The Steps of Language Survey

An Outline of Practical Methods

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March 2007

Much of the contents of this course were adapted from a previous Language Survey course taught at Payap University by Noel Mann, and from SIL International's modular survey courses, Principles of Language Survey (Gary Simons and Ted Bergman, 2001) and Procedures of Language Survey (Colleen Ahland, Katherine Liddle, David Liddle, Michael Ahland , and Jim Meyers, 2004).

Table of Contents

I do not expect you to absorb all the information in this course all at once. This course is meant to give you an overview of language survey. To really learn about language survey you will need to do it.

Since you will not be an expert on your first few surveys, it is very important that you get help along the way while you are doing survey. Do not just make plans and go off on your own. Get help in planning. Have someone review your methods. If possible, go along with an experienced surveyor. As you get more experience you will not need so much help. Then, someday, you will be the one giving the help to others.

In the sections called "Readings", "Resources" and "For Further Study", the abbreviation LL stands for "LinguaLinks" and CD stands for the Course CD. *Unless otherwise noted, items on the Course CD are in the corresponding Chapter folder.*

To use the accompanying Course CD, you must own a copy of Lingua Links Library v.5. Purchasing information for Lingua Links Library is available at SIL's website (www.sil.org).

0 Overview of Language Survey

0.1 Introduction

This course is designed to be practical. That is, it is designed to enable the student to actually carry out a language survey rather than just learn about language survey in theory. The course introduces the steps of a language survey in chronological order. Theoretical background and practical knowledge will be introduced within the context of each step of the language survey process.

The best way to learn language survey is to do language survey. This course is intended to give you the resources you need to get started and to refer back to as you carry out language surveys in the future. There will be some practice involved in this course, as well. I do not expect that you will feel like experts by the end of this course. But you will have been exposed to all the steps involved in a language survey and you will know where to look to remind yourself of the details of each step.

Objectives

After learning the material in this chapter, you should be able to:

- Define language survey
- Give various reasons for why one would want to conduct a language survey
- List the linguistic and sociolinguistic factors that are typically measured in a language survey
- List typical methods of measuring these factors

0.2 What is a Language Survey?

"Survey ... refers to a study which attempts to uncover and present a broad overview of the linguistic and sociolinguistic facts concerning a specific ethnolinguistic community in a particular region." (Blair 1990:1)

This definition is very general. Some things to note are:

- "Broad overview"... the commonly used language survey instruments are not meant to be precise, but to just give a general idea of the situation.
- Surveys can be for both LINGUISTIC and SOCIOLINGUISTIC purposes
- "Ethnolinguistic community"... We often talk about surveying a language, but really we are surveying people who have a common language and/or ethnicity.

One of the most important things you should know is that language survey takes TIME. All good research takes good planning and an investment of time. There is no way around this fact. If you try to take shortcuts, you will undermine the quality of your data and weaken the conclusions you can make.

0.3 Why Do a Language Survey?

One reason to do language survey is for the purpose of linguistic and/or sociolinguistic research. That is, just to advance the state of knowledge about an ethnolinguistic community.

Another reason to do language survey is for the purpose of determining language development needs, priorities and strategies. This sort of survey also advances the state of knowledge, but the primary motivation is to do language development.

Some more specific objectives for language survey include:

- To determine if the speech community can understand and would accept literature in a language of wider communication.
- To determine if the speech community can understand and would accept literature in another variety of their language.
- To determine the boundaries between languages. That is, which varieties are mutually intelligible[1] and which should be considered a separate language.
- Within a language, to determine which variety(ies) should be chosen for language development.
- To assess language vitality.
- To assess multilingualism.
- To measure community bilingual proficiency.
- To investigate language use and attitudes.
- To get a broad overview of the sociolinguistic situation in a region or among a group of languages.
- To identify the languages used in a region.
- To identify the languages of wider communication used in a region.
- To determine the nature of involvement of an organization in the development of a language.
- To investigate the historical relationships between languages.
- To classify languages.

0.4 What Does a Language Survey Measure?

What kinds of things could you measure in order to meet the objectives listed above?

- Language attitudes
- Comprehension of related dialects
- Linguistic relatedness
- Language vitality
- Domains of language use
- Bilingual proficiency
- Language names (autonyms and exonyms)
- Ethnolinguistic identity
- Dialect perceptions
- History and migration patterns
- Language contact
- And more!

[1] It is possible that intelligibility could be in one direction only. Also, one could have a dialect chain. These situations complicate the definition of "language" and make determining language boundaries more difficult.

0.5 Common Survey Instruments and What They Are Used For

Background research helps you find out what is already known about the speech community. Then your plans can start from there. You do not want to redo something that someone else has already done (unless you do not trust their work!).

Background interviews are used to gather information related to survey planning from knowledgeable people.

Individual Sociolinguistic Questionnaires are used to gather information from individuals, such as their language use patterns, language attitudes, perceptions, opinions, etc. Individual SLQs are used to learn about characteristics that vary between individuals. Thus, good sampling methods must be used when using this instrument.

Knowledgeable Insider / Village Leader Sociolinguistic Questionnaires are used to gather factual information from people who know a lot about the speech community. If you are looking for facts, then you do not need to ask a lot of people, just someone who knows the answer! A **Teacher Interview** is another kind of insider interview that can be very helpful in learning about language vitality. Local school teachers can tell you a lot about the language use patterns of children in the community, about what languages children know when they start school, and about how these factors have changed over time. Parents might know about their own children, but teachers have experience with many children from many families over many years.

A **Group Interview** is used to gather information from a group of individuals. This can be useful if being in a group is more culturally appropriate, or if you think you will get better information after the group discusses the question and comes to an agreement on the answer, or to save time if you only want a first impression about the language situation.
An example is a **Dialect Perceptions Group Interview** where a group of people who have contact with other communities that speak their language are asked about how similar or different the other communities are from their own.

A **Word List** is used to elicit the words of a language. The researcher both transcribes and records the words for later analysis. These are useful for determining lexical similarity, describing the phonology, and doing historical reconstruction.

Recorded Text Testing (RTT) is used to test intelligibility between related language varieties.

A **Reported Bilingualism Proficiency Interview** is a self-evaluation of bilingual ability.

A **Second Language Oral Proficiency Evaluation (SLOPE)** is a direct method of testing an individual's bilingual proficiency.

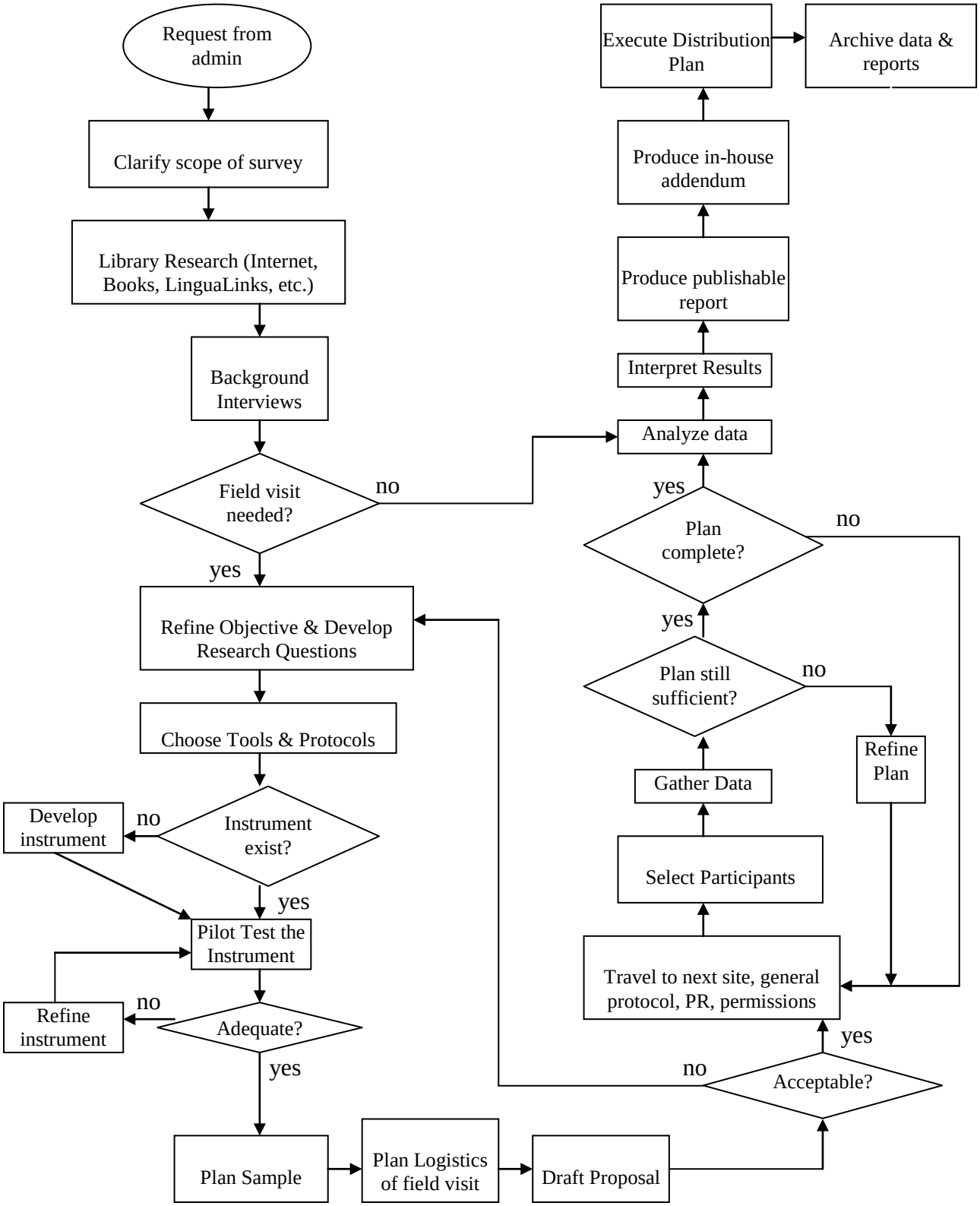
A **Sentence Repetition Test (SRT)** is an indirect method of testing bilingual proficiency for the purpose of assessing community bilingualism.

Observation is used to gather information on things such as language use, bilingual ability, language attitudes, etc.

0.6 Survey Process Flowchart

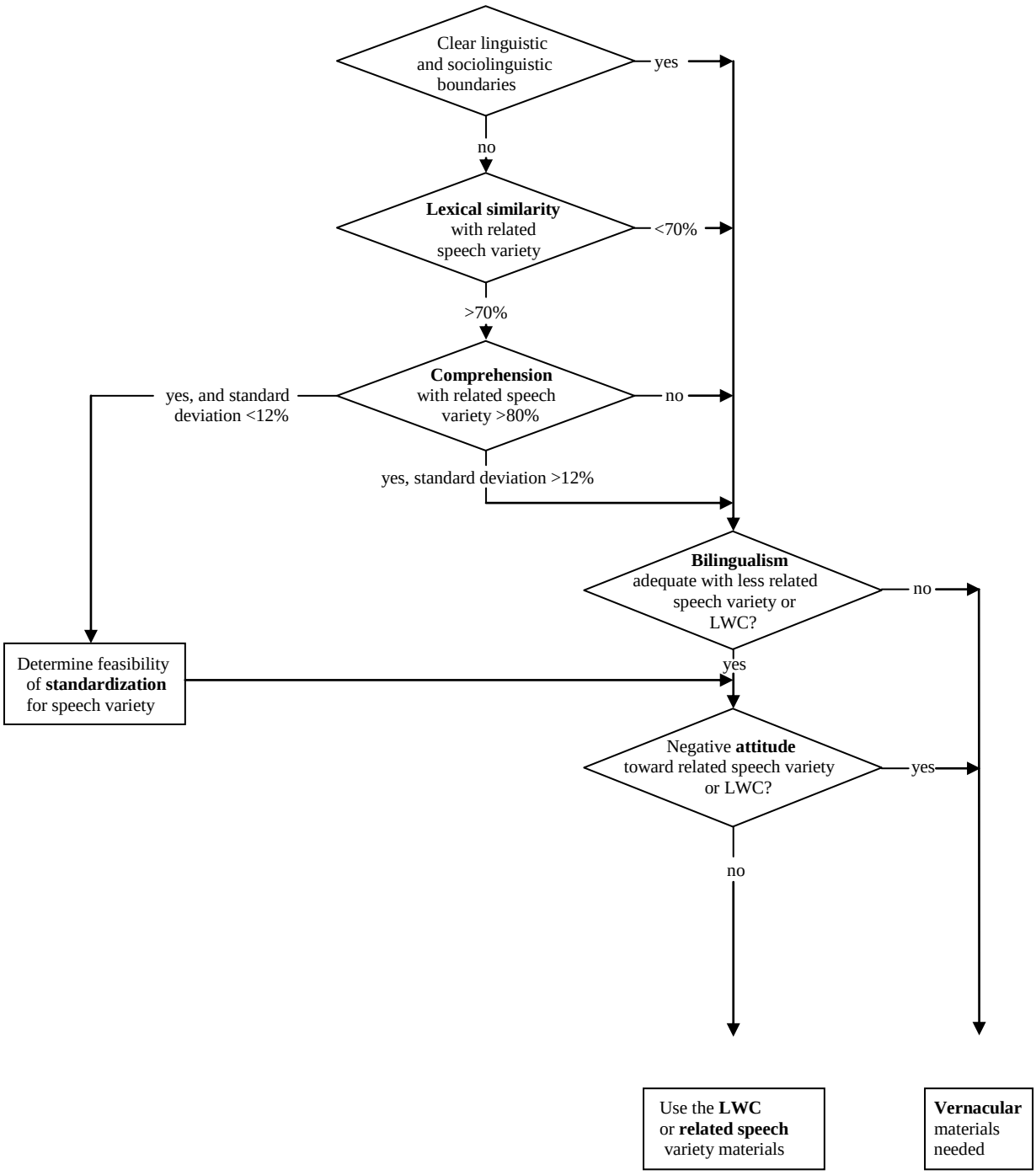
The following flowchart is adapted from a draft created by Ted Bergman (SIL) in 2002.

General Language Survey Process



0.7 Survey Decision Flowchart

The following flowchart illustrates a possible decision process for evaluating if, based on survey data, there is a need for vernacular language development.



(modified from Barbara Heins, in Bergman comp. 1990 Survey Reference Manual. SIL: Dallas. pg. 3)

This flowchart assumes adequate language vitality, but that is often something that we want to investigate in a language survey.

0.8 Examples

0.8.1 Mpi

- What the researchers learned from the background research:
    - 1-2 villages in northern Thailand
    - Location of one village: Ban Dong.
    - Possible location of the second village.
    - Language shift to Northern Thai underway.
    - Tibeto-Burman language in Southern Loloish branch.
    - Closest to, but not intelligible with, Bisu.

- The researchers wanted to determine if they need literature and, if so, what dialect should be the reference dialect.

- The researchers investigated language vitality, bilingualism in Northern Thai, and the sociolinguistic relationship between the two villages.

- The researchers used a Knowledgeable Insider SLQ, and Individual SLQ, and a 436-item Word List

0.8.2 Lawa

- What the researchers learned from the background research:
    - >40 villages in Mae Hong Son and Chiang Mai provinces, northern Thailand.
    - Mountain Lawa already have literature in one dialect (La-up).
    - Mountain Lawa dialects vary from village to village.
    - Most Mountain Lawa report that they can understand each other.
    - The Valley Lawa are reported to be different from the Mountain Lawa.
    - The Valley Lawa are reported to not be using their language any more.

- The researchers wanted to:
    - Determine if all the Mountain Lawa dialects could understand the La-up dialect.
    - Know if the Valley Lawa could understand the La-up Mountain dialect and if they are still using Lawa.

- The researchers investigated dialect intelligibility (for both the Mountain Lawa and the Valley Lawa) and language vitality (only for the Valley Lawa).

- The researchers used a Village Leader SLQ, an Individual SLQ, a Dialect Perceptions Group Interview, and Recorded Text Testing.

0.9 Readings

Blair, Frank. 1990. Survey on a shoestring: A manual for small-scale language surveys. Dallas: The Summer Institute of Linguistics and The University of Texas at Arlington.

- LL, CD
- Read the Forward, Preface, and Chapter 1
- **LinguaLinks:** Sociolinguistics / Language Assessment / Survey on a Shoestring

Gordon, Raymond G., Jr. (ed.), 2005. Ethnologue: Languages of the World, Fifteenth edition. Dallas, Tex.: SIL International.

- CD
- Read the Introduction (http://www.ethnologue.org/ethno_docs/introduction.asp) (pages 7-13 in the print version)
- See http://www.ethnologue.org/ethno_docs/contents.asp for more if you are interested.

Brown, Rick. 1998. "On criteria for identifying language groups and language clusters." Notes on Sociolinguistics 3(1):3–42.

- LL, CD
- Long, but excellent overview.
- The main thing to get from this article is that there are many possible dialect relationships. You want your language survey to be able to distinguish between these if it would make a difference in the decisions resulting from your survey.
- **LinguaLinks:** Sociolinguistics / Notes on Sociolinguistics / NOS Volume 3, #1–4 (1998) / NOS Number 1 (March 1998)

See the example survey reports in the 00 Overview folder

- CD
- **Just skim** to see what survey reports looks like

SIL Electronic Survey Reports (www.sil.org/silesr/)

- To see more examples of survey reports, click on "Country" index to see a list of the available reports ordered by country.
- **Skim** at least one survey report.

0.10 Assignments

Please write brief answers to the following questions:

1. In the readings given here, when are speech varieties considered dialects of the same language and when are they considered to be different languages? [Please note which reading your answers come from.]

2. What are two possible dialect situations where the "mutual inherent-intelligibility model of language" (Brown 1998:Figure 2) would not work?

3. What language model does Brown conclude is the best? Why?

4. Answer the following two questions:
    a. What might go wrong in language development if you group dialects based only on intelligibility and ignore ethnolinguistic identity?
    b. What might go wrong in language development if you group dialects based only on ethnolinguistic identity and ignore intelligibility?

5. What is the difference between "bilingualism" and "bidialectalism"? [Don't just write what Brown (1998) says... summarize it in your own words. You do not have to include all the differences, just give a few sentence description of them.]

6. In Figure 8 of Brown (1998), E is the "central" dialect, while in Figure 9, B is. Figure 8 was based on data gathered from those with no contact in order to measure inherent intelligibility. Figure 9 was based on data gathered from everyone in order to measure bidialectal intelligibility. Brown suggests that B is really the central dialect, not E. Why? Do you agree or disagree?

