

TOWARDS A DIALECT GEOGRAPHY OF DANGME

PART I

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O. Introduction.

At the time of writing, the first summer's field work for the Institute's Dangme Area Studies Project is finished, but the data has not yet been analyzed. This first phase of field work was carried out in the Ada district, and involved the collection of data in the fields of social anthropology, oral literature, linguistics, Islamic studies, health and nutrition. The work in linguistics consists of administering two questionnaires. One is directed to socio-linguistic information, in an attempt to find out what linguistic groups are represented in the area, the extent of polyglotism among Dangmes and non-Dangmes in the area, the main languages of inter-and intra-group communication, whether or not any language shift is taking place, and if so, what kind. The second questionnaire is purely linguistic in nature, and has as its aim the definition of the isoglosses that divide Dangme-land into dialect areas. In this article the authors would like to review the state of our present knowledge of Dangme dialectology, on which the survey will build.

There are several reasons why the Dangme-speaking area is an attractive one for dialectological study. Physically it is quite well defined, stretching along the coast from Prampram on the west (I) to Ada on the east, and from the sea on the south across a very dry and sparsely-inhabited plain to the Akwapim range on the north. Krobo traditional area extends through the hills and forest north of Koforidua, and is quite different geographically from the rest. The area as a whole is not too large for fairly intensive study, but large enough to provide interesting variety, linguistic and otherwise.

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The Dangme area is recognized as being culturally and linguistically closely knit. Its people recognize a common heritage and speak one language that is intelligible to all. On the other hand, it is well known to all Dangmes that there has been no political unity since the old days when the clans agreed to disagree at Lolovor, and dispersed to set up independent political units at their present locations. The commonly recognized linguistic distinctions coincide with these political ones: Gbugbla (Prampram), Ningo, Ada, Osudoku, Krobo and Shai. Yilo Krobo and Manya Krobo are political divisions which are not commonly regarded as coinciding with linguistic divisions.

Assuming for the time being that these divisions are indeed linguistically meaningful, they are dialectal in nature. That is, they reflect differences in sound, grammar or lexicon, or two or all of these aspects of language, which are obvious to the speakers of Dangme. Yet they are not so serious as to prevent or seriously disrupt communication between speakers of, say, Ada and Krobo, or Gbugbla and Shai. Thus the difference between the Dangme dialects is different from the differences between these dialects and their very close relative Ga, for if a Ga-speaking person has not had considerable experience of Dangme he cannot understand it, nor can a Dangme-speaking person understand Ga if he has not gone through some kind of learning process.

The Dangme dialects are supposed to correspond to political divisions, and the political divisions in turn to a historical event: the dispersal, whether sudden or in stages, from Lolovor. We might hope therefore that a better understanding of the relationships between these speech types will lead to a better understanding of early Dangme history.

A certain amount has already been written on the Dangme dialects. Professor Jack Berry took note of some of the differences (2) and D. A. Pupilampu also commented on them. (3) One of the present authors attempted to account for some of the phonetic differences between Ada and Krobo, and noted a few morphological variations between these dialects. (4) The other author has noted a number of lexical variants between Ada, Krobo, Shai, Ningo and Prampram. (5) Thus we are not starting completely from scratch. We will summarize present knowledge and opinion about dialect differences under four headings:

