MINISTRY OF SCIENTIFIC AND TECHNICAL RESEARCH

DIALECT INTELLIGIBILITY TESTING AMONG NGOMBA (ALCAM 940) SPEECH VARIETIES: BAMENDJINDA, BABETE, BAMENDJO

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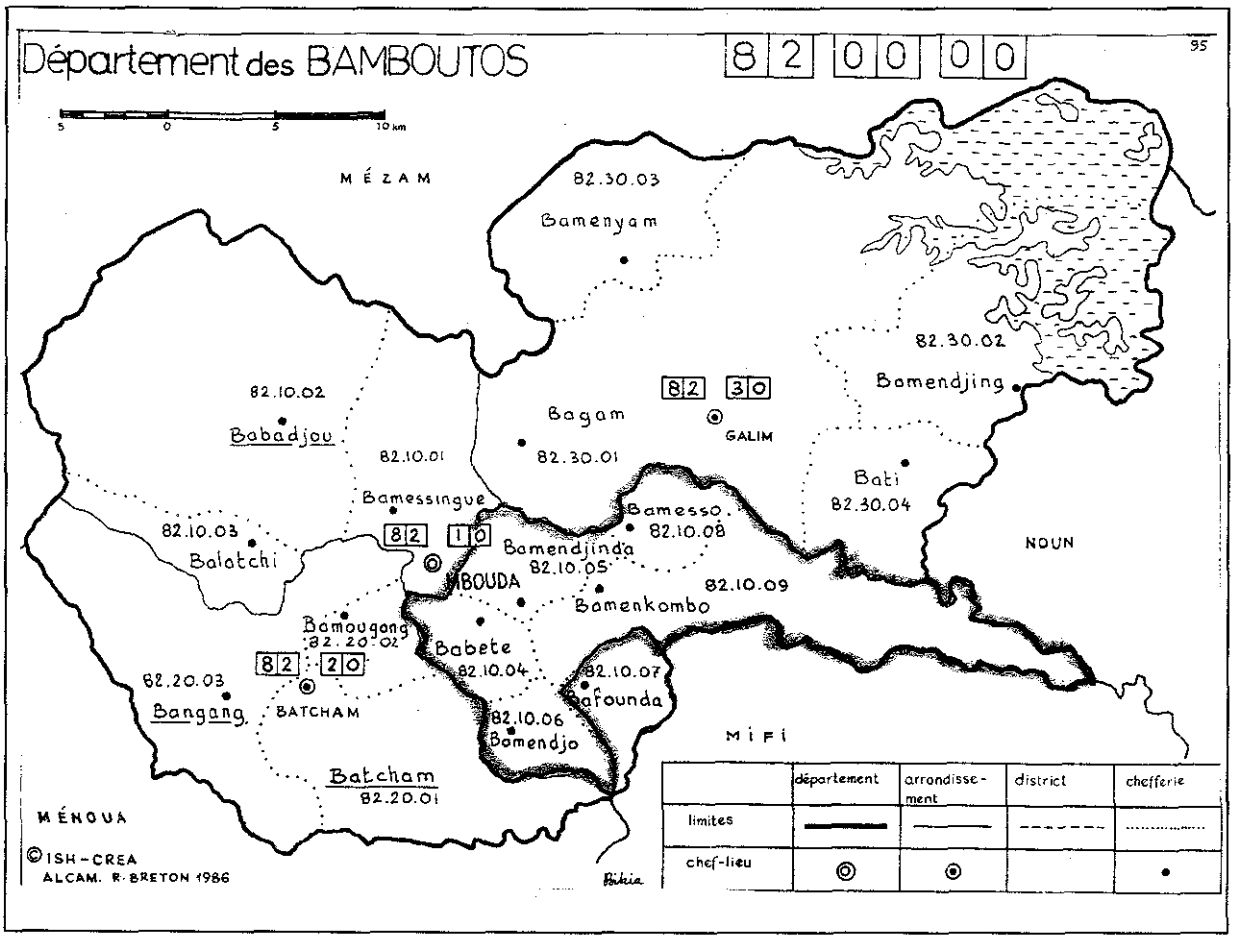
1. INTRODUCTION

