

CHAPTER 3

METHODOLOGY

3.0 Overview of methodology

Several methods were used in this research in order to obtain the desired data to answer the research questions. A questionnaire was the main instrument employed, while informal interviews and participant observation were used as complementary instruments. Both quota sampling and systematic sampling were used in determining which subjects were to be interviewed. Quota sampling was employed to select subjects in the villages where the population is homogenous, while systematic sampling was employed in the county seat, Jinhua, where the population is more heterogeneous. Descriptive statistics served as the main method in analyzing the data while the chi-square test was used to determine the significance of the results for selected questions.

3.1 Questionnaire

An individual questionnaire and a village leader questionnaire were employed to collect data. The questionnaire contains both open and closed questions.

3.1.1 Questionnaire designing procedure

The questionnaire was designed following these procedures.

- Step 1. Determine precisely what information is desired.
- Step 2. Study reports from similar questionnaires.
- Step 3. Draft some questions, and put them in a good layout and order.
- Step 4. Pretest the draft, and analyze the results.

Step 5. Revise the questionnaire.

Step 6. Start the survey.

Showalter (1991) has been a useful reference in the process of compiling and revising the questionnaire.

The questionnaire was originally written in English and then translated into Chinese by the researcher. Ten subjects were chosen from the county seat to do a pilot test before going to the villages to conduct the survey on a large scale. The questionnaire was revised according to feedback from the pilot test and suggestions from several survey experts.

3.1.2 Questionnaire content

The individual questionnaire consists of four parts. Each part has its own focus. See appendixes 1 and 2 for the individual questionnaire in both English and Chinese.

The goal of Part I was to establish the background information of the subjects such as age, gender, education level, marital status, occupation and travel experience. It consists of 16 questions

The goal of Part II was to discover Bai speakers' attitudes towards their own language, culture, other Bai speakers and related language development issues. It consists of 28 questions divided into three groups. Group A (questions 1 to 11) focuses on eliciting Bai people's attitudes towards Bai language and culture. Group B (questions 1 to 7) focuses on eliciting Bai people's attitudes towards other Bai speakers. Group C (questions 1 to 10) focuses on eliciting Bai people's attitudes towards literacy in both Bai and Chinese, and their attitudes towards mass media in Bai including newspaper, radio and television.

The goal of Part III was to obtain Bai speakers' self-reported linguistic information such as language contact with Chinese and language use in different domains: home,

education, trade, work, religion, government and stranger. It consists of 24 questions. Questions 1 to 10 elicit subjects' linguistic background information. Questions 11 to 17 elicit subjects' self-reported ability in Chinese and contact with Chinese. Questions 18 to 24 elicit subjects' language use pattern in seven domains. Under each of the seven main domains, there are sub-domains determined by interlocutor, activities and setting.

The goal of Part IV was to discover Bai speakers' self-reported oral Hanyu proficiency. It consists of 18 self-evaluation questions. These 18 questions are adapted from (Blair 1990:100-102). Each question is contextualized to fit into the situation of Bai people and the purpose of this study. Each question is associated with a level description in the proficiency testing models developed by FSI (Foreign Service Institute of the United States Department of State), ILR (Interagency Language Roundtable) or SLOPE (Second Language Oral Proficiency Evaluation).¹⁰

The village leader questionnaire was designed to discover demographic information at the village level as well as the village leader's personal attitudes towards Bai literacy. See Appendices 3 and 4 for the village leader questionnaire in both English and Chinese.

3.1.3 Questionnaire administration procedure

Informal permission was obtained from the local government education bureau before conducting the survey in the villages. Two Bai speakers were trained to elicit information using the questionnaire. People in different villages were contacted in advance to cooperate with the survey team. One to one interviews were conducted throughout the whole survey. The surveyors asked the questions in parts I, II and III

¹⁰ Detailed description of FSI oral proficiency test is in Wilds (1975). For a description of the SLOPE oral proficiency test, see Bergman (1990). See www.govtilr.org for a description of ILR.

in Bai and wrote down the subject's response on the questionnaire in Chinese. Part IV concerning bilingualism was asked in Hanyu. On average, one questionnaire took half an hour to complete.

The research team began to survey from each village center, where many people get together and the village-square, store and clinic are located. Willing subjects were selected to fill in the stratified sampling frame.¹¹ After filing the background information of the subjects from the village center, the team walked in the village and field randomly and asked whomever they met to answer the questionnaire to fill in the empty cells of the sampling frame. Some of the questionnaire was often administered while the respondents were doing other things such as making ropes, cooking and feeding pigs. They were willing to answer all the questions, but it took longer to complete.

3.1.4 Advantages and disadvantages of questionnaires

The advantages and disadvantages of the questionnaire approach to some extent lie in the nature of open and closed questions.