7. What is the difference between "bilingualism" and "intelligibility"?

8. What is the difference between "inherent" and "acquired" intelligibility?

9. If you haven't used the Ethnologue much before, find the entry for Thailand and read about the following languages: Akha, Mpi, Phuan, Thai (Northern), and Urak Lawoi. Just get an idea of how the Ethnologue is set up and what kind of information it contains. *[You don't need to write up anything for this.]*

0.11 For Further Study

Simons, Gary F. 1991. The role of philosophy in decision making. In Kindell, Gloria E., ed. 1991. Proceedings of the Summer Institute of Linguistics International Language Assessment Conference, Horsleys Green, 23-31 May 1989. Dallas: Summer Institute of Linguistics.

- LL, CD
- **LinguaLinks:** Sociolinguistics / Language Assessment / Proceedings of the Language Assessment Conference / Part II. Decision making

Simons, Gary F. 2001. Rethinking language survey.

- CD

0.12 Sociolinguistic Background Reading

[These are not included in the course. Some are in LinguaLinks. Otherwise, you will need to find these yourself if you are interested in them.]

Language vs. Dialect

- Wardhaugh, Ronald. 1993. An introduction to sociolinguistics. 2nd edition. Oxford: Blackwell. Chapter 2 deals with "Language, dialects and varieties" (pp. 22-38).
- Simons, Gary F. 1979. Language variation and limits to communication. Technical Report No. 3. Ithaca, NY: Department of Modern Languages and Linguistics, Cornell University. (Reprinted 1983 by Summer Institute of Linguistics, Dallas, TX.)
    - Section 1.2 and first paragraph of section 2
    - **LinguaLinks:** Sociolinguistics / Language Assessment / Language variation and limits to communication
- Wald, Benji. 1994. "Sub-Saharan Africa." Atlas of the world's languages. London: Routledge. Section 1, pages 289-292.
- Romaine, Suzanne. 1994. Language in society. Oxford: Oxford University Press. Chapter 1 deals with language and dialect (pp. 1-31).
- Grimes, Joseph E. 1995. Language survey reference guide. Dallas: Summer Institute of Linguistics. 0-88312-609-5
    - Section 3.2
    - **LinguaLinks:** Sociolinguistics / Language Assessment

Language Vitality / Bilingualism / Diglossia

- Hatfield, Deborah H. and M. Paul Lewis. 1996. “Surveying ethnolinguistic vitality.” Notes on Sociolinguistics 48:34–47.
    - Excellent!
    - **LinguaLinks:** Sociolinguistics / Notes on Sociolinguistics / NOS Vol. I, #1–50 (1981–1996) / Notes on Literature in Use and Language Programs: Issues 39–50 / NOS Number 48 (June 1996)
- Fasold, Ralph. 1984. The sociolinguistics of society. Oxford: Blackwell. Introduction (ix-xi), Chapter 1 - "Societal multilingualism" (pp. 1-12), and Chapter 2 - "Diglossia" (pp. 34-54).

1 Background Research

1.1 Introduction

The first step in a language survey is to find out what others already know about the language and people you are interested in. It is also important to learn about the surrounding area as well as related languages... there are few isolated language communities in the world anymore. Thorough background research will help you plan your survey well.

Objectives

After learning the material in this chapter, you should:

- Know how to access materials relevant to language survey background research.
- Know how to conduct a background interview.
- Know how to write an Annotated Bibliography that is useful for survey planning and writing a survey proposal.

1.2 Resources

See **Library and Online Resources** on the Course CD.

Libraries can be found at universities, non-government organizations, national Bible translation agencies, research centers (national & expatriate), and other places.

When searching a library database for information about a language or people group:

- Look up the country, language family, individual languages, and major authors.
- Search alternate names for the language and people.
- Look in bibliographies of books and articles you already have for more references.
- In addition to looking for books and articles about the language and people of interest, sometimes excellent information (general information or specific to that language group) can be found in more general books about the country or region in which the people live.

Tips for finding a particular reference in a library database:

- If it is a book, search for the author or title.
- If it is in an edited volume, search the name of the editor and the name of that volume.
- If it is in a journal, search for the name of the journal, not the name of the author. Once you find the location of the journal, you can go to the shelf and find the specific issue you are looking for.

1.3 Background Interviews

Much of the information you need to know when planning a language survey is not written down anywhere. It is in the heads of people who are knowledgeable about the peoples and places you are interested in. Take time to think about the kind of information you want to find out about and create a good list of questions. You probably will not ask every question to every person you interview since they will have different areas of expertise.

- You might write the questions in your language, but then you might have to translate them into the language you will use during the interview. It is better to translate the questions ahead of time, rather than trying to do so during the interview. That way, you can get help in wording if you need it, and you can ask the questions in a clear way so as not to waste the time of your interviewee.

- Keep track of the results of the interview in your annotated bibliography (see below).

- During the interview, get permission to reference the person in your report. Clarify what things are too private to include in a report.

- Interview people during the planning stages of the research and revise your plans as necessary based on their input.

Who are the experts?
- Village leaders
- Language committees
- Religious leaders
- Educators
- Government workers
- Members of ethnolinguistic community who are living outside home area (e.g. in a major city where you live or are going to pass through)
- Outsiders who have lived in the area for a period of time
    - Missionaries
    - Linguistic researchers
    - Anthropologists
    - Aid workers (e.g. Peace Corp)
- Professors who have done research on the language
- Perhaps you can think of others...

What do you ask about?
See **Background Interview Guidelines** on the Course CD.
Also on the Course CD are an example (blank) Background Interview Questionnaire and an example which includes answers.

1.4 Annotated Bibliography

An annotated bibliography is a listing of all sources (books, articles, people, etc.) of information along with an "annotation" for each source. The annotation summarizes what is in each source. This could be a paragraph summarizing the information, a listing of relevant information, or even a Table of Contents (if you do not have time to read the source, but want to know what it contains for future reference).

The annotated bibliography serves as a way to keep track of what you are researching so you can easily access it later when you are ready to write your Survey Proposal and Survey Report. Without this kind of organization, you may end up having to read all your references again later!

In general, keep track of ANYTHING that is relevant to the language and people you are researching. It is helpful to group your background research notes by the sorts of topics you will use in your survey report.
- Be sure to copy all information needed to find this resource again (i.e., FULL bibliographic information using whatever format you will use in the final report).
    - Include the location of the source (i.e. For written materials: what library, call number, etc.; For people: name, address, phone number, email, etc.).
- Geography

    - Maps
        - Country, Region, local showing village locations
        - Village locations and names
        - Local names, names used by outsiders, official names
        - "Make copies of maps that you find in reading and write in the margins any additional information or possible contradictions that you notice. (Remember copyright regulations, though!)" (Procedures)
    - Surrounding ethnolinguistic communities
    - Names/locations of places, political divisions/subdivisions
    - Learn what areas are restricted access for foreigners and/or nationals
- People
    - Ethnolinguistic group names
        - For the people
        - For the language
        - Local names, names used by outsiders, official names
    - Religion
    - Occupation
    - Culture
    - Social & political organization
- History
    - Of the people group
    - Of the village
    - Migration patterns
- Language
    - Linguistic characteristics – typology, phonetics, phonology, grammar, tones, etc.
        - "Record all available information about the sound systems of the lects in question and the larger language family to which they belong. Create a summary of this information that you can review before leaving on the survey trip and/or before taking the first couple of word lists." (Procedures)
        - "Take notes on hypotheses or findings regarding the linguistic relationships of the lects in question, especially if they are the results of historical-comparative work." (Procedures)
        - "If you find any word lists from the lects you are interested in or in related lects, make copies of them. (Remember copyright regulations, though!)" (Procedures)
    - Relationship with other languages
        - Lexical similarity - word lists
    - Note if the reference contains word lists or other relevant data
    - "Learn all of the variations of the names for the languages, dialects, and peoples you will be studying that are identified in the Ethnologue and other sources. You should do this every time you come across a new document in your research." (Procedures)
- Sociolinguistics
    - Bilingualism, multilingualism, diglossia, domains of language use, language attitudes, language vitality, etc.
- Dialect relationships
- Census statistics (demographic information for an area and sometimes even villages)
    - Good for sampling later
- Policy statements regarding language issues

- Research previously done in the area, perhaps in related varieties
    - Can use their word lists for comparison
    - Education
- Interesting quotations that you might want to use in your report
- Note your opinion of the book – How reliable is the information? How did the author go about getting the information and drawing conclusions?
- Note the names of those mentioned in the reference that you might be able to interview (including the author).

There are various ways you could format an annotated bibliography for your own use. You could use a "list format" or a "spreadsheet format", for example. See examples of each of these on the Course CD. If you were going to publish the annotated bibliography, then you would need to use whatever format is appropriate for the location of the publication. For example, the spreadsheet format might work if published on the internet, but would be very awkward for a book.

1.5 Citation Style

See the **LSA Style Sheet** (in Resources) for the Journal of The Linguistic Society of America's manuscript guidelines. You do not have to use all of their other formatting guidelines unless you are submitting a paper to them. For your work in this class, though, please follow the following guidelines:

- **Please use their format for citations and for referencing other works (see Sections 11 and 12 of the LSA Style Sheet).**
- A4 paper
- Single spacing
- Double-sided to save paper (if possible)
- Use Unicode fonts only
    - For IPA, use Doulos SIL or Charis SIL
        - Charis SIL is better for printing... It was designed for laser printers.
        - These are both downloadable for free from SIL at http://www.sil.org/computing/catalog/index.asp#fonts
- Margins should be consistent throughout unless you just cannot make something fit. Definitely use at least 1 inch margins on the left if the paper will be bound.
- Use [brackets] for phonetic transcriptions. Use /slashes/ for phonemic transcriptions. Use (parentheses) for parenthetical comments.

Here is a guide for citing web pages, email messages and Usenet news articles:
http://cob.jmu.edu/wrightnd/citing1.htm

1.6 Other Tips

The following tips are from Loren Maggard (former SIL SAG Survey Coordinator):

- Check the libraries in big cities you transit through for resources. Make sure to take ID (e.g. passport). Note that usually only the card catalogues are accessible.
- Take all your reading away for some "sheltered time", e.g. at a center or holiday resort. Also a good idea for report writing.
- Set aside adequate time for background research. Pick the brains of people with previous experience in the area.
- It's helpful to write the "introduction" chapter of the report (history, geography, people, language situation) before you go out on survey. It is fresh in your mind during the background research. The chapter can always be modified later.
  [NOTE: In this course, you do this when you write the Survey Proposal, which is pre-fieldwork.]

1.7 Readings

Blair, Frank. 1990. Survey on a shoestring: A manual for small-scale language surveys. Dallas: The Summer Institute of Linguistics and The University of Texas at Arlington.

- LL, CD
- Read Section 2.1
- **LinguaLinks:** Sociolinguistics / Language Assessment

1.8 Resources

Library and Online Resources

- CD

Background Interview Guidelines
Example Background Interview (blank)
Example Background Interview (with answers)

- CD
- Note that the one with answers does not have exactly the same questions as the blank one.

LSA Style Sheet

- CD
- http://www.lsadc.org/info/pubs-lang-style.cfm

Annotated Bibliography (spreadsheet format)

- CD

Annotated Bibliography (list format)

- CD

1.9 Assignments

Start the project described below. Many of the items below refer to Chapters we have not yet covered. But the due dates will fall after we cover those topics. Write in the due dates for each part here and refer back to this page throughout the course.

Project: Language Survey Proposal

Pick a language that needs to be surveyed. It can be anywhere in the world. The goal of this project is to write a Survey Proposal, but there are a number of other assignments that you will be required to turn in along the way. The following is a list of the steps in this project:

1. Do background research.

2. Write an Annotated Bibliography with at least 10 entries.
   NOTE: Even after the due date, you can continue to do more background research and add to your Annotated Bibliography. The more research you do, the better your Proposal will be in the end.

3. Interview at least one expert.
   a. Create a Background Interview questionnaire.
   b. Turn in the questions and the responses.

4. Outline Purposes, Goals and Research Questions

5. Write an Initial Plan

6. Develop an Individual Sociolinguistic Questionnaire
   a. If your survey does not require an Individual SLQ, then see me for an alternative assignment.
   b. Explain why each item on your SLQ is there.
   c. Demonstrate that every Research Question that needs items on the SLQ has some included in the SLQ.

7. Write a Survey Proposal
   a. This should include all the sections in the Survey Proposal Template. In particular, there should be a clear description of your research questions, the protocol for each instrument you will use, sampling plans for individuals and sites, what data collected using which instruments will be used to answer the research questions, and the criteria that will be used to answer the research questions.

8. Survey Proposal Review
   a. The instructor will review your Survey Proposal and write comments.
   b. Meet with the instructor to discuss the comments.

9. Survey Proposal Revision
   a. Revise your Survey Proposal based on the results of the Survey Proposal Review.

10. Survey Proposal Presentation
    a. Give a 20-minute in-class presentation of your Survey Proposal

If you find that you are not sure what to do for any step, please do not hesitate to see the instructor and ask for help.

2 Research Question Formulation

2.1 Introduction

"Language survey" is a broad topic. If someone says "that language needs to be surveyed," what does that mean? What would you do first if you were asked to carry out a survey of a language? The first questions in your mind should be "Why do the survey?" (**Purpose**), "What goals do I want the survey to achieve?" (**Goals**), and "What questions do I want the survey to answer?" (**Research Questions**).

Often the language surveyor is not in a position to answer the "Why?" question, but rather needs to ask this question of whoever is requesting the survey. Knowledge of the **Purpose**, **Goals** and **Research Questions** is essential to being able to carry out an effective research project. It would be unwise to build a building without a blueprint, or go to a new destination without a map. In the same way, **you should never do research without carefully thinking through the Purpose, Goals and Research Questions.**

Objectives

After learning the material in this chapter, you should:

- Understand all the parts of the Ladder of Abstraction.
- Be able to use RAID to formulate appropriate Purposes, Goals and Research Questions for typical language surveys.
- Know what survey instruments are typically used to answer the most common Research Questions.

2.2 The Ladder of Abstraction

Many different people might call for a language survey for many different reasons. For example, here are some possible questions that someone might ask which would require a language survey:

- A language development organization (e.g. SIL) might want to know...
    - "In developing a particular language, which variety(ies) should be chosen for development?"

- Government officials might want to know...
    - "How many languages are used in a given geographical region?"

- Ministry of Education officials might want to know...
    - "In a given geographical region, what is the best language to use for primary education?"

- Literacy specialists might want to know...
    - "Which orthographic symbol should be used for 'ch'?"
    - "Is the use of the LWC spreading?"
        - "If so, what are the implications of its use as the written language?"

How would you answer these questions? You have to turn these broad, general questions into more precise tools that can be used to get answer to the questions. This is done using what is called the "Ladder of Abstraction."[1]

- With the information that is given to you in mind, define **Purposes**, **Goals** and **Research Questions** for the survey. That defines WHAT you want to find out.

- Then list the linguistic and sociolinguistic **Concepts** related to each **Research Question** and think about what kinds of things are **Indicators** of those **Concepts**.

- Then design **Probes**[2] which measure the **Indicators** related to the **Concepts** in order to answer the **Research Questions**. Answering your **Research Questions** means you have achieved your **Goals** and accomplished the **Purposes** of the survey.

Picture a ladder where the rungs are more abstract the higher you go. The survey process involves going down and up the Ladder of Abstraction. You go down the Ladder from a more abstract Purpose and move to more concrete Probes. Then you collect your data using the Probes. Then you go back up the Ladder with your data in order to answer the Research Questions and accomplish your Purposes. **Definitions of each rung in the Ladder are given in the RAID document (see below).**

2.3 Using RAID

It is not so easy the first time to know how to express the Purpose of a survey. That is why the RAID tool exists. RAID stands for "Research and Instrument Design". It is an outline of possible survey Purposes, Goals, Research Questions, Concepts, Indicators and Probes. It was designed to be used by MSEAG language surveyors and, as such, it may not apply to your situation if you have different survey Purposes.

RAID is an outline of **SUGGESTIONS**. What you need for your survey might not be in the outline. But RAID does give you an idea of how to use the Ladder of Abstraction. The key is that you THINK about your survey and what kind of data you need to answer **your** Research Questions.

There is a copy of RAID on the course CD (in the Chapter 4 folder – "17 Nahhas et al (2006) Research and Instrument Design Tool"). Feel free to make a copy of it and modify it to meet your needs. For now, we will only discuss RAID down to the Research Question level. But in Chapter 4 (Develop Instruments), we will make use of the rest of the outline.

[1] The information on the Ladder of Abstraction presented here was adapted from Douglas Boone's (SIL) adaptation of the material found in De Vaus, David A. 1986. Surveys in social research. Winchester, MA: Allen & Unwin, Inc.

[2] Similar Probes are gathered together into survey Instruments. For example, questions that you will ask individuals are gathered into an Individual Sociolinguistic Questionnaire.

2.4 Examples

Mpi and Lawa have already been surveyed by SIL. This section describes the situations before the survey. Let's see how to use RAID to formulate the Research Questions for these surveys.

2.4.1 Mpi

Mpi is spoken in two villages in Thailand. It is not clear how many Mpi people are still using Mpi. Mpi is not a written language. SIL wants to know if there are any language development needs for the Mpi language. Use RAID to fill in the following outline.

Purpose 1:

Goal 1:

Research Question 1:

Research Question 2:

Goal 2:

Research Question 1:

Purpose 2:

Goal 1:

Research Question 1:

Goal 2:

Research Question 1:

(The outline actually used in the survey is on the course CD.)

2.4.2 Mountain Lawa

Mountain Lawa is spoken in over 30 villages in Mae Hong Son and Chiang Mai provinces in Thailand. Missionaries have worked among the Mountain Lawa for over 50 years and have developed an orthography and translated the entire Bible into Lawa. Spoken Lawa varies from village to village. The orthography and literature are based on the Lawa spoken in Ban La-up. It is not clear whether all the Mountain Lawa adequately understand the Ban La-up dialect of Lawa. SIL wants to know if there are any further language development needs for the Mountain Lawa. Use RAID to fill in the following outline.

Purpose 1:

Goal 1:

Research Question 1:

Research Question 2:

(The outline actually used in the survey is on the course CD.)

2.4.3 Valley Lawa

Valley Lawa is spoken in about 10 villages in Chiang Mai province in Thailand. They have little contact with the Mountain Lawa. Valley Lawa is very closely related to Mountain Lawa. There are some reports that some of the Valley Lawa are shifting to Northern and Central Thai. SIL wants to know if there are any language development needs for the Valley Lawa. Use RAID to fill in the following outline.