1.1 Location and Participants

From 26 April to 5 May 1994, an RTT (Recorded Text Test) survey was conducted among the Bamendjinda, Babete, and Bamendjo varieties of Ngomba (ALCAM 940), spoken in Mbouda Subdivision, Bamboutos Division, West Province (cf. Figure 1). The research team consisted of Lawrence Seguin, Peggy Griffin, and Paul Huey of SIL (Société Internationale de Linguistique) and Joseph Mbongué of the Cameroon Bible Translation Association (CABTA).

Figure 1: Ngomba Area

(Source: Breton and Fohtung 1991:110)



1.2 Previous Survey

This survey followed upon a rapid appraisal survey of the "Nda'a" ethnic group carried out in May 1993 by a joint SIL/University of Yaoundé I team (cf. Grant 1993). The results of this survey established the presence of five main speech varieties of Ngomba, each corresponding to a single village: Bamendjinda, Babete, Bamendjo, Bamenkumbo, and Bamesso. A sixth village, Bafounda, was also found to be part of the Nda'a ethnic group. The language spoken in Bafounda, Fʉ'da, is a variety of the Ngəmba dialect of Ghɔmala' (ALCAM 960), however.

Interview results at that time suggested that Ngomba speakers understand one another to an adequate degree; consequently, all speakers could potentially use literature in one of the varieties. Bafounda was an exception in that Ngomba speakers generally reported they could not understand it, although Bafounda speakers could understand them (an indication of one-way acquired comprehension).

ALCAM word lists of 120 items in length were collected in all 5 Ngomba-speaking villages during the first survey. A synchronic analysis of these lists showed at least 83% lexical similarity between them, with most pairs scoring more than 90% (Grant 1993:5). This in itself is not a guarantee of adequate comprehension, as Blair (1990:15) points out:

> *If any two word lists are more than sixty percent similar, then linguistic similarity alone is not sufficient to determine whether or not the two varieties represented in those word lists are different dialects of the same language or different languages. When this environment occurs, dialect intelligibility testing must be done to distinguish intelligibility boundaries between speech varieties.*

It was thus decided to conduct a recorded text test in order to gain an objective measure of comprehension that could be compared to both the interview and the word list analysis results.

2. OBJECTIVE

RTT uses recorded autobiographical narrative as a means of measuring the level of intelligibility between a pair of closely related speech varieties. It is not bilingualism testing, in that it does not measure how well speakers from one speech variety are able to *speak* a second variety. Rather, it simply gives an indication of the level of *comprehension.*

This method was applied to three of the five Ngomba speech varieties to verify comments made by the speakers themselves concerning intercomprehension (Grant 1993). These were Bamendjinda (the variety in which SIL began linguistic research in late 1993), Babete, and Bamendjo. Babete and Bamendjo were chosen over Bamenkumbo and Bamesso because they were reported to be the most linguistically distinct from Bamendjinda.

The ultimate objective being to ascertain the feasibility of Bamendjinda as a standardised form to serve all three varieties, it was deemed unnecessary to test comprehension between Babete and Bamendjo.

3. PROCEDURE

The principle behind a recorded text test is that a speaker of speech variety A listens to a short, autobiographical narrative recounted in speech variety B by a mother-tongue speaker of B. The story is broken into short sections, each of which is followed by a question (asked in variety A) which refers back to information explicitly given in that section of text. A test consists of at least ten questions, always asked in the *mother tongue* of the hearer (variety A). Answers are scored as correct, incorrect, or half-correct. The percentage of correct answers given is used to judge the speaker's comprehension of the text and, by extension, to give an indication of his level of comprehension of the second speech variety (Blair 1990:73-74).