Closed questions are controllable for the researcher and much easier for respondents to deal with. The time in administration can be minimal, allowing for large numbers of people to be interviewed, and they are easy to score. Trained surveyors can assist the researcher in eliciting the data, but the subjects may only report what they themselves want the researcher to hear, or what they believe the researcher would like to hear. Open questions give the subjects more space to express their opinion, but they are more difficult to control and to organize the results.

¹¹ See 3.2 for sampling methods.

Fasold (1984:152) suggested, "The ideal compromise is to conduct pilot research with open questions and use these results to construct a closed-question questionnaire."

In this study, many of the closed questions were followed with an open question such as "Why?" which gave the subjects freedom to express their opinions.

On the other hand, self-reported data tends to have problems in the areas of reliability and validity. Blair (1990:107) suggested that a study on language use and language attitudes is actually dealing with a three-fold distinction among language use, language image and language posture. Language image (what one thinks one does with a language) and language posture (what one claims to be able to do with a language) often differ radically from language usage (what one actually does with a language).

In this study, observation was used in conjunction with the questionnaire to minimize the bias.

3.1.5 Difficulties encountered in survey

Non-response is a common situation that a researcher will encounter with any kind of survey. In this survey, two subjects refused to be interviewed. Since the sampling was not a strict random sampling, other subjects with the same criteria were interviewed to replace the non-respondents. Four subjects refused to answer some questions in the questionnaire concerning marriage and family.

Mal-response¹² is another inevitable situation a surveyor has to deal with in doing survey. The subject gives the answer that they think the interviewer wants to hear. As a result, some of one person's answers contradict each other.

¹² Mal-response refers to a bad response to the question.

For example: One subject who reported himself with a low Chinese ability in question I 4 later answered in III 15 that he often writes poems in Chinese.

I 4. Can you write Chinese?

Yes___ Some___ No___

III 15. How often do you write Chinese?

a. Daily **b. Often** c. Occasionally d. Seldom e. Never

What do you write? Often writes poems

In order to ensure the reliability of the research, answers from questionnaires with noticeable mal-response were not included in the analysis.

Unpredictable situations in field trips are a challenge that surveyors need to learn to cope with. Following is an example of one of those unpredictable situations: after planning and contacting people several days before going to one village, the survey team arrived on the day just to find out the next day was the opening day for a two-week fire-wood collecting period. (In order to sustain the forests, the government only opens the forest once a year for the villagers to collect fire-wood.) It was said that all men would leave early in the morning to go to the forest. The team had to interview as many subjects as possible, especially men, on the day they arrived and had to extend the planned survey schedule. Fortunately, the next day was a sunny day, and many households decided to have their New Year pig slaughtered on that day, so many men stayed!

3.2 Sampling

In the initial planning stage of this research, random sampling was planned to be used as the sampling method. However, the situation showed that there is little possibility to do random sampling due to the population management system in China. As a

result, quota sampling was chosen as the sampling method in the villages where most subjects are homogeneous. Systematic sampling was used in the county seat.

3.2.1 Quota sampling

Population, school distribution and distance from Jinhua were the three main factors in forming strata for selecting rural survey sites. An attempt was made to sample the whole county. According to these criteria, 8 townships were merged into 5 research areas plus the county seat Jinhua. Figure 6 is a map of Jianchuan County. Five research areas are marked by number, and the county seat Jinhua is marked by a star. The underlined township is the one in which the survey was administered.