PART I

1. The Dialect Areas: a Preliminary Hypothesis.
2. Phonological Variation.
3. Grammatical Variation.

PART II

4. Lexical Variation. (6)

1. The Dialect Areas: a Preliminary Hypothesis.

Several years ago the second author designed a questionnaire to elicit forms which were expected to show variation among the Dangme dialects. The questionnaire consisted of sixty-five single words, almost all of them nouns, and thirty short sentences. The questionnaire now being administered is essentially a much revised, extended and, hopefully improved version of the first one. At various times the first questionnaire was administered to persons who were speakers of one of the traditional dialects, and this discussion is an analysis of the data thus obtained. Eleven respondents were interviewed: four from Krobo, including one from Bukunor, two from Odumase, and one from Somanya; two from Shai, including one from Dodowa and a group of old ladies at Doryumu; one from Akuse, as representative of Osudoku; one from Prampram (Gbugbla); one from Ningo; and two from Ada, one from Ada itself and a group of fishermen at Ocansey Korpe. Except for Ada, Ocansey Korpe and Doryumu, all the respondents were interviewed at Legon. Of the latter, the respondents from Gbugbla, Ningo, Somanya and Bukunor and one of the Odumase respondents were university students. The following discussion is therefore strictly tentative, and the hypothesis is presented subject to support or destruction by the results of the comprehensive field investigation now being undertaken.

About a hundred and thirty isoglosses (7) were derived from the material of the questionnaire. However, many of them included all the varieties of Dangme represented, and a few included Ga as well. Here we shall take it for granted that many important isoglosses unite all varieties of Dangme, and at the same time separate them from Ga. Most such isoglosses reflect innovation in Ga, and conservatism in Dangme, but a few, such as the borrowing of *ogbeteé* 'hyena' from Ewe, change of ε to υ after certain labialized consonants (as in *dɔmi*, *duɔmi*, Proto-Ga-Dangme **duε* - 'rubbish') and the loss of a palatal element in many words that now have *d* (as in *do* 'dance', *dɔ* 'valley', from **dio-*, **diɔ-* respectively) are innovations that make the Dangme dialects a positively identifiable unit.

In the present discussion we are only concerned with those isoglosses which unite some dialects in opposition to others. Therefore not all dialect samples are included in the same number of isoglosses. Ada and Ocansey Korpe were both included in forty-three, while Somanya for which only an incomplete response was available, was included in only twenty-nine. Most were included in between thirty and thirty-five isoglosses. The questionnaire was constructed in such a way that a majority of isoglosses are of different pronunciation of the "same word", a smaller number are morphological, and some are lexical. It is possible that an analysis based on one type only, or with a different relative weighting, would give different results. This is another reason why it must be stressed that these remarks are strictly tentative.

The technique employed for this analysis was to abstract from the responses which dialects were united by the same isogloss. The number of isoglosses uniting each dialect to every other dialect were then counted. For instance, if two isoglosses unite Ada with Akuse, and three unite Ada with both Akuse and Ningo, and one unites Ada with Ningo, then five isoglosses unite Ada with Akuse, but only four unite Ada with Ningo. For each dialect, the percentage of its total isoglosses that unite it with each other dialect was calculated. Since each dialect does not enter into the same number of isoglosses, the percentage of all isoglosses including Ada that link Ada with Ningo is not necessarily the same as the percentage of all isoglosses including Ningo that link Ningo with Ada. However, in most cases the two percentages were close enough to be equivalent for our purpose. Exceptions will be noted. The following hypothesis about Dangme dialects and their interrelationships is constructed on the basis of these percentages.

1.1 Members of the "Same Dialect".

As far as the data gathered is concerned, the traditional division of dialects has meaning, in that idiolects (8) from the same traditional dialect area are joined by 80% or more of their isoglosses, and idiolects of different traditional dialects are joined by not more than 68% of their isoglosses. Moreover, with idiolects from different traditional dialects, if the link is more than 60% in one direction, it is usually less than that in the other. Thus 67.6% of Ningo's isoglosses include Gbugbla, but only 54% of Gbugbla's include Ningo. 65.8% of Akuse's isoglosses link it to Ada, but only 55.8% of Ada's link it to Akuse. 60% of Doryumu's isoglosses link it to Ningo, but less than 33% of Ningo's link it to Doryumu.