The actual procedure of collecting stories, creating test tapes, and testing subjects was conducted according to Casad (1974:8-28), with one exception: if the testee did not give a correct answer the first time, he was allowed a second time to listen to that portion and attempt a correct response. Also, since we were not aiming to measure inherent comprehension only, we also tested speakers with previous contact with the other two varieties.

Translations of the test stories and questions are available upon request from SIL, Survey Department, B.P. 1299, Yaoundé, CAMEROON.

Fifteen mother-tongue speakers were tested in each variety. Although an attempt was made to vary the samples according to age, gender, and degree of contact with the other speech varieties, our samples are not necessarily completely representative of the populations (cf. Tables I-III).

Table I: Babete-speaking Sample

	Men	*Women*	*TOTAL*
Young (under 35)	1	4	5
Middle-Aged (35-50)	3	1	4
Old (over 50)	5	1	6
TOTAL	9	6	15

Table II: Bamendjo-speaking Sample

	Men	*Women*	*TOTAL*
Young (under 35)	3	5	8
Middle-Aged (35-50)	6	0	6
Old (over 50)	0	1	1
TOTAL	9	6	15

Table III: Bamendjinda-speaking Sample

	Men	*Women*	*TOTAL*
Young (under 35)	4	3	7
Middle-Aged (35-50)	2	1	3
Old (over 50)	2	3	5
TOTAL	8	7	15

4. PRESENTATION OF DATA AND ANALYSIS

The following results can be considered significant:

1) mean scores (for comprehension of Bamendjinda) of less than 75%, reflecting inadequate comprehension (85-90% is deemed necessary for adequate comprehension). This would have shown that the Bamendjinda dialect is not sufficiently well understood for literature use to be possible as is;

2) evidence of acquired comprehension, either through a difference of 30% or more in mean scores after testing in both directions between Bamendjinda and the other two dialects, or a standard deviation of the scores of 15% among testees in a given village (or both). This would raise the question whether significant portions of the population are unable to adequately understand Bamendjinda.

3) high mean scores (greater than 90%) and low standard deviations (less than 12%) between Bamendjinda and one or both of the other two villages. Together with the statements taken during the May 1993 survey, this would argue strongly that comprehension is adequate for literature use. (It would not show if the high level of comprehension is acquired or inherent, however.)

Table IV compares the mean comprehension percentages ("mean") and standard deviations ("S.D.") for each test location and each speech variety tested. Each testee first listened to a story in his own language (known as the "hometown"), and the community's mean score on this is also given. Results by individual tested are found in the Appendix.

Table IV: Ngomba RTT Results

Comprehension of (in %):

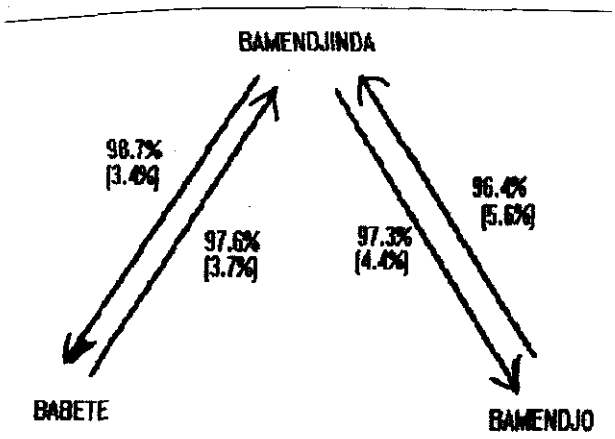
		Babete		Bamendjo		Bamendjinda	
		Mean	*S.D.*	*Mean*	*S.D.*	*Mean*	*S.D.*
By speakers of:	Babete	97.9	4.3	--	--	97.6	3.7
	Bamendjo	--	--	94.9	8.2	96.4	5.6
	Bamendjinda	98.7	3.4	97.3	4.4	96.4	5.3

Because of various factors that made testing conditions less than ideal, some margin of error should be allowed in the above. Thus, differences of less than 5% in the mean scores between pairs are not considered significant.