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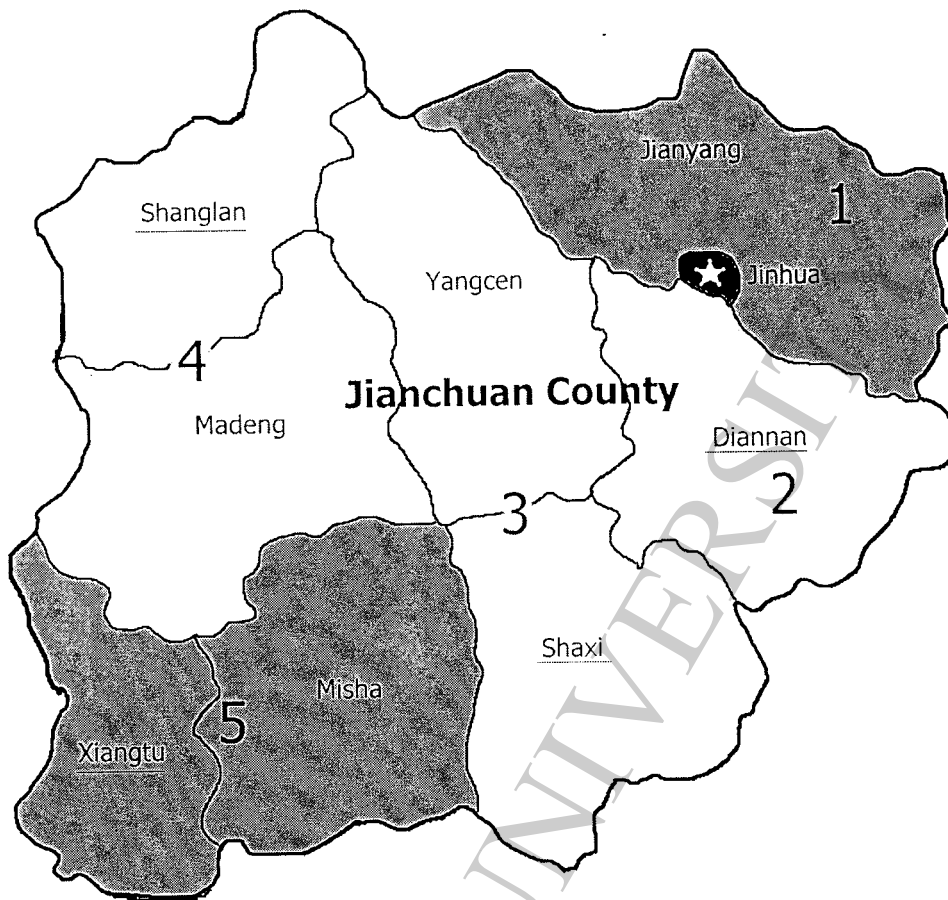


Figure 6 Map of Jianchuan County marked with research areas

Table 7 is the profile of factors in the choice of rural survey sites. Local leadership of the townships was interviewed to give information in determining a specific village, which represents the average level of the area, as the research site.

Profile factors	Xizhong	Xinren	Shilong	Fumin	Xiangtu
Location (township)	Diannan	Jianyang	Shaxi	Shanglan ¹³	Xiangtu
Township population	36,841	32,915	21,586	16,208	5,464
Village population	2,850	2,700	1,040	1,050	2,386
Village Bai population	99%	100%	92%	100%	100%
House holds	674	530	214	254	440
Bai house holds	673	530	196	254	440
Distance to Jinhua	4.5 Km	3.5 Km	30 Km	80 Km	136 Km
Schools (only primary school)	1	2 ¹⁴	1	1 ¹⁵	1
Electricity	Yes	Yes	Yes	Yes	Yes
Telephone	30%	20-30%	30%	1%	30%
Radio and Tape player ¹⁶	50%	Not in use	15%	10%	Not in use
TV	90%	90%	80%	80%	80%
VCD	60%	30%	10%	6%	10%
Exposure to Bilingual education	Yes	No	No	No	No

Table 7 Profile of factors of rural research sites

Age, gender and education are three factors in forming the quota strata for individuals. These criteria are as shown in Table 8:

Age		Education		Gender	
Young (14—36)	Older (36 above)	Uneducated (9 below)	Educated (9 above)	Male	Female

Table 8 Factors in individual quota sampling strata

¹³ The township Shanglan was renamed as Laojunshan two weeks before the survey took place. However, in order to be consistent with other resources, in this paper, the old name 'Shanglan' is used.

¹⁴ One is called 'complete primary school' which is from grade 1-6, another is 'incomplete primary school' from grade 1-3.

¹⁵ The primary school in this village is from grade 1-3. Students need to go to the primary school in another village after grade 3.

¹⁶ Those who report having a radio or tape player added the comments that radio and tape players are not in use anymore. TV is more popular.

Based on the criteria listed in Table 8, 40 informants from each village were to be interviewed. Among them, there were to be 20 males and 20 females. There were two villages where not enough subjects could be found to in the older educated female stratum. Table 9 shows the actual sample sizes in each village.

Stratum	Village					
	Jinhua	Xizhong	Xinren	Shilong	Fumin	Xiangtu
MEY	10	5	5	5	5	5
MEO	10	5	5	5	5	5
MUY	0	5	5	5	5	5
MUO	10	5	5	5	5	5
FEY	10	5	5	5	5	5
FEO	10	5	5	1	1	5
FUY	0	5	5	5	5	5
FUO	10	5	5	5	5	5
Total	60	40	40	36	36	40

Table 9 The actual sample sizes of the five villages

Note : M= Male
 F= Female
 E= Educated (9th grade above)
 U= Uneducated (9th grade below)
 Y= Young 14-36
 O= Old above 36

3.2.2 Systematic sampling

Systematic sampling was used as the sampling method in the county seat Jinhua where subjects are more heterogeneous. There are 4 communities in Jinhua with approximately 3600 households. Sixty households whose gate number can be divided by 6 were interviewed. One subject from each family was interviewed. This subject was chosen to fill the same stratified sampling frame as in villages. In Jinhua, very few people under 36 are uneducated. As a result, no young uneducated subjects were interviewed in Jinhua. The actual sample size in Jinhua is shown in Table 9. There are two households in Jinhua refused to be interviewed. The survey team went to interview the next house which has similar criteria as the non-responding household.