Identity of Ada and Ocansey Korpe is nearly complete, since about 95% of the isoglosses of each include the other. These two together will henceforth be referred to as the Ada dialect. Bukunor, the two Odumase idiolects and Somanya are slightly more divergent, but each is linked to the other by about 85% of its isoglosses, and will be referred to together as the Krobo dialect. Odumase is linked to Somanya by only 78%, but this is probably because the data for Somanya is incomplete. Inclusion in the other direction is 86%. Doryumu and Dodowa diverge a little more than the varieties of Krobo, being linked by 80% of isoglosses in each direction. They will be referred to jointly as the Shai dialect. Akuse, Ningo and Gbugbla are not joined by more than 68% of their isoglosses to any other speech type represented, and hence are regarded as three distinct dialects.

Several isoglosses distinguish Ada from all other dialects. Only Ada (in this material) had *bɔfɔno* 'European', *bɔfo* for 'maize', *pumi* for 'mosquito', *hɔ* for 'hunger', *tsi* for 'ladle', *honyu* for 'soup', and *wɔli* for 'foam froth'. Only Krobo has *okunu* for 'shea butter', *sɔne* for 'pillow', *laku* for 'smoke', and *dabodabo* (in Somanya and Odumase) for 'duck'. Gbugbla is unique in

having emi for 'I', wa for 'grey hair', the form mɔmi for 'okro', and mɛnɔ for 'tomorrow'. The forms mɔnɔ and mɔnɛ for 'tomorrow' are peculiar to Akuse and Ningo respectively, but otherwise these dialects seem to be distinguished mainly by the different isoglosses that link them with other dialects. This is also true of Shai. For example, blɛfono 'European' occurs everywhere except in Ada. pɔmi 'mosquito' occurs in Shai, Krobo and Akuse. imi 'I' occurs in Shai and Krobo, and lasuku 'smoke' occurs everywhere except Krobo. Thus neither blɛfono, pɔmi, imi, nor lasuku occurs only in Shai, but only Shai has all of them. Similarly pɔmi 'mosquito' occurs in Akuse, Shai and Krobo and ami 'I' occurs in Akuse and Ada but only Akuse has both. Ningo and Gbugbla both have pumu 'mosquito'. Ningo, Ada and Akuse have sunue 'pillow' and Ningo, Shai and Krobo have ngua 'grey hair'. Only Ningo has all three.

1.2 Closely Linked Dialects.

Examining which dialects are linked by 50% or more of their isoglosses produces a fairly clear picture of which dialects are most closely linked. In the diagram below linked dialects are joined by 50% or more of their isoglosses. A rather interesting chain pattern emerges whereby each dialect is linked to two dialects those on either side of it in a sequence encircling the Accra Plain in the order Krobo - Shai - Akuse - Ada - Ningo - Gbugbla. One might therefore expect Krobo and Gbugbla to be the most divergent dialects, but actually this is not quite so, as is indicated in 1.4 below.

In the cases of Krobo and Shai, Akuse and Ada, Gbugbla and Ningo, 50% sharing is reciprocal: that is, 50% or more of Krobo's isoglosses link it to Shai and vice versa. These three closely linked pairs of dialects are linked together by pairs where linkage is much stronger in one direction than the other: 50% of Akuse's isoglosses link it to Shai, but only about 40% of Shai isoglosses link it with Akuse. Similarly 59% of Ningo's isoglosses link Ningo with Ada, but only 44% of Ada's link it with Ningo. In the diagram below, broken lines indicate that 50% inclusion obtains in one direction only.