Purpose 1:

Goal 1:

Research Question 1:

Research Question 2:

Goal 2:

Research Question 1:

Goal 3:

Research Question 1:

Research Question 2:

(The outline actually used in the survey is on the course CD.)

2.5 Summary of Typical Survey Designs

The above examples are fairly typical. Below is an inventory of typical survey designs that you might end up using. This list is certainly not exhaustive... such a list would be impossible! Note that a particular survey might include a combination of any of the following designs.

The following would be a design for a situation where the choices for language development are the local language and an unrelated LWC (i.e. comprehension of the LWC would be due to bilingualism).

Purpose 1: ["Need"] Assess the NEED for vernacular literature development among the X people within region R.

Goal 1: Evaluate the potential for X speakers in region R to use materials developed in LWC (an unrelated language).

Research Question 1: ["Proficiency in LWC"] Do X speakers master the LWC adequately?

Research Question 2: ["Attitude to LWC"] What are the attitudes of X speakers toward the LWC (positive, neutral, negative)?

Thus, you need to investigate (at least) **bilingualism**, **language use** and **attitudes**. The Instruments you would use would be **questionnaires**, and possibly some form of **bilingualism testing**.

The following would be a design for a situation where the choices for language development are the local language and a related variety (i.e. comprehension of the related variety would be due at least in part to inherent intelligibility).

Purpose 2: ["Need"] Assess the NEED for vernacular literature development among the X people within region R.

Goal 1: Evaluate the potential for X speakers in region R to use materials developed in Y (related variety).

[NOTE: This Goal includes "literature extension" surveys.]

Research Question 1: ["Comprehension of Y"] Do X speakers adequately comprehend Y?

Research Question 2: ["Attitude to Y"] What are the attitudes of X speakers toward Y variety (positive, neutral, negative)?

Thus, you need to investigate (at least) **intelligibility** and **attitudes**. The Instruments you could use include **word lists**, **questionnaires**, and **intelligibility testing**.

The following would be a design for a situation where there is a question about whether or not there is a need because the language might be dying:

Purpose 3: ["Need"] Assess the NEED for vernacular literature development among the X people within region R.

Goal 1: Evaluate the vitality of language X in region R.

Research Question 1: Does it appear likely that variety/language X will continue to be spoken by future generation(s)?

Thus, you need to investigate various factors associated with language vitality, of which there are many. The RAID outline lists 11 Concepts under this Research Question, and one could think of even more. The Instruments you could use include **questionnaires**, and possibly some form of **bilingualism testing**.

The following would be a design for a situation where there is a need for language development, but it is not clear which varieties of that language should be developed.

Purpose 4: ["Central Dialects"] Determine which X varieties should be selected for development within region R.

Goal 1: Determine the linguistic relationship between X varieties spoken in region R.

Research Question 1: What are the groupings of X varieties based on intelligibility?

Goal 2: Determine the sociolinguistic relationship between X varieties spoken in region R.

Research Question 1: How do X people perceive the groupings of X varieties?

Research Question 2: What are the types, natures and extents of interactions between and within X varieties?

Thus, you need to investigate (at least) **intelligibility**, **attitudes**, **dialect perceptions**, and **contact**. The Instruments you could use include **word lists**, **questionnaires**, and **intelligibility testing**.

RAID includes some additional survey Purposes, as well.

2.6 Readings

Nahhas, R., Kelsall, J. and Mann, N. 2006. RAID: Research and Instrument Design Tool. ms.

- CD (in the Chapter 4 folder)
- Read to the end of page 3.
- Skim the RAID outline just to see what it looks like. Try clicking on some Probe links to see what happens.
- We will use it in class down to the Research Question level.

Simons, Gary F. 2001. Selecting the Right Type of Survey. ms.

- CD

2.7 Resources

Mpi Research Design
Mountain Lawa Research Design
Valley Lawa Research Design

- CD

2.8 Assignments

1. For each of the following five situations (from SIL's Principles course, Gary Simons 2002), use RAID and formulate appropriate Research Questions:
   a. In the Marovo lagoon area, seven closely related vernacular languages are spoken (one of which is called Roviana). Missionaries a hundred years ago tried to establish the Roviana language as a church language; consequently, many people throughout the region know Roviana to some extent and it is still in use in many churches today. However, the national lingua franca, Pijin, is also becoming widely known. Church leaders are debating whether Roviana, Pijin, or the vernaculars will best serve as the language of Bible translation.

   b. Malaita is a large island approximately 100 miles long. The people of the northern half of the island recognize eight different ethnolinguistic groups with distinct names and identities. However, neighboring groups can generally understand each other so that it is not clear how many should be developed as literary languages.

   c. It is not clear exactly what vernacular languages are spoken in western Guadalcanal. Two languages of wider communication are also known to be used in the region, Pijin and a regional vernacular that has been promoted as a church language, but it is not clear how widely either is known or used.

   d. Vanikoro is a small island with only a few hundred indigenous inhabitants who speak the Teanu language. There has been a lot of intermarriage with people from a larger, more populous island who speak a different language that is not related. Consequently Pijin is widely used. The question has arisen as to whether the Bible should be translated into Teanu.

   e. There is no literature in the Baegu and Fataleka dialects of Malaita, but the New Testament has been translated into the closely-related neighboring languages of To'aba'ita and Lau. The question has arisen as to whether these translations can serve the needs of the Baegu and Fataleka.

2. Outline the Purposes, Goals and Research Questions for your Survey Proposal Project.

3 Initial Plan & Site Selection

3.1 Introduction

Before you get started doing too much planning on a research project, it is a good idea to outline your research plan and get feedback from someone with more experience. If you are going in the wrong direction, you want someone to point that out to you at the beginning, not after you have invested a lot of time. This Chapter describes what goes into writing an **Initial Plan**.

Objectives

After learning the material in this chapter, you should:

- Be able to write an Initial Plan for a survey detailing the Purpose, Goals, Research Questions, Site selection, Scope, and a time line for accomplishing all the steps of the survey process.
- Understand what the "scope" of a survey is.
- Understand the principles of site selection.

3.2 Parts of an Initial Plan

- Specify the personnel to be involved in the survey

- Describe the "big picture", that is, the background and motivations for the survey.

- Specify the Purposes, Goals and Research Questions
    - Use what you did in Chapter 2

- Specify the survey Instruments
    - We have not yet discussed how to do this... For this course, at this point, I will tell you what to write for this part. But in "real life", you will use your previous experience to know what the Instruments are likely to be.

- Specify the Criteria that will be used to determine how the results are interpreted
    - Again, we have not yet discussed how to do this... For this course, at this point, I will tell you what to write for this part. But in "real life", you will use your previous experience to know what the Criteria are likely to be.

- Specify the target population for the survey. This is called the **"desired scope"** of the survey.
    - In the survey, you will interview a small number of people, but what larger group do you hope to generalize to? For example, "all Lawa in Thailand".

- Specify the sites you plan to visit and how / why you have picked those in particular.
    - We will discuss this further in this chapter...

- Indicate what the implications are of your chosen site sampling method. That is, will you really be able to generalize to the target population? Is your **actual scope** the same as your **desired scope**?

- If you can, specify a tentative fieldwork plan, stating when you will go where and what you will do at each site.

- Give an estimated time line for when you hope to accomplish all the parts of the survey process.

3.3 Scope

The "scope" of your survey is how far you can generalize your survey results. However, there might be a difference between the **desired scope** and the **actual scope**. The desired scope of your survey is your target population, the ethnolinguistic group or groups about which you would like to draw conclusions. The **actual scope** of your survey, however, depends on your site selection method.[1] You choose your desired scope, but your actual scope is chosen for you based on what sites actually have a chance to end up in your sample. This does not mean that you have to go to every village, but that every village had a chance of being selected.

For example, you might choose your desired scope to be "all Lawa in Thailand." If you chose to randomly sample from a list of names of all Lawa villages in Thailand, then your actual scope would also be "all Lawa in Thailand." Every village in the target population has a chance to be in your sample. But often there are limitations to where you can go. For example, perhaps you only have access to one village, Ban Kok Luang. Then your actual scope is "all Lawa in Ban Kok Luang."

(This is different from the case where you could have gone to any Lawa village, but you chose Ban Kok Luang at random. In that case, your actual scope is all the villages. Of course, by only going to one village your estimates for all Lawa in Thailand will not be very accurate.[2])

3.4 Site Selection

As with everything else about a survey, the site selection should be guided by the survey's Purposes, Goals, and Research Questions. These determine what it is your survey intends to measure. The information gathered in the background research phase of the survey is vital for site selection, as well.

3.4.1 Preliminary Visit

If you have insufficient information about the language area to be able to know how to select sites, then a preliminary visit would be a good idea in order to get an idea of what villages are out there and how they are related.

The point of such a trip would be to just find out what is there, so you do not want to spend a lot of time in any one place. This means that the sorts of Instruments you might use would include questionnaires designed to get village-level information about each village you visit, as well as about the surrounding villages. Resist the temptation to administer more in-depth survey instruments during a preliminary trip... the point is not to go "deep" in any one place, but to gather information about the possible sites. Then you can go home, select good sites

[1] It also depends on your subject selection method, but that will be addressed more in Chapter 4.
[2] This is the difference between "validity" and "accuracy". You can validly estimate something about all the Lawa by visiting one village at random, but your results will not be very accurate. Increasing the sample size (number of villages) will increase the accuracy. But if some villages are not even eligible for selection, then you have lost validity for estimating the characteristics of the target population. You still have validity for the effective population, though, which consists of those sites that had a chance of being selected.

and come back later to get more in depth information at the selected sites. The deeper you go at any one site, the less time you have to visit more sites, and the whole point of a preliminary visit is to get information about as many sites as possible.

3.4.2 Site Selection Principles

Two general ways you could pick sites are:

- You could pick sites using random selection, or
- You could pick certain sites intentionally.

While it is possible to use simple random sampling[1] to choose the sites you will visit, in most cases your background research will reveal information that you can use in selecting sites more strategically. For example, you may learn that there are thought to be two dialect areas. In that case, you want to make sure to choose sites from each area. You could still randomly select sites within each area, of course, but often you have yet more pieces of information (or limitations on access and time) that make random sampling not the best choice. In general, you should use all the information at your disposal to choose sites. If you are then left with any groups of sites that are equally desirable, you can choose randomly among those sites.

Site selection is an art! What follows are some guiding principles. For your particular survey, some of these principles might be more important than others. Some additional site selection guidelines are given specifically for intelligibility testing in "The Steps of RTT" (see Section 4.6.6 of this Course Book).

1. **Put all the possible sites into distinct groups, where sites in the same group are, as far as you know, similar with respect to what you are measuring. Then select at least one site from each group.**

If, within a group, you do not have any information that favors one site over another, it does not really matter which one you select. Within these groups of similar sites, pick randomly (or perhaps pick central and/or peripheral sites... see #2 below).

A key phrase here is "similar with respect to what you are measuring." But if you already knew what you were trying to measure, why would you need to do the survey? What you actually do, in fact, is judge similarity of sites based on related information. For example, language vitality is related to language contact, which is related to geographic location. So in a language vitality survey, sites could be grouped according to location. Other examples follow, categorized by what you might want to measure:

- **Bilingualism, Language Vitality, Language Use and Attitudes** – Sites may differ in contact to the LWC, presence of schools, markets, LWC people living in the village, remoteness, etc. So, for example, you would want to pick some sites that have schools and some sites that do not; or some sites that have only one ethnolinguistic group and some that are mixed.

- **Dialect Relationships** – Sites may have different dialects. So you would want to pick sites from each dialect group. This could be based on background reading and dialect perception interviews.

[1] List the names of all the sites and select a group of names at random from that list.

- **Comprehension** – Sites may differ not only in the dialect they speak, but also in the amount of contact they have with other sites. So, for example, within a dialect, you would want to pick some sites that have a lot of contact with other sites, and some that do not.

2. Select both "central" and "peripheral" sites.

"Central" and "peripheral" are often defined in terms of geographical location, but not always. A site could be central or peripheral for geographic, social, cultural, economic, religious, historic, or political reasons. "Peripheral" can also be defined in terms of what you are trying to measure; for example, sites with the highest or lowest level of bilingualism.

While peripheral sites might represent the extremes of what you are measuring, central sites are not necessarily the sites that have an in between value for what you are measuring. Rather, they are central because they are more important or influential. For example, in studying bilingualism, the peripheral sites might be those with high or low bilingualism, while the central sites might just be the population centers, regardless of bilingual ability.

Choosing **central** sites allows you to find out information about the most influential sites. Choosing **peripheral** sites allows you to find out information about the extremes. Then you can assume that the other sites fall somewhere in between these extremes.

Some examples of central and peripheral sites follow, categorized by what you might want to measure.

- **Language Vitality** – A central site might be a site that has the largest population, or is the historic homeland. A peripheral site might be a site that has very high contact with the LWC, or perhaps a site that is very remote. The definitions of "central" and "peripheral" here could be switched depending on whether you suspect high or low vitality.

- **Linguistic Relatedness** – A central site might be a site that is considered by the people to best represent a particular dialect. A peripheral site might be a site that is considered to be sort of in between two dialects, or one that is clearly part of one dialect, but is not the representative variety.

- **Comprehension** – A central site might be a place with a variety that everyone else understands. A peripheral site might be a place with a variety that no one else understands.

In some cases, you could just pick peripheral sites. For example, if you suspect that there is low language vitality at all sites, then you might just select one or a few sites where you guess the language vitality is highest. If you find low vitality there, then you could assume that the others are even lower. In other cases, due to time constraints, you might only choose a central site. But then be aware that you may not have gained any information about the periphery.

3. Beware of Convenience Sampling!

A reason sometimes given by researchers for selecting certain sites is **convenience**. It is tempting to only visit the sites that are the easiest to get to, but are these sites representative of the whole population? If there are a group of sites that really are equivalent as far as you know, and the fact that one is more convenient to visit has nothing to do with what you are studying, then picking that site is fine. But in many cases this will not be true! Usually the more convenient sites are also the ones with more language contact, more wealth, more education, etc. Such sites are more convenient for everyone, not just for language surveyors!

One example where convenience might be a legitimate reason for picking a site is if you have a **contact** at a particular site. Having a contact can greatly improve your ability to get good data since you already have a relationship in the community.

4. Check the Boundaries

If you are not sure how far the ethnolinguistic group you are surveying extends, then you might want to pick sites even beyond the known geographic boundaries. You might find that there are more villages than you thought! Or you might be able to confirm that the group only extends so far.

5. Modify the Site Selection During the Survey Fieldwork

Sometimes information gathered during the fieldwork will cause you to rethink your site selection. What information will influence your site selection depends on what you are trying to measure.

For example, suppose you are trying to determine which dialects understand each other. If one of your survey instruments includes questions about dialect perceptions, then the survey team can modify the site selection during the fieldwork based on the answers to these questions. Suppose you have grouped together a set of villages thinking they are all about the same linguistically, but subjects in the selected site identify another site in that group as speaking differently from them, then you could add that other site. It no longer fits in the original group of similar sites.

6. Check the Assumptions

You always will have to make assumptions in order to select sites. State these assumptions, and why you think they are true, clearly in your Initial Plan. For example, "I am assuming the following three villages have the same language vitality so I am only going to visit one of them. I think this assumption might be true because..." Then make sure to select a few additional sites that you will visit if you have time in order to check your assumptions.

For example, if you are assuming that language vitality is the same in a set of three villages, and you only have time to visit one of them, then have in mind the possibility of checking this assumption by visiting one or both of the other sites if circumstances change and it turns out that you do have time. If you do not plan for this possibility, then you might not be prepared to take advantage of it should it arise.

3.4.3 Can You Generalize to the Target Population?

Of course, you would like to be able to generalize to the target population. Randomly selecting sites gives every site a chance of being selected, which means that your actual scope will be the same as your desired scope, and you will be able to generalize to the target population. But random selection also leads to the chance that some important sites will be missed, especially if there is only time to visit a few sites! Choosing sites intentionally makes sure that important sites are not missed, but then leads to some sites not having a chance to be selected, thus limiting the scope.

Care must be taken to interpret the results of any survey. State your desired scope. This is also called your "target population". Then, based on your site selection methods and your subject selection methods (see Section 4.9.6), determine what your actual scope is. This is also called your "effective population". In the survey report, be careful to only draw direct conclusions about your effective population. As shown in some of the examples below, you might still be able to draw indirect conclusions about the target population by making some reasonable assumptions based on background research.

3.4.4 Examples

Suppose that the language you are studying is spoken in 10 villages. Your desired scope is those 10 villages. You know from background research that there are two dialect groups, one with 4 villages and the other with 6 villages. Also, within the 4 village group, one site is more central and three are more peripheral. Within the 6 village group, two sites are more central and four are more peripheral. Suppose also that you only have time to visit two villages.

Here are some examples of how various site selection methods lead to various actual scopes.

- **Site selection method:** You list out the names of the villages and randomly select two.
    - **Actual scope:** Since all the sites had a chance to end up in your sample, your actual scope is the same as your desired scope. Another way to say this is that your effective population is the same as your target population. Yet another way to say this is that you are able to generalize to the entire target population.
    - **Possible problems:** Your random selection might contain no sites from one or the other of the dialect areas. Or, you might end up with only peripheral sites, or only central sites.
    - **Possible modifications:** Select a larger number of sites to increase your accuracy and your chance of getting all kinds of sites.

- **Site selection method:** You pick one site at random from each dialect area.
    - **Actual scope:** Again, since all the sites have a chance to end up in your sample, your actual scope is the same as your desired scope.
        - Since one dialect area has only 40% of the villages, if you want to combine your results over both of the selected villages, you should combine it in a 40%-60% ratio. Otherwise, the combined information will be over-representing the smaller dialect area.
    - **Possible problems:** You might end up with only peripheral sites, or only central sites.
    - **Possible modifications:** Select a larger number of sites to increase your accuracy and your chance of getting all kinds of sites.

- **Site selection method:** You are studying the relationship between the two dialects and you know from background research that the central sites are considered to be where each dialect is spoken the "best." You pick one *central* site at random from each dialect area. For the 4 village group, there is only one to choose from. For the 6 village group, you flip a coin to choose between the two central sites.
    - **Actual scope:** This selection method does not give the peripheral sites any chance of being in the sample. Thus, it would seem that the actual scope is limited to the central villages. However, for the purposes of this research, that is not a problem, assuming the background research was accurate. If the central sites really represent each dialect, then they are the right sites to use for comparing the dialects. You really do not have a population of 10 sites, but a population of two dialects.
    - **Possible problems:** Are the two central sites in the 6 village group really equivalent? If not, then one might be a better choice than the other.
    - **Possible modifications:** Additionally visit some of the peripheral sites to check that they really speak the same dialect as their central site. You could also visit the other central site in the 6 village group to make sure it is the same dialect as the other central site you already visited. These are examples of "checking the assumptions" on which you based your original site selection.