Figure 2 reduces Table IV to show the bilateral comprehension relationships between each of the speech varieties. The figure to the left of the slash is the mean percentage; the figure to the right is the standard deviation. The arrows point from the test location to the speech variety tested.

Figure 2: Comprehenion

(Mean Scores and Standard Deviation)



From these scores, our conclusion is that the level of comprehension between Bamendjinda on the one hand, and Bamendjo and Babete on the other, is high enough for Bamendjinda literature to be useable in these other two dialects.

5. CONCLUSION

Since it was reported during the initial rapid-appraisal survey that Bamenkumbo and Bamesso are even closer to Bamendjinda than the other two dialects, it seems safe to say that all five villages have a high level of mutual comprehension. Combining the RTT results with positive attitudes and the sense of ethnic oneness among these villages, we have every reason to believe that Bamendjinda remains a suitable choice as a reference dialect for the Ngomba-speaking commmunity.

REFERENCES

Blair, Frank. 1990. Survey on a Shoestring: A Manual for Small-scale Language Surveys. Dallas, Texas: Summer Institute of Linguistics and Arlington, Texas: University of Texas at Arlington.

Casad, Eugene H. 1974. Dialect Intelligibility Testing. Norman, Oklahoma: Summer Institute of Linguistics of the University of Oklahoma, Norman.

Dieu, Michel and Patrick Renaud, eds. 1983. Atlas Linguistique de l'Afrique Central (ALAC), Atlas Linguistique du Cameroun (ALCAM). Yaoundé: DGRST/CERDOTOLA and Paris: ACCT.

Grant, Caroline A. 1993. A rapid appraisal survey of Ngomba (Nda'a) [Bamboutos Division, West Province]. Unpublished ms., 9 pp.

APPENDIX

RTT TEST RESULTS BY TEST LOCATION

A. Babete

Sex	*Age*	*Hometown (x/10)*	*Bamendjinda (x/11)*
F	18	10	11
F	20	10	10.5
F	25	10	10
F	30-35	10	11
F	43	10	10
F	50	10	11
M	22	10	11
M	35	10	11
M	41	10	10.5
M	41	10	11
M	50	8.9*	10
M	60	9	11
M	60-65	8.9*	11
M	65	10	11
M	80	10	11
Mean:		*9.8*	*10.7*
Mean (%):		97.9%	97.6%
Standard deviation:		*0.427*	*0.404*
S.D. (%):		4.3%	3.7%

** - score was 8/9, one answer was thrown out.*

B. Bamendjo

Sex	*Age*	*Hometown (x/10)*	*Bamendjinda (x/11)*
F	20	10	11
F	24	10	11
F	26	10	11
F	27	10	11
F	30	9	11
F	50	7.8*	10
M	19	9.5	10
M	31	10	11

B. Bamendjo (Cont'd)

Sex	*Age*	*Hometown (x/10)*	*Bamendjinda (x/11)*
M	22	10	11
M	36	10	11
M	38	10	11
M	44	8	9
M	45	10	10
M	45-50	8	10
M	50	10	11
Mean:		*9.5*	*10.6*
Mean (%):		94.9%	96.4%
Standard deviation:		*0.822*	*0.611*
S.D. (%):		8.2%	5.6%

** - score was 7/9, one answer was thrown out.*

C. Bamendjinda

Sex	*Age*	*Hometown (x/11)*	*Babete (x/10)*	*Bamendjo (x/10)*
F	16	9	9	9
F	22	11	10	9
F	25-30	10.5	10	10
F	36	10.5	10	10
F	50-60	11	10	9
F	60+	11	10	10
F	80+	11	10	9
M	20	11	10	10
M	21	11	10	10
M	30	11	10	10
M	30	10	10	10
M	41	11	10	10
M	43	10	10	10
M	66	10	9	10
M	60-65	11	10	10
Mean:		*10.6*	*9.9*	*9.7*
Mean (%):		96.4%	98.7%	97.3%
Standard deviation:		*0.583*	*0.34*	*0.442*
S.D. (%):		5.3%	3.4%	4.4