Table 10 is a profile of factors of the county seat Jinhua.

Profile factors	Jinhua
Whole population	11,476
Bai population	85%
House holds	3,587
Bai households	3,181
Schools ¹⁷	3
Electricity	Yes
Telephone	80%
Radio and Tape player ¹⁸	60%
TV	98%
VCD	53%
Exposure to Bilingual education	No

Table 10 Profile of factors of the county seat Jinhua

3.3 Informal interviews

The questionnaire was the main instrument employed in this study, nevertheless, an informal interview gives very important information which can be used to interpret the results of the questionnaire and to complement it. An informal interview refers to a dialogue without guiding questions. The conversation should be led into a discussion of special topics without catching the interviewee's attention. During the six months of research time in Jianchuan, people from different backgrounds were interviewed by this informal interview method. Among them, there are government officials, teachers, doctors, students, farmers, shop owners and retirees, etc. The researcher kept a journal to record the information gaining through the informal interviews. Later, the recorded information was used as examples in the discussion to supplement with the analysis. Some information gained through the conversations would not be available from other sources.

¹⁷ There are two high schools in Jianchuan County. One is located in Jinhua, and another in Jianyang Township. There are two junior high schools in Jinhua.

¹⁸ Those who report having a radio or tape player added the comments that radio and tape players are not in use anymore. TV is more popular.

The advantage of the informal interview is that it is more personal and flexible than administering a questionnaire. In most cases, the interviewees are more likely to give their instant response rather than think for what they think interviewer wants to hear.

The disadvantage lies in the difficulties in interpreting the data. It also requires that the researcher have a solid understanding of the language and culture.

3.4 Participant Observation

Being a Bai speaker herself gave the researcher great opportunity to be involved in the Bai people's daily life. Sitting in a village clinic gave her a chance to meet people from nearby villages and observe their language use patterns in a public setting. Visiting friends brought her into a Bai home setting allowing her to discover their language use patterns in a family domain. Sitting in a classroom gave her a better understanding of how the teacher and students switch codes between Bai and Hanyu. Taking a Chinese-speaking visitor to the market gave her a chance to find out which language Bai speakers use to talk to a stranger. There are many more instances that could be listed. All these observed information was recorded into researcher's journal. Later, the recorded information was used in the discussion as examples to supplement with the analysis.

The advantage of participant observation is that it yields data that no other methods can get. It also helps to understand the real language situation better and give light in interpreting the questionnaire results.

The disadvantage is the enormous amount of time it takes. Namely, it is a time-consuming method. Participant observation also requires that the researcher have a very good understanding of the community both linguistically and culturally.

3.5 Analysis procedure

Data entry

All the data were input into a Microsoft EXCEL spreadsheet shortly after returning from the survey trips. Questions with embedded questions were coded as 1a, 1b and 1c. Answers to a follow-up question were inserted as a comment instead of in a separate column. All worksheets were checked twice to minimize the possibility of making mistakes in the process of inputting data. Another procedure done before starting to analyze data was regularizing the data by checking the consistency in using abbreviations and codes.

Analyzing data

1. Formulas in EXCEL were used to calculate the percentage of responses.
2. The arithmetic mean (\bar{X}) is defined as the sum of the scores divided by the number of scores. This was used to find the mean of language use in each domain and the mean of language attitude in each area for the data.
3. The chi-squared test was used to evaluate how location can affect language use and language attitudes of subjects from the county seat Jinhua and from the five villages.

3.6 Summary

In this chapter, methods employed in this study were discussed. A questionnaire including four parts was used as the main instrument to collect the data for the study, while informal interviews and participant observation were used as complementary methods. Non-response, mal-response and unpredictable situations were the main difficulties encountered while conducting the survey. Population, school distribution and distance from Jinhua were the three main factors in forming strata for selecting

rural survey sites. According to these criteria, 8 townships were merged into 5 research areas plus the county seat Jinhua. One village from each research area was selected as the survey site. Age, gender and education were three factors in forming the quota strata for individuals. Forty subjects from each village were interviewed. Both quota sampling and systematic sampling were used in determining which subjects were to be interviewed. Quota sampling was employed in villages, where the population was assumed to be more homogenous, while systematic sampling was employed in the county seat, Jinhua, where the population was assumed to be more heterogeneous. All the data were input into a Microsoft EXCEL spreadsheet. Descriptive statistics are used as the main method in analyzing the data while the chi-square test was used selectively to determine the significance of the results.