- **Site selection method:** You are studying language vitality and you know from background research that the peripheral sites have higher vitality than the central sites, but you do not know how high the vitality is; in fact, it might be rather low. You select one *peripheral* site at random from each dialect area.
    - **Actual scope:** This selection method does not give the central sites any chance of being in the sample. Thus, it would seem that the actual scope is limited to the peripheral villages. However, with respect to language vitality, you might still be able to draw some conclusions about the central villages. Assuming your background research is accurate, whatever vitality you find in the peripheral sites gives you an upper bound for vitality at the central sites. If vitality is low at the peripheral sites, then you can assume that vitality is also low at the central sites.
    - **Possible problems:** If vitality turns out to be high at the peripheral sites, this sampling plan will not have given you much information about the central sites; vitality there could be high or low.
    - **Possible modifications:** Suppose you suspect that, while the peripheral sites do have *higher* vitality, the central sites might still have high vitality. You could select only central sites. If it does indeed turn out that the central sites have high vitality, then you can assume that the peripheral sites have high vitality as well. Of course, if the central sites turn out to have low vitality, then you cannot say much about the peripheral sites; vitality there could be high or low.

The site selection method you choose depends on your Research Questions! Are you trying to compare the dialect areas, study language contact, assess bilingualism, evaluate vitality, or something else? Different goals and different contexts will lead to different site selection plans.

3.5 Why so much work for an "Initial" Plan?

This might look like a lot of information to put in an "initial" plan! But these are all issues that need to be considered before conducting fieldwork. They would all have to be part of the Survey Proposal anyway. Thinking through them now and writing an Initial Plan provides a

way for someone more experienced to confirm that you are heading in the right direction before you take the time to write the Proposal. The writing and reviewing of an Initial Plan serves as a "sanity check." It is good to find out sooner rather than later if your plans need improvement.

3.6 Examples

In class, we will discuss the Example Initial Plan... See the Readings.

3.7 Readings

Example Initial Plan (Lawa)

- CD
- See also "Lawa Maps" for the site locations

Casad, Eugene. 1974. Dialect intelligibility testing. Norman, Oklahoma: Summer Institute of Linguistics of the University of Oklahoma.

- LL, CD
- Read Sections 2.1.1 to 2.1.3
- While this is referring specifically to site selection for intelligibility testing, many of the principles are generally applicable.
- **LinguaLinks:** Sociolinguistics / Language Assessment / Dialect intelligibility testing

3.8 Resources

Initial Plan (template)

- CD

SIL Sample Initial Plan 1
SIL Sample Initial Plan 2
SIL Sample Initial Plan 3

- CD
- These do not follow the same format that is presented here, but they do follow the same general principles.

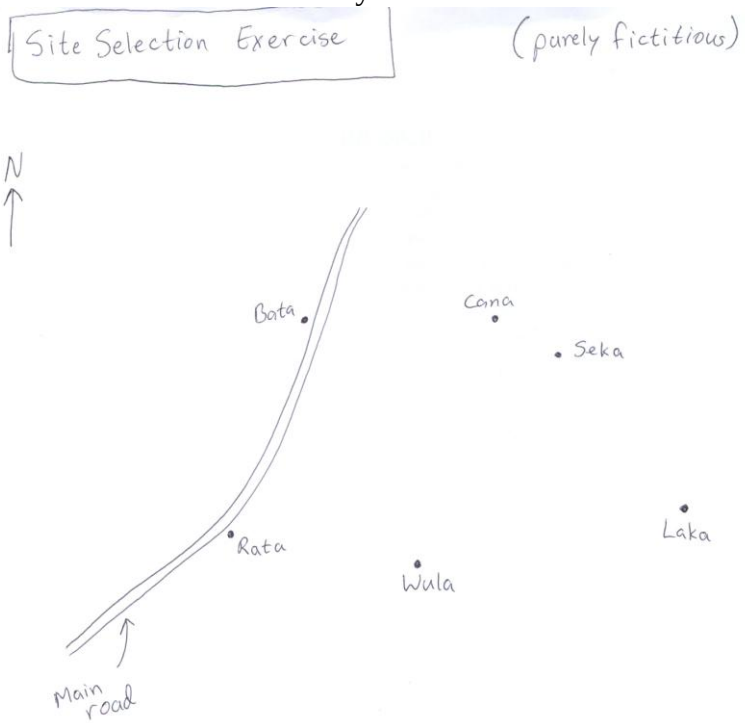
3.9 Assignments

1. Site Selection Exercise

(NOTE: Much of this example is fictitious. I got it from another source (Noel's teaching notes) that did not specify what parts of it were real and what parts were made up. Then I changed some details myself.) You are asked to survey the Whurthei people in the Congo (Africa). After reading several books and articles in the library and discussing the language situation with some people who have traveled in the area, you discover the following:

Information from Library Research

- Whurthei is a local language, not a language of wider communication (LWC). The LWCs used in the Congo are French (the official language), Lingala and Monokutuba.
- The books in the library mention five Whurthei villages: Bata, Cana, Seka, Rata, and Wula. The books claim that there are two different dialects among the Whurthei. These are identified by the names of the villages of Bata and Rata. The books claim that Cana and Seka speak the Bata variety and that Wula speaks the Rata variety.
- One of the books contains a wordlist from Rata.
- There is a neighboring related language. The closest village from that neighboring group is Laka.
- When researching maps (see below) of the area, you find that Bata and Rata are located fairly close to the main road through the area. The other three villages are further away from the road. Cana and Seka are relatively close to each other.



Information from Background Interviews

- The local government office is in Bata, as well as the weekly market.
- While staying in a large city nearby, you interview people familiar with the Whurthei. They tell you that every one of the five villages speaks Whurthei differently.
- One of these interviewees is from Seka. He says he can introduce you to people in Seka if you would like.

(Questions on the next page...)

Please answer the following...

(A) Suppose that the purpose of the survey is to determine how many different dialects there are in the Whurthei language in order to translate health materials. For now, you are going to make some preliminary guesses based only on wordlists. You only have time to get word lists from three villages.

- Which three should you go to? Why?
- What if you could go to four villages... which extra one would you go to? Why? If you think there is more than one good choice, but are not sure which one is more important to go to, just give a reason for each of the ones you think are good choices.

(B) Suppose instead that you are going to investigate language vitality using SLQs and you only have time to go to two villages.

- Which two should you go to? Why?

2. Write an Initial Plan for your Survey Proposal Project.

Note that there might be parts of the Initial Plan that you do not know how to do yet. Usually, you give your best guess based on past experience. For now, if you are not sure what to write for some parts, please ask the instructor for help.

3.10 For Further Study

Bergman, Ted G. 1991. Rapid appraisal of languages. Notes on Sociolinguistics 28:3–11. Notes on Scripture in Use and Language Programs.

- LL, CD
- **LinguaLinks:** Sociolinguistics / Notes on Sociolinguistics / NOS Vol. I, #1–50 (1981–1996) / Notes on Scripture in Use and Language Programs: Issues 20-38 (June 1989-1993) / NOS Number 28 (June 1991)

4 Develop Instruments

4.1 Introduction

Now that you have a basic plan for the survey, it is time to develop the instruments you will use to gather the survey data. These could be word lists, questionnaires, intelligibility tests, or other kinds of survey instruments. One way to do this is to go back to the RAID outline. For each Research Question, choose Instruments and Probes that elicit information that will help you answer that question.

Objectives

After learning the material in this chapter, you should:

- Know how to incorporate Informed Consent into a protocol
- Be able to use RAID to determine which survey instruments are most appropriate for each Research Question
- Understand how to develop and use the following instruments:
    - Word List
    - Sociolinguistic Questionnaire (Individual and Knowledgeable Insider)
    - Teacher Interview
    - Group interview
    - Recorded Text Testing (RTT)
    - Observation
- Be familiar with the following instruments and know where to look to learn more:
    - Sentence Repetition Testing (SRT)
    - Second Language Oral Proficiency Evaluation (SLOPE)
- Understand the principles of subject selection and the implications of various sampling methods.

4.2 Informed Consent

Before administering any kind of survey instrument, you should always:

- Explain who you are,
- Explain what you are doing,
- Explain what you want the subject to do,
- Explain what you will do with the information that the subject gives you (e.g. write a report, write a thesis, put language data on the web, etc.)[1], and
- Ask the subject if they are willing to be interviewed.

This is called getting "informed consent." You should have a way to remind you to do this, possibly a script written out, and a way to record whether or not informed consent was given. It is helpful to have big checkboxes on the first page of a questionnaire where you can clearly indicate this. For example,

ORAL CONSENT:	**Given:** ☐	**Not Given:** ☐

Getting informed consent is the right thing to do, ethically. Also, if you plan on using the information later is a thesis, many universities require you to have proof that you obtained informed consent. If you plan on using the data at a particular university, contact them before you do any data collection and find out what their requirements are. Then let them know what you are planning on doing and ask if that will meet their requirements. Keep copies of all this correspondence in case, later, they question your methods. You want to have proof that you were trying to follow their rules on ethics to the best of your ability.

4.3 From Research Questions to Instruments

In Chapter 2, you thought about your survey's Purposes, Goals, and Research Questions. But how will you answer the Research Questions? You need to gather information. This can be thought of as "probing" people to find out more about their language and their behavior. You "probe" them using survey instruments. These are the data collection tools in the surveyor's toolbox. Just like tools that you use to fix a car with, or that a surgeon uses to operate on a patient, each tool has its own function. You must understand what each tool is for and how to use it, its proper use and its limitations. You cannot just use one instrument for every possible research question. As the saying goes, when you have a hammer, everything is a nail. Of course, if there really is a nail, a hammer really is the best tool to use.

The RAID outline lists instruments that are appropriate for the research questions currently in the outline. Take a look at it again. Questions that are good to ask of a sample of individuals are listed under the instrument "Individual Sociolinguistic Questionnaire." Questions that are good to ask of experts are listed under "Knowledgeable Insider Questionnaire." And so on...

Here is an example:

[1] From what I understand, it is enough to inform the subject of your immediate purpose (e.g. to write a research paper). They do not need to know your or others' ultimate purpose. You and others can use the information in the research paper for many different purposes. It is impossible to inform the subject of all the possibilities. If in doubt, check with the journal or university where you hope to use your data to find out what their informed consent requirements are.

Purpose 1: Assess the NEED for vernacular literature development among the Valley Lawa.

Goal 1: Evaluate the potential for Valley Lawa speakers to use materials developed in Mountain Lawa (a related variety).

Research Question 1: Do Valley Lawa speakers adequately comprehend Mountain Lawa?

Concept 1: Linguistic relatedness
Indicator 1: Lexical similarity
Instrument 1: **MSEA 436-item wordlist**
Probe 1: MSEA Comparative Wordlist
Criteria: < 70% means inherent intelligibility is unlikely.

Concept 2: Comprehension
Indicator 1: Tested comprehension
Instrument 1: **Recorded Text Testing (RTT)**
Probe 1: The 10 RTT comprehension questions
Criteria: Mean score < 60% means inherent intelligibility is unlikely, 60-79% means uncertain, ≥ 80% means likely.

If you use RAID to determine which Instruments and Probes help answer which Research Questions, then when you get to the data analysis and report writing stage, you will know what to do. You will know which data you have gathered is useful for answering which Research Question. This will be discussed more in Chapter 10. At this point, what you want to make sure is that all Research Questions are being addressed with enough Probes. Use something like the file "18 Linking Probes to Research Questions.xls" (on the Course CD) to make sure that all Research Questions are adequately covered by the Probes you have chosen. This kind of chart can help you as well if you want to reduce the number of Probes. You can do so in a way that ensures that no Research Questions are left without enough Probes. To use this file, Select All and sort by various columns to see what Probes go with what Research Questions. The Research Questions are listed in Columns E through I.

In terms of developing Instruments, RAID is most useful for SLQs. It gives you lots of examples of survey questions that can help you measure things like language use, attitudes, contact, etc. This will be discussed more in Section 4.6.2.1.

Each section below will outline further steps in instrument development and how to use each instrument (**protocol**) in the survey fieldwork.

4.3.1 Resources – RAID

Nahhas, R., Kelsall, J. and Mann, N. 2006. RAID: Research and Instrument Design Tool. ms. (and Probes folder)

- CD

Linking Probes to Research Questions

- CD

4.4 Protocol

Once you know what instruments you need, you need to develop them unless they already exist in a form that fits your survey already. Additionally, you must specify how you will use each instrument, that is, what is the instrument's "protocol."

> "The concrete procedure for observing, asking or measuring in a language survey. A protocol might stipulate, for example, how subjects will be chosen, how a question will be posed, how a test will be scored, or what to do in case the interview is interrupted. Having and following relevant and comprehensive protocols is a key to ensuring reliability. For this reason, every survey instrument should include not only probes but also protocols for administration and analysis." (from Principles of Language Survey: Glossary; Douglas W. Boone, 4 June 2004, © 2004 SIL International)

The right protocols might already exist for your instruments, or they might not. If you want to innovate with a protocol, then you should test the new protocol thoroughly and seek input from others to make sure that your innovation will really lead to valid results. *In nature, "innovations" are usually mutations that are detrimental to the organism. At the same time, researchers are able to genetically engineer new varieties of some organisms that are very beneficial.* Better to go with a protocol that others have validated unless you have the time to validate your innovation.

The protocol will be different for each instrument. The most common instruments are described in the sub-sections that follow.

4.5 Word Lists

Please read Sections 1 to 3 in "The Steps of Word Lists" (on the course CD). We will discuss it in class.

Look at the following two files on the course CD:

- 435 Word List
- 435 Word List README

The Excel file gives you a 435-item word list arranged by semantic categories. There is also a column called "Weight." As stated in the README file, the suggested method for computing lexical similarity percentages is to use 100 words that have "weight" 3. How to analyze a word list will be discussed in Chapter 10. For now, just know that if you are limited in time, then you could elicit fewer words. The words with higher weight have a higher priority. The following table shows how many words you could collect if you wanted only those with higher weights.

Table 1 – Priority Subsets of the Modified 435-item Word List

If you only elicit words with "Weight" of at least:	Then you will have a word list of this length:
3	109
2.5	162
2	239
1	433
0	435

It may take as much as 6-8 hours to elicit and record the full 435-item list, closer to 8 hours if it is your first time. With experience, and with a good informant, you might be able to do it in 4 hours. What you need to think about is what you need the words for... If all you are going to do is lexicostatistics, then you need at least 100 words, but probably more than 150 just in case you have trouble eliciting some words, and also so you have enough data in order to be able to spot any regular sound correspondences between language varieties. I suggest that you get at least the 239 words with weight 2, 2.5 and 3. If you are going to be doing historical reconstruction, then get all 435 words (in fact, you might even want a longer word list). See Section 3.1.3 in "05 The Steps of Word Lists" for more about word list length. All the sample lists are included in the Course CD in the "Chapter 4\Sample Word Lists" folder.

4.5.1 Readings – Word Lists

The Steps of Wordlists

- CD
- Read Sections 1 to 3

SIL. 1989. Lexicostatistics committee: Report and recommendations. Report to the International Language Assessment Conference, Horsleys Green. In Language Survey Reference Manual, comp. by T. G. Bergman. LinguaLinks Library version 5. [CD-ROM]. Dallas: SIL International, pp. 185-90.

- CD, LL
- This reference recommends using only one word list informant, but then checking the list with another informant later. Eliciting the list from more than one person in the first place (as recommended in this course) gives them the opportunity to discuss the words with each other and come to an agreement on the best form. Which method you use depends on what you feel would be most culturally appropriate.
- This reference says that using the Comparative Method is beyond the scope of SIL surveys. However, this was written in 1989. Currently, SIL has reversed this stance and is saying that the Comparative Method is the **only** way to analyze word lists. The MSEAG Survey Team, however, chooses to use lexicostatistics to analyze word lists, but only for the purpose of a screening tool for low intelligibility (and possibly a first guess at language groupings to be followed up by further research).
- **LinguaLinks:** Sociolinguistics / Language Assessment / Survey reference manual

4.5.2 Resources – Word Lists

435 Word List
435 Word List README

- CD (in the Sample Word Lists folder)
- There are also a lot of other word lists in this folder.

Mann, Noel. 2004. Mainland Southeast Asia comparative wordlist for lexicostatistic studies. Chiang Mai: Payap University, ms.

- CD

4.5.3 For Further Study – Word Lists

The following are about assessing linguistic similarity at the lexical level, the phonological level, and the grammatical level.

[NOTE: The phonological methods are listed for completeness; they are not widely used in language surveys and would need more attention than given here to really understand.]

Batibo, H. M. 1980. Review of Derek Nurse's Description of Sample Bantu Languages of Tanzania. Journal of African Languages and Linguistics 2.

Simons, Gary. 1977. Phonostatistic methods.
- CD

Grimes, Joseph E. 1995. Language survey reference guide. Dallas: Summer Institute of Linguistics.
- LL, CD
- Chapter 2
- **LinguaLinks:** Sociolinguistics / Language Assessment / Language survey reference guide / 2. Systematic comparison

Sim, Ronald. 1991. Syntactic studies on survey. In Kindell, Gloria E., ed. 1991. Proceedings of the Summer Institute of Linguistics International Language Assessment Conference, Horsleys Green, 23-31 May 1989. Dallas: Summer Institute of Linguistics.
- LL, CD
- Section 16.4 of the LL document

LinguaLinks: Sociolinguistics / Language Assessment / Proceedings of the Language Assessment Conference: Horsleys Green, 23-31 May 1989 / Part IV. Intelligibility and test design / 16. Data for good decision making / 16.4. A new look linguistic component

4.6 Sociolinguistic Questionnaires

A well-designed and carefully administered sociolinguistic questionnaire (SLQ) can get you quite a bit of information. How does one design an SLQ? What is involved in administering an SLQ? Section 4.6.2 discusses Individual SLQs, as opposed to SLQs designed to be administered with experts (Sections 4.6.3 and 4.6.4) or groups (Section 4.6.5). The questions on an Individual SLQ ask about information that varies between people, such as language use or bilingual proficiency. As such, Individual SLQs are intended to be administered to a representative sample of people. The questions you ask experts include things like "Is there a school in this village?" and "How many people live in this village?" Those are questions about facts that do not vary between individuals. You just want to find a person that knows the answer.