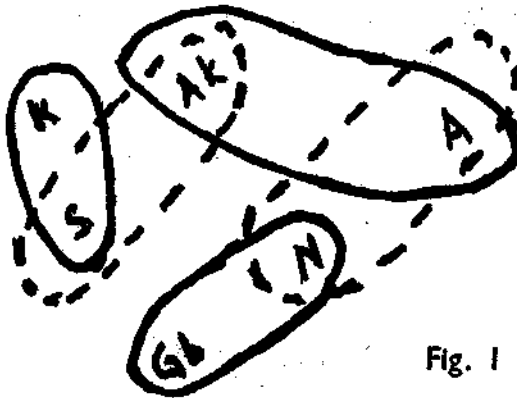


Fig. 1

Several isoglosses link Krobo and Shai only, eg. those for *imi* 'I', *nangmɔ* 'navel', *ahlu* 'tortoise', *osrami* 'moon', *aklowa* 'village', *akate* 'groundnut'. There are also several that link Akuse and Ada only: *atɔtɔ* 'pineapple', *gigɛ* 'groundnut', *mɔmɔi* 'okro', *ami* 'I', *sugba* 'earth'. The words *katiɛ* 'for groundnut', *pumu* for 'mosquito', *duɔmi* for 'rubbish', and *nɛ* in the second syllable of the word for 'today' are unique to Ningo and Gbugbla. (9) But at least in our data, there is only one isogloss that joins Ningo and Ada without including other dialects as well, namely that for *anyazia* 'story'. (Akuse and Bukunor have initial *a-*, and Shai and Somanya have *ny* rather than *n*, but only Ada and Ningo combine these features.) Between Akuse and Shai there are no unique isoglosses. These two dialects are joined by such isoglosses as that for *blɛfono* 'European', which also includes Krobo, Ningo and Gbugbla, that for *pɔmi* 'mosquito', which also includes Krobo, that for *lasuku* 'smoke', which includes all but Krobo, and for *ayɔnu* 'shea butter', which also includes Ada and Ningo. Thus reciprocal 50% inclusion, represented by solid lines on the diagram, seems to co-incide with the occurrence of several uniquely characterizing isoglosses. Unidirectional 50% inclusion, represented by broken lines, seems to coincide with absence or near absence of such isoglosses.

Another interesting feature of this pattern is that Akuse (probably Osudoku generally) seems to act as a link between the dialects of the coast and those inland. Although it is geographically closest to Odumase and Bukunor, it seems to be linguistically much closer to Doryumu and Dodowa. Akuse is very near the traditional dispersal point of the Dangme in northern Osudoku. One is led to wonder whether this pattern of linked dialects does not reflect the original pattern of migration outward from near Akuse, one stream moving inland in stages, and another moving down the Volta and westwards along the coast.

1.3 Secondary Dialect Areas.

When we examine those dialects that are linked by more than 33% of their isoglosses, a secondary pattern of overlapping dialect groupings is obtained. In this grouping, Krobo is still linked only to Shai. Ningo and Akuse

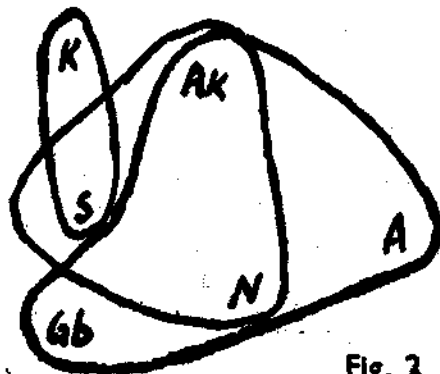


Fig. 2

are linked by at least 33% of their isoglosses to Shai on the one hand and Ada and Gbugbla on the other, but Shai is still not linked to Ada or Gbugbla (see Figure 2).

Gbugbla is excluded from the group that includes Shai because inclusive isoglosses were less than 33% of the total for Gbugbla — Dodowa, Gbugbla — Doryumu, and Dodowa — Gbugbla. However, it is more than 40% for Doryumu — Gbugbla. Doryumu — Ningo linkage is more than 50%. This suggests that although Doryumu and Dodowa are related as varieties of one dialect, their relations with other dialects may be quite different. It is possible that the presence of Ningo herdsmen on the Shai plains between Doryumu and Agomeda is a factor in the situation, but until more information is available this is only a possibility.

