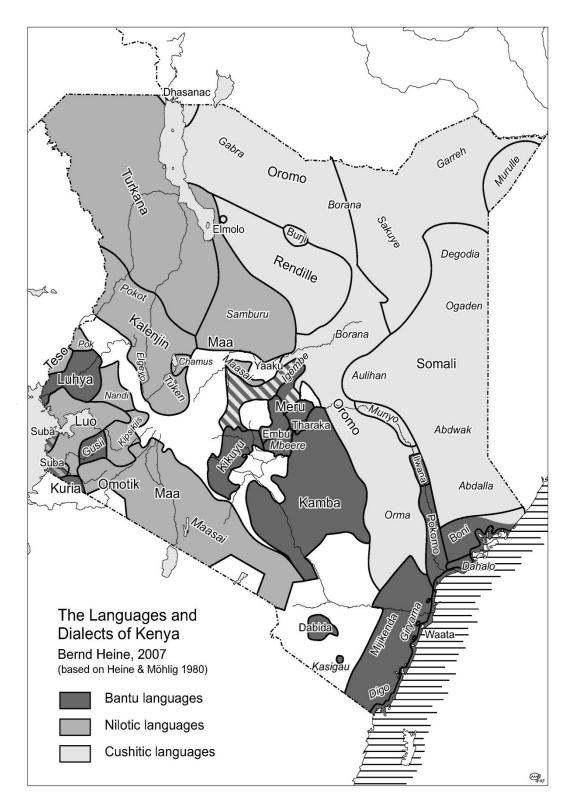
As observed above, the atlas project described in this paper turned out to be too ambitious in its objectives. Rather than focusing on specific problems it attempted to deal with a large range of issues that was too wide to be covered satisfactorily given the limited time and resources and the unusually complex sociolinguistic situation characterizing the Republic of Kenya. Nevertheless, the project yielded a number of insights that helped to provide a better basis for understanding the role played by languages in this country.

References

- Heine, Bernd. 1970. Zu einer Verbreitungskarte des Swahili im westlichen und zentralen Kenya. *Die Erde* 101(2): 123-127.
- ----- 1970. Research on the distribution of Swahili in western Kenya. Journal of the Language Association of Eastern Africa 1(1): 80-85.
- ----- 1971. On genetic relationship and the case of the 'Nilo-Hamitic' languages. Journal of East African Research and Development 1(1): 19-28.
- ----- 1971. Kalenjin glottochronology preliminary hypothesis. *Mila* 2(2): 51-55.
- ----- 1972/3. Vokabulare Ostafrikanischer Restsprachen. Teil I [Elmolo]. *Afrika und Übersee* 56(4): 276-283.
- ----- 1973/4. Vokabulare Ostafrikanischer Restsprachen. Teil II [Sogoo und Omotik]. *Afrika und Übersee* 57(1): 38-49.
- ----- 1974/5. Notes on the Yaaku language (Kenya). *Afrika und Übersee* 58: 27-61, 119-138.
- ----- 1975/6. Bemerkungen zur Elmolo-Sprache. *Afrika und Übersee* 59(4): 278-299.
- ----- 1975/76. Notes on the Rendille language (Kenya). *Afrika und Übersee* 59 (3): 176-223.
- ----- 1977. Bemerkungen zur Boni-Sprache (Kenia). Afrika und Übersee 60(4): 242-295.
- ----- 1978. The Sam languages. A history of Rendille, Boni and Somali. *Afroasiatic Linguistics* 6(2): 1-93.
- ----- 1980. The non-Bantu languages of Kenya (Language and Dialect Atlas of Kenya, 2). Berlin: Reimer.
- ---- 1981a. *The Waata dialect of Oromo (Language and Dialect Atlas of Kenya*, 4). Berlin: Reimer.
- ----- 1981b. Some cultural evidence on the early Sam-speaking people of Eastern Africa. *Sprache und Geschichte in Afrika* (SUGIA) 3: 169-200.
- ----- 1982a. The Nubi language of Kibera -- an Arabic creole (Language and Dialect Atlas of Kenya, 3). Berlin: Reimer.
- ----- 1982b. Boni dialects (Language and Dialect Atlas of Kenya, 10). Berlin: Reimer.

- ----- 1982c. Traditional fishing in the Rift Valley of Kenya: a linguistic survey. Sprache und Geschichte in Afrika (SUGIA) 4: 7-40.
- ----- 1983. Eine Bemerkung zur Gliederung der Swahili-Dialekte. Afrika und Übersee 66: 57-65.
- ----- 1985. Concepts of plant taxonomy among the Samburu (Kenya) some preliminary observations. *Afrikanistische Arbeitspapiere* 3: 5-36.
- Heine, Bernd and Oswin Köhler. 1981. *Linguistik Ostafrika (Afrika-Kartenwerk*, Beiheft E 10). Berlin, Stuttgart: Gebrüder Borntraeger.
- Heine, Bernd and Wilhelm J. G. Möhlig. 1980. Geographical and historical introduction, language and society, selected bibliography (Language and Dialect Atlas of Kenya, 1). Berlin: Reimer.
- Heine, Bernd, Franz Rottland and Rainer Voßen. 1979. Proto-Baz: some aspects of early Nilotic – Cushitic contacts. Sprache und Geschichte in Afrika (SUGIA) 1: 75-91.
- Heine, Bernd and Rainer Voßen. 1979. The Kore of Lamu: a contribution to Maa dialectology. *Afrika und Übersee* 62(4): 272-288.

Appendix



Kenya's Language Map