4.6.1 What Makes a Good Question?

Before putting together a questionnaire, it is vital to know what a good question looks like. You want to measure something (e.g. language vitality) and you want to use the answers to questions to do the measuring. As Fowler (1995:1-2) notes,

> "There are several implications of the notion that the answers to questions will be used as measures.
>
> **"First,** we are not interested in the answers for their own sake. Rather, we are interested in what the answers tell us about something else. As a result, one critical standard for a good question-and-answer process is that it produces answers that provide meaningful information about what we are trying to describe.

> **"Second,** the purpose of measurements usually is to produce comparable information about many people or events. Hence, it is important that the measurement process, when applied repeatedly, produces consistent results.
>
> "These points lead to the beginning of the answer to, "What is a good question?" **A good question is one that produces answers that are reliable and valid measures of something we want to describe.**"

"Reliability" means that the answers are consistent when the thing the question measures is consistent. "Validity" means that the question is measuring what you intend. So what question characteristics lead to reliability and validity? The main points will be discussed here, but for more detailed information, see Fowler (1995), Showalter (1991), "Sociolinguistic survey questionnaires", and Wetherill (1995:Chapter 5) (see the Readings in Section 4.5.6).

One of the main characteristics that questions should have is that they should be **unambiguous**. That is, every subject should clearly understand the question the same way, the way that you intend. One thing you can do to ensure this is to make sure to ask the questions in the same way to every subject (Fowler 1995:4). This is especially important when you are asking questions about attitudes. The wording of the question can drastically change the answer you get. Questions about factual information can be asked more loosely.

A principle mentioned in the Readings is the use of DeVaus' "Ladder of Abstraction"[1] in writing good questions. This principle is what the RAID outline is based on. The Ladder of Abstraction helps you understand good question design. You want to ask questions that are answerable. You do not want to just ask the subject your Research Question ("Could the X people use literature written in the LWC?") or even a Concept related to the Research Question ("What is your bilingual proficiency in the LWC?"). **You need to think of what kinds of things are Indicators of the Concepts related to a Research Question, and then write Probes that have a chance to measure that Indicator.**

For example, self-reported bilingual proficiency is an Indicator of bilingual proficiency (a Concept), which is related to the Research Question "Could the X people use literature written in the LWC?" One possible Probe for self-reported bilingual proficiency is "Can you use the LWC to buy vegetables at the market?" Of course, you would not want to base the answer to your Research Question solely on that one Probe, but rather use a number of Probes to measure that Indicator. **The point here is that you have to ask questions that people can actually answer.**

The following are some principles of good questionnaire design from Fowler (1995:103).

Principle 1: **The strength of survey research is asking people about their firsthand experiences: what they have done, their current situations, their feelings and perceptions.**

Beware of asking about information that is only acquired *secondhand.*

For example, beware of asking a question like "How do the people in that other village feel about the national language?" The person you are asking might give an answer, but is he just

[1] De Vaus, David A. 1986. Surveys in social research. Winchester, MA: Allen & Unwin, Inc.

guessing? Of course, there might be times when you *have* to ask a question like this if you do not have access to first-hand information. But, if you do, be careful to interpret the results carefully... take into account how likely it is that the subject really knows the answer to your question vs. how likely it is that they are just guessing or giving their opinion.

Beware of hypothetical questions.

For example, beware of asking a rural villager "If you lived in the city, would you keep speaking your local language?" Again, you might get an answer, but what does it mean? It is possible that hypothetical questions can be used to assess attitudes, but be careful of using them to assess the likelihood of a certain future behavior. As Fowler (1995:80) points out, "People are not good at predicting what they will do, or how they will feel, in a circumstance they have not yet encountered."

Beware of asking about causality.

For example, "Why is your language dying?" Again, these kinds of questions might be useful for assessing attitudes, but not for getting a factual answer to the question. A subject is just not going to be able to give you the answer to this question. If you are intested in attitudes, or opinions, you could ask "Why *do you think* your language is dying?" But be aware that your previous questions may have given away your agenda, and the subject might just tell you what they think you want to hear.

Beware of asking respondents about solutions to complex problems.

For example, "What do you think your community could do to preserve your language?" Language maintenance is not simple!

Principle 2: Ask one question at a time.

Avoid asking two questions at once.

For example, "When you travel to the neighboring village, how long does it take to get there and what language do you use with those people?" At least in this example, the possible answers to the two questions are easily distinguishable. An even worse question would be "What languages do you use at home and at work?" If the subject gives an answer, it might not be clear which question he is answering. In both of these examples, it would be better to split the question into two questions, asked one at a time, giving the subject the opportunity to answer each one separately.

Avoid questions that impose unwarranted assumptions.

For example, "Why do you think your language is dying?" This question assumes that the subject agrees that his language is dying! If he does not agree, then he might not be sure how to answer your question. He would have to contradict you in order to answer truthfully, which might be an uncomfortable thing for him to do. It would be better to ask him what he thinks the future of his language will be in the next 10-20 years, and then ask him why he feels that way. Of course, do not use such a question to actually predict language vitality! It is just an attempt to assess an attitude.

Beware of questions that include hidden contingencies.

For example, "What language do you use with the people who live in the other Province?" This question assumes that the subject has actually met and talked with those people! It

would be better to ask first if he has ever met and talked with them (and where, under what circumstances). Then, if he has, ask about language use (in each situation he mentioned in his answer to the first question).

***Principle 3*: A survey question should be worded so that every respondent is answering the same question.**

All subjects should understand the question the same way. For example, if you are interested in what language was used most in the village 50 years ago, "When you were [a child / a young adult *(depending on how old they are now)*], what language did you use the most here?" is better than "What language did you use when you were a child?" Not everyone was a child 50 years ago!

Make sure all the subjects understand the terms in the question. For example, "How often do you speak Central Thai, the kind that is taught in school?" is better than "How often do you speak Thai?" The term "Thai" could mean different things to different people. It could mean "Northern Thai" or "Central Thai" or "Northeastern Thai" or something else.

Make sure all the subjects understand references to time in the same way. For example, "How many times did you need to speak Central Thai during the last week?" is better than "How often have you spoken Central Thai recently?"

Asking multiple, simple, questions is better than asking one, long, complicated question. You want to make sure that every subject understands what you mean, not just those with good memories, long attentions spans, or an interest in the topic.

***Principle 4*: If a survey is to be interviewer administered, wording of the questions must constitute a complete and adequate script such that, when interviewers read the question as worded, respondents will be fully prepared to answer the question.**

If the interviewer always needs to give an explanation, then he has the added burden of trying to give this explanation consistently to every subject. It would be better to include all the instructions they need in a script preceding the question. Give any needed definitions first. Put the question at the end, with the possible responses at the end of the question.

***Principle 5*: Clearly communicate to all respondents the kind of answer that constitutes an adequate answer to a question.**

For example, if you want to know about all the languages that someone uses in a domain, then ask "When you talk with your parents, what languages do you use? Please name all of them." If you just ask "When you talk with your parents, what language do you use?", they might only give you the one they use the most. Alternatively, if what you want to know is the one they use the most, then ask the question that way. Otherwise, they might just answer with the first one that comes to mind, or they might just answer with one of two languages that they use equally.

An important thing to note is that many of the examples of bad questions given here are only bad questions *if* you are trying to measure certain things. For example, some questions are lousy for facts, but very good for attitudes. Judge the appropriateness of a question in light of your particular Purposes, Goals, Research Questions, Concepts and Indicators.

4.6.2 Individual SLQ

4.6.2.1 Design

Overview:

- Pick Probes from RAID for each Research Question.
- Paste them into a copy of the SLQ template to start your questionnaire.
- Put the questions in some logical ordering.
- Review the SLQ and make sure that it adequately addresses the relevant Research Questions.

Open the RAID document and use the Document Map feature (View – Document Map). The Document Map shows the RAID outline from Purposes to Concepts. The Concepts are sociolinguistic factors that are associated with each Research Question. Click on a Concept in the Document Map. You are taken to that point in the RAID outline. Now you can see what sorts of things are Indicators of that Concept and what Instruments and Probes can be used to measure those Indicators.

The basic idea in designing an SLQ using RAID is, for each Research Question, to go down the RAID outline and pick the Probes you want. Copy and paste each Probe into another file. A good place to start is the file "Individual SLQ (template)" that is found in the Probes folder (in Chapter 4 on the Course CD, in the RAID folder). This gives you a basic SLQ with introductory screening questions. Make a copy of this file and rename it for your survey. You can copy and paste the questions you pick from RAID into your questionnaire.

After copying all the questions you want, you need to put the questions into some logical ordering. Try to group questions together that are similar. For example, questions about language use can go in one section; questions about children can go in another, etc. Once you have the ordering you want, go back and number the questions. Follow-up questions should be labeled by letters. For example,

1. Twenty years from now, do you think Lawa children will be speaking Lawa in this village?
    a. Yes or no
    b. (if "no") How do you feel about that?
    c. (if "no") Why?

There are really three questions here (1a, 1b, and 1c). The latter two are only asked if the answer to the first is "no". This question is trying to measure attitudes to language maintenance and attitudes to language death. It is *not* trying to predict language vitality!

You might think at this point that your SLQ is way too long! You do not have to use EVERY Probe available for a Research Question... you can be selective. When deleting questions from your questionnaire, make sure that every Research Question still has some Probes left. You can make a list of SLQ questions for each Research Question and see which questions you can safely drop (see "Linking Probes to Research Questions.xls" on the Course CD for an example of how to do this).

See also "Example Individual SLQ" on the course CD (in the Sample Questionnaires folder).

4.6.2.2 Formatting the Questionnaire

See the example questionnaires on the Course CD (in the Sample Questionnaires folder). The main thing you want is clarity. It should be very clear to the interviewer what to do at each step... what to read aloud, what are just instructions to the interviewer, when to skip certain questions, etc. Some questions are only asked if there is a certain answer to another question; make sure this is clearly indicated.

Some people like to have a master copy of the questions and then write he answers in a separate data notebook. This is nice for having all the answers in one place so no sheets get lost. However, it is very easy to write down answers in the wrong place since the questions are not in the notebook. It would take a long time to write all the questions (or even the question numbers) ahead of time in the notebook for every subject. A better solution is to have one copy of the questionnaire but many copies of answer sheets that have both the questions and space to write answers. The answer sheets can be printed and bound together, with a plastic cover (in case of rain). The questionnaire can be laminated to protect it, or put in a plastic sleeve (that makes it easier to edit if you need to).

The **questionnaire** should have the questions in the language you will use for the interview. If you are not fluent in that language, or if you might use more than one language, then you can have a column for each language you need. The sample questionnaires on the Course CD are actually answer sheets (unless English is the language of elicitation). Look in the subfolder "Sample English-Thai questionnaires" for some examples using Central and Northern Thai as the languages of elicitation. You will notice that in those there is no blank column for the answers. These are the questionnaires that were used in conjunction with a bound book of pre-printed answer sheets.

The **answer sheets** should have the questions in whatever language the person recording the questions understands best, and if there is room, also the language of elicitation (if the writer understands it). The main thing is that the writer be able to know which question was just asked and to know quickly where to write the answer. Make sure there is enough room to write answers!

In summary, the main principles to keep in mind are that the interviewer must understand the questions and not easily get lost, that the answer-writer has space to record answers and will not easily get lost, and that the subjects must understand the questions and understand them consistently.

4.6.2.3 Subject Selection

An Individual SLQ must be administered to individuals.... but what you are really after is a *group* of individuals that is representative of some larger group, say, the village they live in. This means that you have to have a good sampling design. See Section 4.10 for more information about sampling individuals.

It might be culturally inappropriate to interview certain kinds of people. For example, men might not be able to interview women. In such situations, you need to have male and female interviewers and adjust your protocol accordingly: men interview men, and women interview women.

4.6.2.4 Administration

After selecting a subject, what do you do? One of the most important things is to **make them feel comfortable**. The more nervous they are, the worse data you will get. Learn what the culturally appropriate ways are to be friendly and not give offence. Then you want to **orient the subject** to what you are doing and ask their **permission** (see Section 4.2 for more about Informed Consent).

If the subject agrees to participate, then **record information that will allow you to identify this subject** correctly. The sample questionnaires on the Course CD include items like "Questionnaire number", "Date", "Location", etc. If at all possible, fill in this information *before* the interview. If that is not possible, fill it in right after the interview. At the very latest, fill in this information at the end of the day when you are reviewing your work for the day. For "Date", try to write not only the date, but the time of day as well. This might be important if there are any changes made to the protocol during the survey. If you make a note of the change along with the day and time of the change, and if every questionnaire is labeled with a day and time, then you can easily know which subjects were administered SLQs with the old protocol.

Then **proceed through the questions** on the questionnaire in order, not too fast, not too slow. In general, it is important to read the questions exactly as written. This ensures that all subjects are answering the same question. Asking a question differently might change the meaning slightly. Of course, you might find that the wording for a question is awkward and that you need to change it to get the information you need. That is fine... just record what you changed and the day and time you changed it. The exact wording is most important for questions about feelings and attitudes. For more factual questions, like "What language did you speak first as a child?" or "Where did you grow up?" giving extra explanation is fine to make sure the subject understands the question.

Never suggest an answer, but if you do for some reason (or if someone else nearby does), make a note that you did so. You might not want to count this answer in your analysis later. If you give a suggestion, and the subject said "yes, that is my answer" you will never know if they really felt that way, if they were telling you what they thought you wanted to hear, or if they were just taking an opportunity to get out of the embarrassment of not having an answer. If they are taking a long time to answer, just let the subject know that it is OK if they do not have an answer and move on to the next question.

Write down exactly what the subject says (in their language if possible). Use phonetics to write down key words that you do not know. You can ask someone else later what the words mean. Be very careful to **record the answers to each question in the right place** on your answer sheet. Also, be very careful to **record answers unambiguously**. Do not use abbreviations that can have more than one reasonable meaning. Write clearly so that you will know what you wrote later. You might not get a chance to enter the data into the computer until a week or two later... it would be good if you can read what you wrote since you likely will not remember the details after that long. During the interview, you might feel like you will remember all of what is happening, but after interviewing many people over many days, the details can get surprisingly jumbled in your brain!

Always write *something* down. If you skip a question, write "skipped" (and note why you skipped it). If you ask the question but they do not answer, write "no answer". If they answer "I do not know", then write that down. Blanks on the answer sheet are very ambiguous.

If there is one person asking the questions and another person writing the answers, then have clear signals for when to wait and when to proceed. The writer needs to be able to keep up so they should have a way to ask the interviewer to wait. The interviewer should pay attention to the writer so as to not ask questions so quickly that the writer cannot keep up with the answers. **You need to work as a team. What you write down is all you can be sure about later. Do not rely on your memory!**

4.6.2.5 Advantages and Disadvantages

Some **advantages** of interviewing a sample of individuals (as opposed to just one person or a group) include:

- You have the opportunity to measure the variability between subjects.
- You can estimate what proportion of the village has certain characteristics (but to really do this well, you would have to have a good-sized, representative sample).
- You have more control over the screening process. With a group interview, you might not be able to choose who you interview as easily.
- The opinions expressed may be more valid when interviewing one individual at a time. If no one else is listening in, the subject may feel freer to express his or her opinion, especially if it is different than the way they think others feel.

Some **disadvantages** of interviewing a sample of individuals include:

- In some cultures, interviewing an individual can be isolating and unnatural.
- More time is required.
- There might be a need for a larger survey team which includes both males and females, old and young to gain access to all strata of interest. This depends on how culturally appropriate it is for the surveyors to interview those who are different from themselves.

4.6.3 Knowledgeable Insider SLQ

4.6.3.1 Design

Designing a Knowledgeable Insider SLQ (KISLQ) is exactly the same as designing an Individual SLQ (ISLQ). The difference between the two is what sorts of questions go in each one. An ISLQ has questions for which the answers will differ between subjects. The questions on a KISLQ are asking about facts that do not vary between subjects; what will differ between subjects, however, is their knowledge of the facts. You want to find a "knowledgeable" person, an expert. For example, a question about how many people and houses there are in the village should be asked of a knowledgeable person such as the village leader. You could also ask about lists of things (e.g. "What languages are spoken in this village?") or how the majority behave (e.g. "What language is used most in this village?"). These are facts. But you would have to interview a representative sample of individuals to find out how the items in the list are distributed through the village (e.g. what proportion of people speak each language).

[It might be better to call these "Village-Level SLQs"; that name would be simpler and more descriptive of what the template actually has. But that would mean changing lots of references in RAID and lots of file names, so I'll wait on it!]

4.6.3.2 Formatting the Questionnaire

The information in Section 4.6.2.2 applies here, as well.

4.6.3.3 Subject Selection

As stated above, you want to select someone who is "knowledgeable" about the facts pertaining to the language and the village. This person usually must be an "insider" in order for them to know this information. Sometimes, an outsider can provide valuable information as well.

Unlike subject selection for an ISLQ, then, selecting a subject or subjects for a KISLQ does not involve representative sampling. You basically just need to find and ask someone who is likely to know the answers to your questions. This might be the village leader. It might be a group of people from the village. You need to be careful to ask screening questions that will help you find out if this person really does know what they are talking about. Are they a member of the language group you are interested in? How long have they lived in this village? If you are asking questions about children's language use, do they have any young children at this time? Etc.

4.6.3.4 Administration

The information in Section 4.6.2.4 applies here, as well. If you are doing the KISLQ with a group, then also see the information in Section 4.6.5.4 on administering a group interview.

4.6.3.5 Advantages and Disadvantages

Some **advantages** of interviewing knowledgeable insiders include:

- Good for getting information about village-level facts.
- You can interview them during the background research phase.
- This kind of interview could be done long-distance (mail, phone, or email).
- They have a better chance than you do of distinguishing real trends from anomalies.
- Faster and potentially more efficient than an Individual SLQ for some kinds of information.

Some **disadvantages** of interviewing knowledgeable insiders include:

- There is no measure of variability (see Wetherill 1995). With a random sample of individuals, the variability in the responses gives you an idea of how variable things are in the whole population.
- The respondent might misinterpret or misrepresent the facts if they actually are not qualified to answer your questions.
- The answers you get can be very subjective.

See also "Example Knowledgeable Insider SLQ" on the course CD (in the Sample Questionnaires folder).