1.4 Minor Dialect Links.

Other groups or pairs of dialects are linked by 15% or more of their isoglosses. This is the highest level at which Krobo is linked with any dialects other than Shai. For instance, it is linked with Akuse by *bl̩gfo* 'maize', *pomi* 'mosquito', and with Ningo by for instance *bl̩fota* 'pineapple'. At this level also Shai is linked with Ada, for instance by *ayɔnu* for 'shea butter', and with Gbugbla, for instance by *sune* for 'pillow'. Gbugbla is distinctively linked with Ga, mostly in the form of borrowings from the latter. Only Gbugbla and Ga have *wobi* for 'bee', *w* as the initial sound of the word for 'grey hair', *bl̩fonyo* for 'European', *adesa* for 'story' tale', *bl̩fonmɛ* for 'pineapple', *klakunu* for 'turkey' and *nku* for 'shea butter'. The groupings linked by 33% or more of the isoglosses of each dialect are shown in the diagram below.

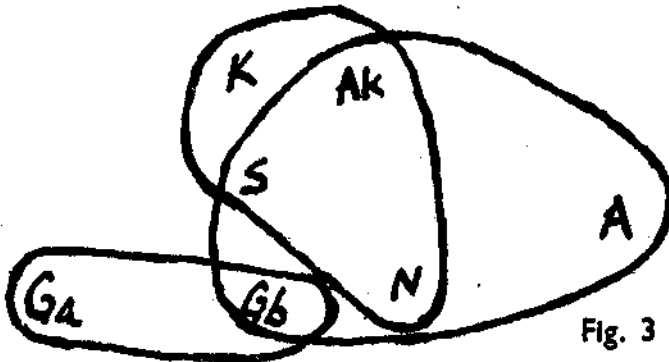


Fig. 3

It may be observed that at none of these levels is there any link between Krobo and Ada or between Krobo and Gbugbla. Linking isoglosses between Gbugbla and any of the varieties of Krobo is consistently below 15%, and Odumase-Gbugbla is also below 15%. However, Somanya — Gbugbla and Bukunor — Gbugbla are linked by 20% and 21% respectively (6 to 8 isoglosses).

ses). Between Krobo and Ada, however, there are consistently only one or two linking isoglosses (dɔmi 'rubbish'). Thus the most extreme divergence among the Dangme dialects is demonstrably between Krobo and Ada.

2. Phonological Variation.

In this section, discussion is limited to certain features resulting from phonetic change that distinguish Ada and Krobo. No mention will be made of other dialects for three reasons: 1) As shown in section 1, Ada and Krobo represent the extremes of dialectal variation in Dangme, and most of the important differences are differences between these two. 2) Ada and to a lesser extent Krobo seem to be the principal foci for innovation and the diffusion of innovations. 3) Quite a lot of reliable and relevant data is currently available for these two dialects, but very little for the others.

Several types of phonological or phonetic difference distinguish Krobo and Ada. Of the following types, three are essentially innovations in Ada, one is the result of an innovation in Krobo, and one (labialization of initial consonants) involves change in both.

2.1 De-labialization.

2.11 There are several words that contain a syllable buɔ in Ada, but bɔ in Krobo:

Ada	buɔ nubɔ buɔmi	Krobo	bɔ nibɔ bɔmi	'grow' (verb) 'stranger' 'hair'
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Others have wo in Ada but ho in Krobo:

wo	ho	'honey', also 'bee'.
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2.12 There are also words that have a syllable mɔ, h(l)ɔ or ho in Ada but muɔ, muɛ huɔ or hue in Krobo:

Ada	mɔmul mɔnɔ hɔ hlɔmi honyu	Krobo	muɔmi muɛnɔ huɔ huɔmi huenyu	'okro' (first syllable) 'today' 'hunger' 'coughing' 'soup'
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2.13 On the basis of comparison with Ga, it would seem that in each case the more conservative form is the one with u or w, and that the dialect without this has lost it. Concerning the absence of h in the Ada word for 'bee', see 2.3 below. Concerning the vowels of the words for 'today' and 'soup', see 2.4 below.