4.6.4 Teacher Interviews

A Teacher Interview is really just a kind of Knowledgeable Insider SLQ. It is listed separately to highlight its particular value in learning about education, literacy, and language vitality. Local school teachers can tell you a lot about the language use patterns of children in the community, about what languages children know when they start school, and about how these factors have changed over time. Parents might know about their own children, but teachers have experience with many children from many families over many years. Also, school teachers or administrators have the greatest knowledge of the structure of the educational system and possibly also of the level of literacy in the community.

4.6.5 Group Interviews

Group interviews can be very useful in a language survey. You could use a group interview:

- When you do not have time to sample many individuals
- When asking village-level information (facts, not opinions)
- When you want a group of people to discuss the answers and give you a consensus (or to see if there is a consensus...)

Note that a group interview can be used for individual-level information or village-level information.

An example group interview questionnaire is included in the Course CD. It is a **Dialect Perceptions Group Interview.** It is used to ask a group of people about the relationships between their language variety and that spoken in other villages which they have contact with.

4.6.5.1 Design

The design process for a Group questionnaire is basically the same as for other questionnaires. You want to have probes that help you answer your research questions. The RAID tool can help with this.

4.6.5.2 Formatting the Questionnaire

The only difference between a Group Interview questionnaire and other questionnaires is that you need to plan for getting multiple answers to questions. You want to have room to write multiple answers and to have some way, if possible, of keeping track of which subject gave which answer. It may be difficult to write all the information people are saying and, at the same time, to identify who said what. If you have to choose between writing all the information and noting who gave the information, choose writing all the information.

4.6.5.3 Subject Selection

How you select subjects depends on what you are trying to find out. If the group interview is trying to find out about factual information, then you need to find people who know the answers. In this case, it is just like a Knowledgeable Insider SLQ with respect to subject selection.

If you are after information that varies between individuals, and you are using a group interview just to save time, then you need to use the same kinds of sampling that you would for an Individual SLQ. Note, however, that since you might get just one answer representing the group consensus, you will not be able to evaluate the variability among people in the population. Group consensus is good for getting the "best" answer, but not for getting a range of answers. To do that, it might be better to ask each member of the group individually. But then they might not be willing to disagree with the others in the group. If you really want to know the distribution of answers among individuals, then do an Individual SLQ.

You could use a group interview to get individual-level information if you think that peoples' answers will not differ much within certain groups, but will between groups. For example, if you have reason to believe that all the young people will answer a certain way and all the old people will answer another way, then you could interview a group of young people and a group of old people in two separate interviews. But if people within a group really do not agree, then interviewing individuals might be better.

Also, you need to be very aware of the problems in administration mentioned in the next section. You likely will not get information from every member of the group. Usually, you should count a group interview as having a sample size of 1. This will depend on whether the participants each answered the questions individually, or whether their answers tended to agree (perhaps because one dominant person answered first and the others just answered the same way). Keep good notes so you can tell the difference later.

4.6.5.4 Administration

The information in Section 4.6.2.4 applies here as well. Additionally, you must be aware of the group dynamics. Is there one member of the group who is doing all the answering? If so, is he just giving his own opinion? Does he really represent the group? Did the group discuss the question together and then reach a consensus? Does everyone in the group understand the language you are using to ask the questions? If not, is someone interpreting for those who do not understand?

The advantage to having a group is that it is more natural and fun and gives you the opportunity to get information from many people at once. But if one person is dominating the discussion, then you need to be aware that you might not be getting the whole story. If this is the case, you need to be culturally aware enough to know how to check the information without causing the dominant person to lose face.

When you are working with a group, things will often go faster. With more people, there is more of a chance that people will just talk without you being able to control the pace of the interview. Thus, you will tend to write faster and possibly end up writing information that is ambiguous. For a Dialect Perceptions Group Interview, for example, many of the things you will write will look like "When people from here talk to people from there, we only understand half of what they say." Make sure you know where "here" and "there" are! Be careful of pronouns... Will you know later what they refer to? Sometimes you will be writing something that compares two locations with respect to a third. For example, "People from Kok Luang understand La-up dialect better than Bo Luang." Does this mean they understand La-up better than Bo Luang people understand La-up, or that they understand La-up better than they understand Bo Luang? Those are very different pieces of information!

It is easy to write a statement and not know how to interpret it later unless you write out the full context. If you need to, look back over your notes during the interview and ask clarifying questions so you can make sure your notes make sense and you will know what they mean the next day, or the next week when you enter the data into the computer, or the next month when you write the report. Look back over your notes at the end of the day, as well, and fix anything that you know is in error.

4.6.5.5 Advantages and Disadvantages

Some **advantages** of group interviews include:

- May be more culturally appropriate, especially in a place where people make decisions by consensus.
- Good for measuring things that have low variability across subjects (e.g. facts).
- Different people contribute differently to an interview. One person may not think of everything. In a group discussion, many things may come up that would otherwise have been forgotten.
- Less time consuming. You can get information from more than one person at a time.

Some **disadvantages** of group interviews include:

- There is often no way to tell how much the answers would have varied had you asked many individuals.
- One person might dominate the discussion. In that case, the answers you get might only represent that person rather than the whole group.
- You might miss out on the minority viewpoint. Perhaps there really is no consensus, just a vocal majority. Alternatively, there might be a very vocal minority... so you have actually missed out on the majority viewpoint!
- There is less control of screening. You very well could end up with a group that was chosen for you or volunteered and the make-up of the group might change during the interview as people come and go. You could inconspicuously screen out subjects by the way you ask questions and who you focus on.
- It takes more skill to facilitate a group discussion. Of course, this is a skill that might be natural for certain personalities.
- Some people are more likely to say what they really think in an individual interview.
- The pace of the interview is faster, so you might have trouble writing down everything that is said.

4.6.6 Question Translation

Usually, you write a question in your own language. However, that is usually *not* the language you will use to ask the questions. Thus, you will need a translation. One option is to bring along a translator who can ask the questions in the language of elicitation. Whether you can speak that language or whether you use a translator, it is a very good idea to translate the questions ahead of time into the language of elicitation. For you, who are not a native speaker of that language, this will help you ask the questions in an understandable way. For a translator, having a script will help to make sure the questions are asked the same way of every subject. This is important for the validity of the results. If different subjects hear different wordings for a question, then it is possible that they will understand the question differently. In that case, they are answering different questions and compiling their answers is not valid.

4.6.7 Readings – SLQs

Fowler, Floyd Jr. 1995. Improving survey questions: Design and evaluation. Thousand Oaks: Sage Publications. Page 103.

- CD
- What is on the CD is a copy of page 103 from this book. It lists 7 principles for good questionnaire design. Although the heading is “Designing Good Survey Instruments”, Fowler is thinking just of questionnaires.

Sociolinguistic survey questionnaires

- LL, CD
- This has a great summary of what makes good questions and how to design a questionnaire.
- **LinguaLinks:** Sociolinguistics / Language Assessment / Assessing Language / Supplemental information for general survey factors / Sociolinguistic survey questionnaires

Showalter, Catherine J. 1991. "Getting what you ask for: A study of sociolinguistic survey questionnaires." Notes on Sociolinguistics 28:19–34. Notes on Scripture in Use and Language Programs.

- LL, CD
- **LinguaLinks:** Sociolinguistics / Notes on Sociolinguistics / NOS Vol. I, #1–50 (1981–1996) / Notes on Scripture in Use and Language Programs: Issues 20-38 (June 1989-1993) / NOS Number 28 (June 1991) / Measuring language attitudes and language use

Wetherill, G. Barrie. 1995. Research design and analysis. Unpublished.

- LL, CD
- Read Part I, Chapter 5 "Questionnaires"
- **LinguaLinks:** Sociolinguistics / Language Assessment

4.6.8 Resources – SLQs

Example Individual SLQ
Example Knowledgeable Insider SLQ
Example Dialect Perceptions Group Interview
Example Teacher Interview

- CD (in the Sample Questionnaires folder)

4.6.9 Assignments – SLQs

- Design an Individual SLQ for your Survey Proposal Project.
- On a separate page, outline which Probes are associated with which Research Questions. Do this in outline form as in RAID. In the outline, include the question number from your SLQ that is associated with each Probe.
- Include the outline of your Purposes, Goals, and Research Questions that you completed in Chapter 2 to remind me of the context of your SLQ.

4.6.10 For Further Study – SLQs

Stalder, J. and Mark E. Karan. 1997. Assessing motivations: Techniques for researching the motivations behind language choice. A paper presented at ILAC III.

- CD

Fowler, Floyd Jr. 1991. Improving survey questions: Design and evaluation. Thousand Oaks: Sage Publications.

- An excellent book!
- If you want this book, order it through a bookstore or try looking on the internet.
- The publisher has a website, too (www.sagepub.com)
- ISBN 0-8039-4582-5 cloth / ISBN 0-8039-4583-3 paper

Callister, Sandra. 1977. Sociolinguistic approaches to dialect surveying in Papua New Guinea.

- LL, CD
- A great reference for what kinds of things to ask in a Dialect Perceptions interview
- **LinguaLinks:** Language assessment / Language variation and survey techniques

A number of resources in the Sociolinguistics Bookshelf of *LinguaLinks Library* provide sample questions:

- LL

- **LinguaLinks:** Language assessment / Assessing language / Questionnaires for sociolinguistic surveys
- **LinguaLinks:** Language assessment / Assessing language / Language use questionnaire
- **LinguaLinks:** Language assessment / Assessing language / Supplemental information sections. There are many sections with a title beginning "Supplemental information for ..." Many of the subsections of these are sample questionnaires.

4.7 RTT

4.7.1 Introduction

Recorded Text Testing (RTT) is a method of intelligibility testing. The basic idea of RTT is to record a story in one variety of a language and test speakers of other varieties to see how well they understand the story. That sounds simple, but it is anything but. There are lots of ways to do RTT incorrectly. See "The Steps of RTT" (on the course CD) for a practical guide to the steps involved in carrying out RTT. The following excerpt is included here to give you an idea of what an RTT looks like.

(From "The Steps of RTT")
Before going into all the details of RTT it is helpful to have an idea of what the final form of the test will look like. The final product is a recording composed of the following elements. Let L1 be the language variety of the test-taker and L2 be the language variety that you are testing. You want to see if L1 people understand L2. In some cases, you will be testing more than one variety at a time and you will have an L3 test, as well, or even an L3 test and an L4 test.

Introduction

1. Introduction in L1
2. *"Do you understand?" (L1) (asked orally, not on the tape)*
3. *"Can you hear the sound clearly?" (L1) (asked orally, not on the tape)*
4. *"Here is the first story." (L1)*

Practice Test

5. Practice Story in L1
6. *"Now you will hear this story again with questions. When you hear a question, please answer it." (L1)*
7. Practice Story in L1 with questions in L1 inserted at various points in the story.
8. *"Now you will hear a longer story." (L1)*

Hometown Test

9. L1 Story
10. *"Now you will hear this story again with questions. When you hear a question, please answer it." (L1)*
11. L1 Story with questions in L1 inserted at various points in the story.
12. *"Now you will hear another story." (L1)*

L2 RTT

13. L2 Story
14. *"Now you will hear this story again with questions. When you hear a question, please answer it." (L1)*
15. L2 Story with questions in L1 inserted at various points in the story.
16. *"Now you will hear another story." (L1)*

L3 RTT

17. L3 Story
18. *"Now you will hear this story again with questions. When you hear a question, please answer it." (L1)*
19. L3 Story with questions in L1 inserted at various points in the story.

EVERY part of the RTT is recorded in L1, the subject's native language, EXCEPT for the L2 story. This is to ensure that the subject understands all the instructions, and all the questions he is to answer. You do not want people to answer incorrectly because they do not understand the questions. If they give a wrong answer, you want to be able to conclude that this is because they do not understand the *story*.

All the (many) parts of the RTT are there because you want to isolate one factor, comprehension of the L2 story, and remove the effect of all other factors.

- The **Introduction** and **Transitions** help remove the effect of confusion or having a test start unexpectedly.

- The **Practice Test** is very short and just gets the subject familiar with the test taking procedure, removing the effect of unfamiliarity with the test procedure. Without the Practice Test, subjects might score lower than they should on the Hometown Test.

- The **Hometown Test (HTT)** is full length story and serves as a way of making sure that the subject is not a poor test taker and is a native speaker of L1. This test is about the same length as the L2 RTT, but is in L1. If a subject does poorly on the Hometown Test, then their L2 RTT score will not be counted; if it can be done without offense, they are

not even given the L2 RTT. The HTT removes the effect of poor test-taking ability. Also, it helps ensure the validity of the RTT by screening out those who score low because they are non-native speakers of L1. The ability of such people to understand the L2 story is not what we are trying to measure.

We will go into a lot of detail about RTT in class and do a practice RTT. We will use "The Steps of RTT" as our textbook for this portion of the course. Also, some example RTT stories are on the course CD (see Resources).

4.7.2 Readings – RTT

The Steps of RTT

- CD, You will get a printout
- Read Sections 1 to 3
- Skim Sections 4 to 6 (We will go over the details of these sections during the RTT project class times)
- You will use this book as a reference in the RTT practice we will do.

Notes on Measuring Intelligibility

- CD

4.7.3 Resources – RTT

RTT Stories from Pakistan

- CD

4.7.4 Assignments – RTT

RTT practice – This will be discussed in more detail in class...

4.7.5 For Further Study – RTT

Casad, Eugene. 1974. Dialect intelligibility testing. Norman, Oklahoma: Summer Institute of Linguistics of the University of Oklahoma.

- LL
- **LinguaLinks:** Sociolinguistics / Language Assessment

O'Leary, Clare F. 1994. "The role of recorded text tests in intelligibility assessment and language program decisions." Notes on Sociolinguistics, Special Issue 2:48–72.

- LL, CD
- **LinguaLinks:** Sociolinguistics / Notes on Sociolinguistics / NOS Vol. I, #1–50 (1981–1996) / Notes on Literature in Use and Language Programs: Issues 39–50 and Special Issue 2 (1994–1996) / NOS Special Issue 2 (March 1994)

Grimes, Joseph E. 1995. Language survey reference guide. Dallas: Summer Institute of Linguistics.

- LL, CD
- Chapter 3 (Intelligibility testing)
- Note that most surveyors aim for 15-25 RTT pilot test questions rather than 30.
- **LinguaLinks:** Sociolinguistics / Language Assessment / Language survey reference guide / 3. Intelligibility testing

4.8 Observation

4.8.1 Introduction

Sometimes the information you are interested in can be more easily observed than measured using other survey instruments. For example, if you want to know what language children use while playing, you could watch them playing at the school. Of course, the "observer's paradox" can cause your observations to not reflect reality. That is, your presence as an outsider might change the behavior you are trying to observe.

In a language survey, you can use observation informally or formally. That is, you can just keep open eyes and ears and take notes on things you observe that are relevant to your research questions. Or you could additionally prepare an "observation schedule" ahead of time in order to keep track of specific categories of information. An example of the types of things you could observe is given in "List of Observable Information" on the Course CD (see Resources). Although I have never used an observation schedule, I recently asked a colleague for a copy of one he has used. When I receive it, I will include it in the Course CD.

4.8.2 Quantitative vs. Qualitative Data

Quantitative data is data that you can quantify, that is, express in terms of numbers; for example, a lexical similarity percentage, RTT scores, or a frequency table showing how many subjects answered a question in what way. **Qualitative data**, on the other hand, cannot be easily expressed numerically; for example, the answers to an open ended question or the researchers' observations. These two kinds of data are analyzed and interpreted in different ways. It is possible to turn qualitative data into quantitative data by grouping the data into categories and then classifying each observation into a category. This might work better for answers to open ended questions than for observations, but you could imagine ways where you could quantify observations, as well.

Quantitative data is often considered to be more objective and qualitative data more subjective. Thus, some people will only accept numbers in support of a hypothesis. This, to me, seems to be a dangerous belief. Along with rejecting any qualitative data, some people will also end up uncritically accepting *any* kind of numeric data. It is not the kind of data that is important so much as the *source* of the data and the *representativeness* of the data. It is not whether or not one kind of data is more objective than another, but whether or not you can trust your data. Given that you can trust it, how far can you trust it? I will discuss this more in Section 4.10. While that section is primarily talking about subject selection, the principles of when data is or is not generalizable are generally applicable to any kind of data. I will just add here that it is easier to justify trust in quantitative data since there are proven methods of sampling that can be used. It is harder to determine the representativeness of qualitative data, but not impossible.

Given that you can trust your data to give you objective information, you still have to treat quantitative and qualitative data differently. It is more straightforward to analyze quantitative data in that you just count things or average things or whatever is appropriate. But qualitative data is by nature very fuzzy. The best way to handle it, I think, is to have thought carefully ahead of time about what kind of information you might end up with and what you would do with that information. Then, if your qualitative data seems to support a particular conclusion, you can justify your objectivity. But if you form a hypothesis after looking at the data, then your conclusions are open to criticism. You could use previously unpredicted patterns in the

information to form a new hypothesis, but then you would need to go out and get more information, quantitative or qualitative, to test that hypothesis.

Qualitative data can be used to describe a situation or phenomenon. You might carefully sample a set of people and ask about their language use and tally their answers (quantitative data). But it is the qualitative information that will help you interpret the results and understand why the language use patterns are the way they are. "Qualitative information injects a note of reality into the somewhat abstruse world of numbers" (Blair 1990: Chapter 8). Qualitative information is essential for the *interpretation* of quantitative data.

4.8.3 Readings – Observation

Blair, Frank. 1990. Survey on a shoestring: A manual for small-scale language surveys. Dallas: The Summer Institute of Linguistics and The University of Texas at Arlington.

- LL, CD
- Read Chapter 8 "Observation"
- **LinguaLinks:** Sociolinguistics / Language Assessment

Kindell, Gloria. 1997. How to use observation.

- LL, CD
- **LinguaLinks:** Sociolinguistics / Language Assessment / Assessing Language / How to survey and assess the sociolinguistic situation / Identifying the social distribution of linguistic varieties / How to collect data and analyze language use by social groupings

4.8.4 Resources – Observation

List of Observable Information

- CD

4.8.5 For Further Study – Observation

Definitions for *observation*, *observer's paradox*, and *participant observation* in the Glossary of Sociolinguistic Terms (*LinguaLinks*, Sociolinguistics Bookshelf).

Brown, Rick. 1998. "On criteria for identifying language groups and language clusters." Notes on Sociolinguistics 3(1):3–42.

- LL, CD (On the CD, this is in Chapter 0)
- Read "Participant observation and ongoing assessment" which is a subsection of the last section, "Appropriate research instruments."
- **LinguaLinks:** Sociolinguistics / Notes on Sociolinguistics / NOS Volume 3, #1–4 (1998) / NOS Number 1 (March 1998)

4.9 Bilingual Proficiency

We usually think of individual bilingual proficiency on a scale from 0 to 5 (0, 0+, 1, 1+, 2, 2+, 3, 3+, 4, 4+, and 5). These levels are generally referred to as "FSI levels" even though they are now actually called ILR[1] levels. In a language survey, we often want to measure bilingual ability in order to determine if a language group is "adequately" bilingual in another language where "adequate" means that they could use literature in that language.

But what level is "adequate"? Some would argue that a minimum of level 4 is needed in order for someone to use literature in a second language. Others would say that 3 or 3+ is sufficient. What level is adequate depends on what tasks the person needs to perform in the second language.

We cannot, however, only think about adequacy for **individuals**. Usually, a language survey is concerned with estimating the bilingual proficiency of a language **community**. Different individuals will have different levels of bilingual proficiency. This proficiency will often differ by age, gender, education, etc. (see Blair 1990, Chapter 5). If the research question has to do with whether or not the language community can use literature in another language, the researcher must decide not only **what level** of proficiency is considered adequate for an individual, but also **what proportion of the community** must achieve that level, and if things like age and gender matter.

For example, one could specify that bilingual proficiency in a community will be considered adequate if 75% of men and 75% of women have bilingual ability of at least level 3+. Note that this is NOT the same as saying "at least 75% of all people"! If all the men are bilingual but only half the women are, then about 75% of all people are bilingual, but not 75% of the women. To determine if the community meets this criterion, you need a way to measure the bilingual proficiency of individuals, and a method of sampling individuals that allows generalization to the whole language community.

Measuring

One possible reason for measuring bilingualism would be to rule it out, to prove to others that a group really is not adequately bilingual. In that case, you do not need a very powerful tool. You could use reported information on bilingual ability and language use in domains to predict bilingual ability. If all indications are that bilingual ability is low, then perhaps more in depth testing is not warranted. However, if the reported information indicates that bilingual ability might be higher, and if the conclusions of the survey depend on knowing how high, then more objective testing methods are needed. In some cases, those you have to convince insist on more than reported information, in which case you need to use a more formal testing method.

Sampling (Subject Selection)

Whether for reported information or for actual bilingualism proficiency testing, if you want to make conclusions about the whole language community, then you need a representative sampling method. **See Section 4.10 for more about sampling methodology.**

[1] FSI stands for Foreign Service Institute (US State Department) and ILR stands for "Intra-Language Roundtable".

When Do I Need to Do Bilingualism Testing?
In some cases, bilingual proficiency is of interest for its own sake. But in many language surveys, the reason to measure bilingual proficiency is in order to determine if there is a need for language development. Decker (1991) says,

> "Knowledge about the bilingualism in a language group is important in the process of making the decision for use of literature in the second language. Unnecessary time should not be spent on promoting literacy in the mother tongue language when there is a better, more effective alternative. If a language community is sufficiently bilingual in another language which already has literature and training programs, then many years can be saved in training time. Likewise, a decision made that calls a language group sufficiently bilingual, which in reality is not sufficiently bilingual, can be a very costly mistake in terms of the frustration felt by the people. Those making decisions about whether or not to promote literacy in a second language need good information. Even if that information takes time and effort to gather, the time and effort are well spent when one considers the waste of effort in the event of a wrong decision."

If a language community is adequately bilingual in a developed language, then perhaps they do not need to have their own language developed. Note that negative attitudes towards this other language might reverse this conclusion. Additionally, high bilingual ability can be an indicator of language shift, which would indicate language endangerment. A language with low vitality may not need to be developed since in the near future there may not be any speakers of the language.

Much depends, however, on your philosophy of what languages really best serve people. For example, some language planners could be classified as "mother-tongue first". That is, they believe that the mother-tongue is the best choice for language development no matter what. Some would not go that far, but would say that the mother-tongue should be developed when it has high vitality, regardless of the presence of bilingualism.

Think carefully about what you will do with the results of a community bilingualism evaluation... If your decision will be the same whether bilingual proficiency is high or low, then there is no need to measure it! Alternatively, if bilingualism will not affect the decision in the case of high language vitality, then you might save time by investigating language vitality first. If vitality is high, then bilingualism would not affect your decision. If vitality is low, then there must be bilingualism in something! It may become obvious that there is no other choice for language development than to use the other language. Again, in this case, bilingualism testing would not be needed.

In some situations, there are more than two competing languages. It may be clear that the mother-tongue is endangered, but it may be of interest to investigate which of the other languages is being used more and which language is being used in which domains. If language development or promotion decisions can be made by only looking at language use in domains, then bilingualism testing is not needed. However, a language use study might not clear up the issue, in which case it might become necessary to find out which language the people actually handle better.

The point here is that bilingual proficiency testing is time consuming and the results may potentially be rather unclear unless a lot of effort is put into good sampling and thorough

testing. When the research questions can be sufficiently answered without measuring bilingualism, do not waste time evaluating community bilingual proficiency levels. Also, whether or not the research questions can be answered without measuring bilingual proficiency depends on your (or the person / organization who is asking for the survey's) philosophy of decision making with respect to language development.

The following sub-sections provide the details for various methods of assessing bilingual proficiency.

4.9.1 Reported Bilingual Proficiency

This method of measuring bilingual proficiency involves simply asking subjects about what they feel they can and cannot do in a language. Questions should ask about both comprehension tasks and production tasks. Some questions should reflect tasks that are easier and some that are harder. The questions are usually designed to ask about things related to various ILR levels. Lingua Links Library has information in the Language Learning Bookshelf about what one should be able to do at various levels of bilingual proficiency.

An example of a reported bilingualism proficiency interview is as follows. When asking these questions, replace [LWC] with the actual name of the language being tested and [L1] with the name of their mother tongue. Usually, these questions would be included in an Individual SLQ.

1. Can you buy something in [LWC]?
2. Can you tell about your family in [LWC]?
3. If you overhear two [LWC] people speaking [LWC] in the market…
    a. Can you repeat in [L1] what you heard?
    b. Can you repeat in [LWC] what you heard?
4. Could you use [LWC] explain to a [LWC] person how to do your job?
5. Can you speak [LWC] as fast as a [LWC] person?
6. Can you speak [LWC] as well as a [LWC] person?

Note that these questions should be asked in the local language (Blair 1990: Chapter 10). If you ask the questions in the LWC you are evaluating, then you are confounding the results with their understanding of the questions! Also, it is possible that only the more bilingual people will answer your questions. To ask the questions in the local language, you will have to have a local helper who has a language in common with you.

Such a test is rather imprecise as it relies on reported information. However, it can be a good tool in cases where you suspect there is low bilingual ability. If subjects answer "no" to many of these questions, then they are not likely to be highly bilingual. If subjects answer "yes" to all the questions, that indicates the potential for high bilingual ability, however this needs to be confirmed with more objective testing methods such as SLOPE or SRT. It is not uncommon for people to over-report their own ability. Of course, in some cultures, people may tend to under-report their own ability instead. Care should be taken in interpreting reported information rather than just taking it at face value.

4.9.2 SLOPE

SLOPE (Second Language Oral Proficiency Evaluation) is a thorough method of testing the bilingual proficiency of an individual. It is a modification of the United States Department of State Foreign Service Institute (FSI) evaluation for use among potentially illiterate subjects. See Blair (1990:Chapter 6) for more about SLOPE.

SLOPE is excellent for evaluating an individual. But that excellence comes at a price. The testers must have a lot of training, and the interview and evaluation of the interview can be very time consuming. As a result, it is potentially too costly to use for a community profile of bilingual proficiency where many subjects must be tested. This cost must be weighed against the cost of making a wrong conclusion about community bilingualism.

For example, suppose a reported proficiency evaluation says that community bilingualism is high, and suppose that this conclusion would lead to a decision to not pursue vernacular language development. The cost of not doing SLOPE is that there is potential that a language community that needs development will not be served. The cost of doing SLOPE is a lot of time and money for the purpose of checking the reported information. These costs and the potential benefits must be weighed in order to make a decision about whether or not to use SLOPE.

Suppose that the reported proficiency evaluation says that community bilingualism is low, and suppose that this conclusion would lead to a decision to pursue vernacular language development. Then the cost of doing SLOPE is a lot of time and money for the purpose of checking the reported information. However, in the case of reported low bilingualism, it is unlikely that actual bilingual ability will be much higher than the self-report. The likelihood of this occurring must be considered when deciding whether or not to use SLOPE.

4.9.3 SRT

Carla Radloff's book, "Sentence Repetition Testing for Studies in Community Bilingualism" (in the LinguaLinks Library under Sociolinguistics / Language Assessment) describes in detail how to carry out a Sentence Repetition Test (SRT). SRT was designed to be a method of assessing community bilingualism that is more cost-effective than SLOPE. When a subject takes an SRT, they hear a series of sentences of increasing length in the LWC and are asked after each one to repeat the sentence. How well they repeat the sentences is an indicator of their bilingual ability. While this seems to only be testing memory and pronunciation, the validity of the SRT method is based on the idea that bilingual ability is correlated with the ability to hold larger "chunks" of information in one's memory. If someone does not speak the LWC well, then they might be able to repeat back a short sentence, but not a longer one. If someone is fluent in the LWC, then they can repeat back quite a long sentence. A typical person can hold about seven "chunks" of information in their memory, but these chunks are larger for a person who is more proficient in the language.

An important fact to know about SRT is that the scores are not meaningful in and of themselves. A subject might score, say, 10 out of 15, but that does not tell you how bilingual they are in terms of an objective scale, such as ILR levels. In an SRT for one language, a 10 out of 15 might correspond to ILR level 3+... in an SRT for another language, it might correspond to a level 2. During the SRT development, subjects are tested using both an SRT and another, more interpretable, bilingual proficiency evaluation. This more interpretable test serves to "calibrate" the SRT scores. That is, it allows you to say what SRT scores go with

what bilingual proficiency levels. Without the calibration, the SRT scores are not objectively interpretable.

This calibration test could be SLOPE. Radloff proposes using something called a Reported Proficiency Evaluation (RPE) in which native speakers of the test language who know the subjects well give evaluations of the subjects' bilingual ability leading to ratings that look like the ILR scale. In fact, how the RPE levels correlate with the ILR levels must be independently investigated for each SRT constructed. In one such investigation (a French SRT constructed in Cameroon, Africa), it was found that RPE levels tended to be about half a level higher than SLOPE levels.

Some advantages to using SRT include the following:

- ✓ In the test construction...
  - The researcher does not have to be highly proficient in the test language. An educated native speaker can be used to assist with the construction.
  - The test construction can be done in one geographical area and the test can be administered in other geographical areas.

- ✓ In using the test...
  - Administration time is brief... about 15 minutes per subject.
  - If administrators have been well trained, they can score the SRT while administering it.
  - The test procedure (repeating back sentences) is easy for subjects to understand.
  - You do not have to record the repetitions (as opposed to SLOPE where the evaluation session must be recorded).
  - You do not have to isolate subjects from the community (as opposed to SLOPE where the subject needs to be taken to a quiet place for an hour).

- ✓ In analyzing the data...
  - Once the test has been constructed, turning the SRT scores into bilingual proficiency levels is straightforward.
  - There are no recordings to process (unlike SLOPE).
  - SRT scores seem to be correlated with RPE levels up to about level 3 or 3+. Thus, SRT is fairly reliable at distinguishing between low bilingual levels, and between low and high in general (e.g. <3 vs.3 or higher).

Some disadvantages to the SRT include the following:

- ✓ The test construction is quite time intensive.

- ✓ The validity of the SRT results depends heavily on the quality of the RPE (or whatever method was used to calibrate the SRT scores).

- ✓ An SRT may not discriminate well at higher proficiency levels. In the investigation of the French SRT in Cameroon, it was found that SRT scores were poorly correlated with SLOPE levels above 3+. Thus, that SRT was not a good tool for distinguishing between SLOPE levels 3+, 4, 4+ and 5. If the level of bilingualism that is considered adequate is above 3+, then this French SRT cannot establish adequate bilingual ability. It can still establish inadequate bilingual ability if the scores end up being low enough.

4.9.4 Observed Bilingual Proficiency

Another method that can be used to assess bilingual proficiency is for the researcher to engage in conversations with subjects. This will only work if the researcher can speak the language at a level higher than the level considered "adequate." It is not possible to distinguish between levels of bilingualism higher than one's own. The following summary is from SIL's Procedures course.

> "Knowing his own level of proficiency in L2 allows the researcher to rate each person he speaks with relative to himself. Of course his own level must be at least level 2 in order to judge that someone is at least level 3. He would have to be at least level 3 to be able to judge between levels 3 and 4. He would have to probe all pertinent domains and in general use the techniques of SLOPE. This means at least 15 minutes or so with each person unless the first five minutes reveal that the subject is obviously much lower than level 3, the cutoff point for possibly adequate proficiency."

You rate an individual relative to yourself, and if, the person is less proficient than you are, then you could also assign them a particular proficiency level.

4.9.5 Recommendations for Measuring Community Bilingual Proficiency

SLOPE is the only method presented here that is capable of consistently distinguishing between high levels of bilingualism (e.g. between 3, 3+, 4, 4+, and 5). Reported bilingual proficiency and SRT are somewhat capable of distinguishing between low levels and high levels (e.g. less than 3 vs. 3 or higher) of bilingual proficiency. Thus, a good strategy would be to use cheaper methods, like reported and observed bilingual proficiency, along with an investigation of language use and attitudes, as a first approximation. As Decker (1991) says,

> "The best method for planning a survey's approach to a possible bilingual situation is to begin with the use of methods which are the least costly in terms of time and effort...
>
> "If the survey investigations have found that there is a great deal of second language use in significant domains, that the people of the language community have positive attitudes toward the second language, and that other indicators are suggesting that there may be a high level bilingualism on a community wide basis, then bilingualism testing should be considered."

Bilingualism testing (SRT or SLOPE) can be used to get a clearer picture, *if necessary*. SRT is appropriate for testing proficiency in languages that are used widely in an area since the test construction is so time consuming. You probably do not want to develop an SRT to use just one time. SRT is also best suited to establishing low bilingual ability, or at least that someone is less than level 3, since it is not good at distinguishing among higher levels. SRT could also be used to establish adequately high proficiency if "adequate" is defined to be level 3 or 3+. SLOPE is appropriate if there are people willing to commit to the training, if there is funding for the level of effort required, and if there is a need to distinguish among higher levels of bilingual ability.

4.9.6 Readings – Bilingual Proficiency

Blair, Frank. 1990. Survey on a shoestring: A manual for small-scale language surveys. Dallas: The Summer Institute of Linguistics and The University of Texas at Arlington.

- LL, CD
- Read Chapters **5 (Bilingualism)** and **10 (Self-Evaluation Questionnaires)**
- **LinguaLinks:** Sociolinguistics / Language Assessment / Survey on a Shoestring

Decker, Ken. 1991. Strategy for data collection in bilingual communities. In Kindell, Gloria E., ed. 1991. Proceedings of the Summer Institute of Linguistics International Language Assessment Conference, Horsleys Green, 23-31 May 1989. Dallas: Summer Institute of Linguistics.

- LL, CD
- An excellent overview of issues related to bilingualism!
- **LinguaLinks:** Sociolinguistics / Language Assessment / Proceedings of the Language Assessm
- ent Conference / Part VI. Bilingualism / 23. Strategy for data collection in bilingual communities

Proficiency Scales

- LL, CD
- **LinguaLinks:** Language Learning / Managing Your Language Learning Program / Information to help you check your progress / Correspondence of proficiency scales

Grimes, Barbara F. 1986. "Evaluating bilingual proficiency in language groups for cross-cultural communication." Notes on Linguistics 33:5–27.

- LL, CD
- **Just look at the very last section:** "Bilingual proficiency questionnaire" *(this is the only section included on the CD version of this article)*
- **LinguaLinks:** Linguistics / Notes on Linguistics / NOLx, 1985–1989 (Numbers 32–47) / NOLx Number 33 (January 1986) / Evaluating bilingual proficiency in language groups for cross-cultural communication

SLOPE Description
SRT Example
RPE Information

- CD

4.9.7 Assignments – Bilingual Proficiency

Based on Decker (1991), list the factors involved in determining whether or not bilingualism is "adequate" for a community.

4.9.8 For Further Study – Bilingual Proficiency

Radloff, Carla F. 1991. Sentence repetition testing for studies in community bilingualism. Dallas: The Summer Institute of Linguistics and The University of Texas at Arlington.

- LL
- **LinguaLinks:** Sociolinguistics / Language Assessment

SIL 1990. The Summer Institute of Linguistics Second Language Oral Proficiency Evaluation. In Survey Reference Manual, ed. by Ted Bergman.

- LL
- **LinguaLinks:** Sociolinguistics / Language Assessment / Survey Reference Manual

Blair, Frank. 1990. Survey on a shoestring: A manual for small-scale language surveys. Dallas: The Summer Institute of Linguistics and The University of Texas at Arlington.

- LL, CD
- Chapters 6 (SLOPE) and 9 (SRT)
- **LinguaLinks:** Sociolinguistics / Language Assessment

4.10 Subject Selection

The technical term for the method by which you choose subjects to interview is "sampling." This term simply means the process of selecting a group of subjects from your target population. Usually, the population is too large for you to interview everyone, so you have to select a sample. You use the information you gather from the sample to draw conclusions about the population. So it is essential that you understand how to get a representative sample, one that gives you valid information about the target population

Every survey method requires the researcher to think about sampling. This is because all survey methods involve measuring individuals in some way. In some cases, individuals are a proxy for the language (e.g. when collecting a word list to investigate linguistic similarity) and in other cases, individuals are the units you are interested in (e.g. when investigating language use and attitudes).

How you select subjects depends on what you are trying to measure (which, like everything else, depends on your research questions). For example, if you are going to collect a word list, then what you hope to measure is the language. Assuming that all people in the village speak the same language, you can select anyone. In reality, there are other factors to consider. For example, men and women tend to speak differently and languages change over time. You need to specify some selection criteria (e.g. a man about age 45) and stick to it. This makes comparisons across different languages and dialects more valid. **You do not want to conclude two villages speak differently if in fact the only difference was that you got a word list from an old man at one village and from a young woman in the other!** (If you really want to know about the differences in the language between genders or between age groups, then you would need to collect wordlists from members of each group within a village.)

If you are trying to find out certain facts about the language community, such as whether or not there is a school in the village, or what the history of the people group is, then you do not have to ask many people, just those who really know the answer. The facts do not vary among individuals, but knowledge of the facts does.