2.2 Intrusive Labialization.

A phonetic difference which looks very similar to the first is probably to the introduction in Ada of u labialization, in second syllables with close or half-close front vowels, and nasal consonants or l, when the first syllable has a back vowel:

Ada	sunue	Krobo	sune	'pillow'
	sulue		sule	'penis'
	mɔmɔi		mɔɔmi	'okro' (second syllable)

2.3 De-aspiration. (10)

A number of words that have hu in Krobo have w in Ada:

Ada	wɔɔ	Krobo	huɔ	'tomorrow'
	wɔ		huɔ	'sleep' (verb)
	wɔli		huɔli	'foam'
	wɔ		hɔ	'honey', also 'bee'

It seems that in Ada, the proto-syllable *huɔ became wɔ, except when it was nasal or affected by an infix -l-. In that case it was de-labialized, as in 2.12 above. Ada has also lost the h element from the proto-syllable *huo, where Krobo has lost the labializing element (see 2.11 above).

2.4 Backing of Vowels.

In certain two-syllable words, where the second begins in a nasal consonant, the original front vowel of the first syllable has become a back vowel of the same height in Ada:

Ada	mɔɔɔ	Krobo	muɛɔɔ	'today'
	honyu		huenyu	'soup'

2.5 Initial Nasalization.

There are two words, both names of parts of the body, in which the initial consonant is nasal in an apparently irregular way:

Ada	langmɔ	Krobo	nangmɔ	'navel'
	mua		ngua	'gray hair'

It is suggested that the initial nasal consonants are relics of old nasal prefixes which have been lost or assimilated in different ways to the original stem-initial consonant, *l in the first word and *w in the second. Comparison with the Ga words (lanmɔ and wan) supports the hypothesis that the original stem-initial consonants were non-nasal.

3. Grammatical Variation.

In this section we will remark on a few aspects of the grammar of Dangme where there seems to be dialectal variation, either in the realization of morphs expounding a structure or in the grammar of the structure itself. There are further areas where there seems to be variation, but more investigation is required before they can be discussed.

3.1 The Stative Construction. (ii)

3.1.1 The Shape of the Stative Suffix.

The main verb in a stative construction has a characteristic suffix, which varies somewhat. Examples collected by means of the first survey questionnaire indicate that the variation is probably essentially dialectal, but rather unstable. In the Krobo Idiolects, the suffix was realized by vowel length if the verb stem vowel was e, ε, or ɔ, but after a, u, and o it is usually ye or e, sometimes ε after u, and sometimes length. There is variation both between and within idiolects. Thus,

Bukunor	e bi lae, e bi laa o ngɛ nɔ nuε o ngɛ doo	'he would not sing' 'you are drinking' 'you are dancing'
Odumase (2)	i ngɛ laa, i ngɛ laye i bi nuye o ngɛ doye	'I am singing' 'would not drink' 'you are dancing'

In Akuse, Ada and Gbugbla the suffix is vowel length after e, ε, o, ɔ, a, but ε or e after u. Doryumu is the same, but the Dodowa idiolect also had vowel length after u, possibly conditioned by the choice of modal verb:

Dodowa	o ngɛ nyu nuu i be nue ma hi nuu	'you are drinking water' 'I would not drink' 'I will be drinking'
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The Ningo idiolect consistently had vowel length as the only realization of the stative suffix. It is curious that Ningo should most resemble Dodowa in this feature, since it generally tends to show more affinity with Doryumu (see 1. above).

3.1.2 The Future Negative Modal Verb.

Verbs with the stative suffix occur following one of the three modal verbs, hi, ngɛ and bi/be/bɛ. It seems that the last mentioned consistently has the shape bi in Krobo and be everywhere else except in Doryumu, where it is bɛ.

3.2 Formation of the Negative.

There seems to be variation in the formation of the negative of certain classes of verbs, namely low toned disyllables and mid toned verbs. The pattern underlying this variation is not clear. In a set of data collected by the second author, the negatives of *bole* 'surround', *sele* 'swim', *du* 'bathe' and *mlɛ* 'wait' may be *bolee we*, *selee we*, *du we* and *mlɛ we*, or *buɛli*, *sili*, *dui* and *mlɛ*. *buɛli*, *sili*, *du we* and *mlɛ we* appear to be characteristic of Krobo, and *bolee we*, *selee we*, *dui* and *mlɛ* are Ada. However, the first author reports *buɛli* and *sili* from Ada, and *bole we* and *sele we* from Krobo, and considers *bolee we* and *selee we* to be more likely to be Gbugbla.

There is also a difference in the placing of the negative particle *we*, in those instances where it occurs with the same verb in both dialects. In Krobo, *we* always immediately follows the verb, but in Ada it comes at the end of the clause:

Krobo	<i>e la we lahi</i>	'he did not sing songs'
Ada	<i>e la lahi we</i>	'he did not sing songs'

3.3 Nominalization by Reduplication.

In Ada, adjectives and nouns are derived from monosyllabic verb stems by reduplication plus a suffix consisting of a high toned front vowel showing cross-height harmony with the stem vowel, for instance:

<i>gba</i>	'marry'	<i>gbagbɛ</i>	'marriage'
<i>si</i>	'fry'	<i>sisii</i>	'fried'
<i>ko</i>	'knock'	<i>kokoe</i>	'broken'

This structure has been thoroughly described elsewhere by the first author, (12) and its affinity with an Ewe structure has been discussed by the second author. (13) It definitely does not occur in Krobo, and it remains to be seen whether it extends appreciably beyond the Ada area. *kokoe* 'broken' apparently occurs in Akuse.

Notes.

1. We have not considered Kpone in this article, because at present we have no relevant data on the Dangme spoken there, and because today its first language seems to be Ga.

2. In Jack Berry, *Structural Affinities of the Volta River Languages*, PhD Thesis, University of London, 1952.

3. In D. A. Pupilampu, *Dangme Manner of Speech*, London, 1953.

4. In M. E. Kropp, *A Comparative Study of Ga and Adangme*, PhD Thesis, University of London, 1968.
5. In E. O. Apronti, *The Writing of Dangme*, Institute of African Studies, Legon, 1970.
6. Part I is primarily the responsibility of Dr. Dakubu. Dr. Apronti will be primarily responsible for Part II.
7. An isogloss is "a line on a map in a dialect atlas delimiting areas within which certain linguistic features, as pronunciation, vocabulary, etc. are exhibited in common". (Funk and Wagnalls *Standard Dictionary*). Since no dialect atlas of Dangme exists, we are here using the word to refer to isoglosses that we could draw on a map if we were to compose such an atlas.
8. An idiolect is "the totality of speech habits of a given person at a given time". (C. F. Hockett, *A Course in Modern Linguistics*, New York, 1958, pg. 321). Here of course we are only concerned with a small part of the idiolect of each informant.
9. In this paper "ng" is digraph representing the velar nasal consonant.
10. The first author reports the form *duɔmi* from Ada, although it did not occur there in the responses to the questionnaire on which this discussion is based.
11. For a fuller treatment of the rather complicated correspondences involving h and w, see M. E. Kropp Dakubu, *A Problem in the Reconstruction of the Ga-Adangme Consonant System*, in the *Journal of African Languages* Vol. 10 No. 3 1971.
12. This construction is described, with the terminology used here, in M. E. Kropp Dakubu, *The Adangme Verb Reconsidered*, *Journal of African Languages* Vol. 9 No. 1, 1970, pp. 19-26.
13. In E. O. Apronti, *A Phonetic and Phonological Study of the Nominal Piece in Dangme*, PhD Thesis, University of London, 1967.
14. In M. E. Kropp-Dakubu, 1970 note 4.