If you are trying to measure things that really are different for different people, such as language attitudes and use, then you need a representative sample of people. Take language attitudes for example. What you are interested in is the community profile of language attitudes, not just the attitudes of a few isolated people. But, in order to measure the *community* profile, you have to interview *individuals*. If you do not use proper sampling techniques, then the information you get might not really represent the whole community. Nahhas (2006) (see Readings) goes into detail about what kinds of sampling methods are really representative. A brief summary chart is given here:

Table 2 – Brief Summary of Sampling Methods (see Nahhas 2006 for more detail)

Method	Definition	Advantages	Disadvantages
Simple Random Sampling	Using a list of names, choose a set of names randomly.	Results are representative of the whole list.	Non-response can lead to bias. Some sub-groups might be underrepresented.
Stratified Random Sampling	Using a list of names, subdivide the list into groups (e.g. men and women) and randomly choose names from within each sub-list.	Results are representative of the whole list. Ensures that important sub-groups are represented in the sample.	Non-response can lead to bias.
Household Sampling	Using a list of households, randomly choose a set of households.	A list of households is easier to get than a list of individuals. Can only generalize to households, not individuals (unless household size does not matter).	Non-response can lead to bias. Potentially more complicated analysis.
Quota Sampling	Define a set of categories (e.g. by gender and age) and select a certain number of people within each category. The selection is not random, but rather you take whomever you can find.	You do not have to have a list of names or households.	You need strong assumptions in order to generalize to the whole village.
Systematic Sampling	List out all the units (could be people, houses, etc.) and take every so many (e.g. every 10^{th} house).	No need for a detailed list of units. You do need some way of ordering them, and a way to make sure that you are not leaving any out (e.g. you do not want to select in such a way that a certain part of the village is left out entirely.)	Non-response can lead to bias. Rarely, a pattern in the units can lead to bias.

"Non-response" is when you have selected a particular subject, but they are not available or refuse to be interviewed. "Bias" means that your method tends to be off-center; instead of your results being representative of the whole village, they are actually representative of some subset of the village. In the case of non-response, the results represent villagers who are available and willing to be interviewed. In fact, such people might differ from the village as a whole, particularly in their sociolinguistic characteristics.

The sampling methods mentioned so far are methods that are actually justifiable for subject selection. There are also some really bad ways to select a sample of individuals. One of these is called "convenience sampling". This is where you simply select the people that are easiest

for you to find, you feel most comfortable talking to, and/or feel most comfortable talking to you. The problem is that these sorts of people are very likely to be different than the "inconvenient" people in many sociolinguistic characteristics such as language attitudes, bilingualism, contact, etc.

Another kind of sampling that is not recommended for subject selection is "purposive" sampling. This is where you have a certain idea in mind of what sorts of subjects are "typical" and you select those kinds of people. For site selection, this method might actually be very useful, as discussed in Section 3.4. But for sampling individuals, it is problematic. Firstly, you probably have no idea what is really typical. Secondly, even if you did know what was typical, you probably have no idea which people fit that description. Finally, and most importantly, even if you select truly typical people, you will have no information about the rest of the people and how their characteristics are distributed through the population.

4.10.1 Implications of the Sampling Method

In the Survey Proposal you will need to justify your method of subject selection. Explain why you will be able to generalize from the subjects you interview to the target population in the village. In Chapter 3 you learned about the "scope" of a survey and how the site selection method determined your actual scope. That applied to the village level. But *within* each selected village, whether or not you can generalize to the whole target population *of that village* depends on your *subject* selection method. Here are the implications of typical sampling methods. For each method, refer to Table 2 above for a description of the method.

Simple Random Sampling
Results are generalizable to the entire list you chose from. If this list contains all of the people in the village, then you can generalize to the whole village.

Stratified Random Sampling
Results are generalizable to the entire list you chose from. If this list contains all of the people in the village, then you can generalize to the whole village. In order to pool the information over the strata and generalize to the whole village, you need to know the village proportions in each stratum. For example, if you sampled 5 young and 5 old, but in fact the village is 70% young people and 30% old people, then you need to combine the results for young and old accordingly.

Quota Sampling
To generalize to the whole village within each quota category, you need to assume one of the following:

(a) In the entire village, the people within a quota category are all the same (homogenous)

OR

(b) You encountered villagers randomly (i.e. no villagers were any more convenient to pick than any other villagers)

OR

(c) The convenient villagers (those who were available for you to choose from) are generally the same as the villagers who were not available *with respect to the factors you are trying to measure*.

The first two assumptions are rather hard to justify. But the third one might be reasonable in some cases. **But be careful!** Suppose your method involves sampling people who are at

home during the day and you are measuring bilingualism. Are those who are home during the day any different in terms of bilingualism than those who are away? Maybe those who are away have more contact with the LWC and therefore are more bilingual. In that case, quota sampling would underestimate the level of community bilingualism. Of course, the same problem would arise with random sampling if there is non-response. But with random sampling, you know who has not responded and you can make efforts to visit them at another time.

In order to pool the information over the quota categories and generalize to the whole village, you need to know the village proportions in each category. For example, if you selected 5 young and 5 old, but in fact the village is 70% young people and 30% old people, then you need to combine the results for young and old accordingly.

In my experience, quota sampling is the most commonly used form of sampling used by SIL language surveyors. It is easy to explain to a new surveyor or to a local helper and it is easy to carry out. If the surveyor understands the principles of sampling and what kinds of assumptions are needed to make quota sampling representative, then the method can be carried out in a way that maximizes its chance at leading to a representative sample. For example, the surveyor could make sure to sample some people during the evening so as to not miss out on those who are in their fields during the day. Additionally, the surveyor could make sure to sample people from various parts of the village so as to not exclude any part of it that might turn out to be different.

Household Sampling
Results are generalizable to the entire list of *households* you chose from. If this list contains all of the households in the village, then you can generalize to the whole village. NOTE: Using household sampling means that you can make conclusions about *households*. Drawing conclusions about individuals is trickier. If you are using household sampling, you have to decide how many individuals you will sample within a selected household. Since people in the same household are more likely to be similar than a random group of people from the whole village, it is better to just sample one person per household. Otherwise, this intra-household correlation must be taken into account in the analysis. Sampling just one person per household overcomes this problem, but another problem remains: people living in larger households will be underrepresented (they will have a smaller chance of ending up in your sample than people from smaller households). If you are willing to assume that household size is unrelated to what you are measuring, then the conclusions can be generalized to all the individuals in the households on your list. In many cases, this is a reasonable assumption.

Systematic Sampling
Usually, systematic sampling is used to select a sample of households. It is hard to line up all the people and pick every so many. (This would be easier if you had a list of people, but if you had a list, you would just use simple random sampling!) But you can list the households in some order and perform systematic sampling.

To generalize to the whole village, you must justify that this method gives all parts of the village a chance of getting into your sample. Suppose there are actually 150 houses in the village, but you do not know this. You decide to select 10 houses by choosing every 5^{th} house starting at one end of the village (randomly choosing among the first 5 houses for your starting point). This means that only the first 50 houses have a chance of getting in your sample. If there is any reason to believe that the other end of the village might be different in

any way with respect to what you are trying to measure, then this method is not good. You should first count the houses so you know there are 150. Then you should select every 15th house (using a random starting point among the first 15 houses). Even this method would fail if there is some group of 14 houses that is very different and got skipped entirely. Of course, you can only control for what you know about!

If you can justify systematic sampling, then the results are approximately like a simple random sample of households and can be generalized to the whole population of households. As mentioned earlier, a sample of households can be assumed to be similar to a sample of individuals if people in different size households are the same with respect to what you are measuring.

4.10.2 Sample Size

How many subjects should you select? There really is no simple answer to this question. The answer depends on many factors. See Nahhas (2006) a detailed explanation. In practice, you usually do not have the resources to sample as many subjects as you really need to sample. You will be limited by time and money. Traditionally, SIL language surveyors have sampled about 10-20 people per site.

4.10.3 Other Sampling Tips

The following tips are from Loren Maggard (former SIL SAG Survey Coordinator):

- Try to get the hardest subjects first to allow for tiredness and lack of motivation later in the day(s), e.g. for male surveyors, try to sample women first.
- Draw a simple grid to be filled in with tick marks as the various subjects are found (male/female, young/old, educated/uneducated), especially to assist national colleagues and language helpers to understand the sample needed.
- Take time to explain the sampling procedure to village leaders or others helping you. It is easier for them to help you find specific people if they understand who and what you need.

4.10.4 Screening Criteria

Once you have selected a subject, you have to decide whether they are someone you want to interview or not. Within a site, what is your target population for each instrument? For a questionnaire about vitality, you might want anyone who is ethnically from that group regardless of their proficiency in the local language. For an RTT, you would want people who can speak the local language. All of this is specified in your **Screening Criteria**.

Here is an example for screening for intelligibility testing (RTT). The target population was ethnic Lawa people from that village who are representative speakers of the variety of that village. There were three criteria:

1. The subject is "from the village." This is defined as growing up in the village, living in the village at present, and, if they have lived elsewhere, their time elsewhere is not a significant[1] amount of recent time.
2. The subject spoke Lawa first and currently speaks Lawa as their best language.

[1] It is difficult to define a specific time period (e.g. 'more than the last 5 years') for "a significant amount of recent time". Thus, this criterion is intentionally subjective as it depends on how long the subject lived elsewhere and how long they have been back in the village relative to their age, as well as on how atypical their pattern of living elsewhere is relative to the other residents of the village.

3. The subject has at least one Lawa parent from the village and that parent spoke Lawa with them when they were a child.

If the research question was language vitality, then a different target population might be desired that could be specified by only using criteria 1 and 3 from the list above. For an example of what screening questions that go with these criteria, see Screening Criteria Example on the course CD.

Again, this is only an example. The particular criteria you need might differ. The information necessary to evaluate these criteria must be asked of the subjects in a simpler form, of course.

4.10.5 Recommendations

First, follow the advice in Section 3.4 regarding site selection. While purposive sampling makes sense in many situations for site selection, it is not a good idea for subject selection (except when you only want to interview an expert). When sampling individuals, the goal is use a method that you can justify as being representative.

If you have the right contacts, it might be possible to get a listing of individuals or households in a village, either when you arrive or ahead of time. Such a list provides you with a sampling frame, allowing you to carry out random sampling (simple random sampling or stratified random sampling[1]). The most important thing to keep in mind when doing random sampling is that some of those you select might not be home (or might refuse to participate). This is called "non-response". In order to reduce the bias due to non-response, the surveyor must try very hard to follow-up with these people. Try to find them again at a later time. Of course, if someone just refuses to be interviewed, do not keep asking them.

If you are not able to get a list, then another possibility is to take a tour of the village and count the houses and put them in some order by making a map or just memorizing the layout of the village. By doing this, you will have created a sampling frame of houses. Then draw a (simple or stratified) random sample of households and select one individual at random from each household. You could select the households using systematic sampling instead, but the only reason to do this is if you do not have the ability to draw random numbers, or if you must have a method that is easy to explain to the local people. It is relatively easy to obtain and learn to use a table of random digits (see Nahhas 2006) so the first reason should not be an excuse. Another possible reason to use systematic sampling is that you are not able to make a list of households and do not know how many houses there are. In that case, you could use systematic sampling to select households, but it is possible that will leave out some segment of the community that is different with respect to what you are measuring because your sample size was reached before you reached their part of the village.

If, due to time constraints or the possibility that listing out the houses on your own would make people suspicious of you, you could use quota sampling. If you do fall back on this option, try to interview people on various days at various times of day and in various places throughout the village. A commonly used stratification is age, gender, and education. That is, you would sample a certain number of young uneducated men, young uneducated women, young educated men, and so on.

[1] There are other kinds of random sampling. See Nahhas (2006) for details.

4.10.6 Readings

Nahhas, Ramzi W. 2006. Random and non-random sampling for language surveys: methods and implications. (To be submitted to SIL's Electronic Working Papers)

- CD
- Read Section 1, Section 2.1, and Section 2.2
- Skim the rest of Section 2, and Sections 3 and 4, as well

Wetherill, G. Barrie. 1995. Research design and analysis. Unpublished.

- LL, CD
- Skim Chapters 1 and 2 on "The need for design" and "What type of sample design?"
- This has a lot of the same information as Nahhas (2006) but with different emphases.
- **LinguaLinks:** Sociolinguistics / Language Assessment

4.10.7 Resources

Screening Criteria Example.doc

- CD

4.10.8 Assignments – Subject Selection

1. Suppose you go to a village on the day they are having a village meeting. You need to sample 10 people. You stand up at the end of the meeting and announce that you would like 10 people to help you by answering some questions about their language. You mention that you are staying at the house of the village leader for a few days and they can stop by any time.
    a. What kind of sampling is this?
    b. Could you generalize the results of such a survey to the population of this village?
    c. Suppose you were assessing bilingualism in the language you used to make the announcement... in what direction do you think your estimate of community bilingualism would be affected?

2. Suppose that instead of the method in Question 1, you decide to sample 10 people in the following manner: You walk through the village and count that there are a total of 85 houses. You number them from 1 to 85. You draw a random number from 1 to 9 using a table of random digits. You end up with the number 3. Starting with house #3, you sample every 9th house. You intend to sample one person per household at random from the residents of the house.
    a. Which houses are picked? (list the numbers)
    b. What kind of sampling is this?
    c. Suppose every one of the 10 houses you select has someone home for you to interview. Is this sampling method generalizable?
    d. **[EXTRA CREDIT 1 point]** For the question in part c, if yes, why? If no, what would you have to assume in order to make it generalizable?
    e. **[EXTRA CREDIT 1 point]** Suppose instead that there is no one home at three of the houses that you select. What would you do in order to still have a sample size of 10? How would your solution affect the generalizability of your sample?
    f. **[EXTRA CREDIT 2 points]** Suppose that you draw a random number from 1 to 8 (instead of from 1 to 9) and sample every 8th house until you get 10 houses. How does this affect the generalizability of the sampling method? What would you have to assume to make this method generalizable?

4.11 For Further Study – Other

Bergman, Ted, ed. 2001. Survey reference manual. SIL.

- LL
- Lots and lots of articles about language survey. Some are outdated, many are great.
- In particular, see two articles by Wetherill, G. Barrie and Marie South (2001)
    - "Is your sample worth taking?"
    - "What type of sample design?"
- **LinguaLinks:** Sociolinguistics / Language assessment

Stalder, Jürg. 1996. "Update on rapid appraisal." Notes on Sociolinguistics 48:24–28.

- LL, CD
- **LinguaLinks:** Sociolinguistics / Notes on Sociolinguistics / NOS Vol. I, #1–50 (1981–1996) / Notes on Literature in Use and Language Programs: Issues 39–50 and Special Issue 2 (1994–1996) / NOS Number 48 (June 1996)

5 Survey Proposal

5.1 Introduction

Good results come from good planning. A Survey Proposal documents all the background research relevant to a survey, states the purpose of the survey and the research questions to be answered, and clearly describes the methodology to be used to answer the research questions. Also, a Survey Proposal includes a time line for the fieldwork phase of the survey in addition to the details of the resources needed to carry out the survey and a plan for the distribution of the results.

This might seem like a lot of work, but it is worth it! Writing a good proposal gives your supervisors and other stakeholders the opportunity to review the plan and make adjustments as necessary. Perhaps you have left out things that they want included. Perhaps their desires are unreasonable and seeing the plan laid out practically will show them how to scale back their expectations. Also, most of the information in the Proposal needs to be written at some point anyway, for the Survey Report. So why not write it up now? That will make the Report that much easier to write.

Peter Ladefoged, the renowned phonetician, wrote,

> "My aim, seldom achieved but always attempted, is to write the introduction to a paper, laying out the background and stating the problem, before doing anything else. I also try to write up the procedure section before beginning, so that I know what I will be doing. Procedures get modified as one goes along, so this section has to be rewritten; but again this should be done while collecting the data, not after it has all been collected. You should even try to write up the results section of the paper as you go along, just leaving a few blanks for the actual numbers. That way, when you leave the lab or the field site, all that you have to do is the final consolidation of the results you have been getting."[1]

Ladefoged's suggestion was intended for more controlled field work such as gathering phonetic data. But for language survey research, where there are so many unknowns, his ideal is rather difficult to achieve. But the point is that you can write a lot of the Survey Report before you ever collect any data. The more you write ahead of time, the better prepared you will be, the better advice you will get from others, and the less you will have to do afterwards.

Regarding the value of a Survey Proposal in planning, the SIL Principles course states the following.

> "Much of the time and money that goes into doing a language survey can be wasted if the survey is not properly planned. For instance,
>
> - The surveyor could fail to ask questions that are critical to the decision makers.

[1] Ladefoged, Peter. 2003. Phonetic data analysis. Malden, MA: Blackwell Publishing Ltd. (page 192)

- The surveyor could collect information that will never be used by the decision makers.
- The surveyor could use an instrument or method that the decision makers do not believe to be valid.
- The surveyor could spend far more time and money on the survey than the decision makers feel to be appropriate.

In order to avoid these situations, it is critical that the survey be planned in advance of its execution, and that the decision makers who are calling for the survey are in full agreement with the plan. The mechanism we use for this purpose is the *survey proposal*."

Yet another reason to write a Survey Proposal is as follows: What if something prevents you from carrying out the field work or writing the report? An existing Proposal will be very valuable for anyone else who is asked to finish what you started.

Objectives
After learning the material in this chapter, you should:

- Understand what makes up a thorough Survey Proposal.
- Be able to write a Survey Proposal of your own.

5.2 Survey Proposal Outline

The Course CD has a template for a Survey Proposal that you can use to get started. Just delete the instruction paragraphs in each section and insert the information relevant to your survey. One possible outline for the Proposal is as follows. You could organize things differently if you want to, but your Proposal should still contain all this information and be in some logical order.

1 Introduction
 1.1 Geography
 1.2 Peoples
 1.3 Languages
 1.4 History
 1.5 Previous research
 1.6 Other background information
2 Research Purpose, Goals and Questions
3 Methodology
 3.1 Site Selection
 3.2 Instruments
 3.3 Subject Selection
 3.4 Fieldwork Timeline
 3.5 Analysis
4 Work plan
5 Distribution of results
6 Resources needed
 6.1 Personnel
 6.2 Equipment
 6.3 Funding
7 References
Appendices

Anyone who reads the Proposal should be able to understand what you are going to do and why. This gives you the chance to get good feedback from others and be able to refine your plans.

When writing the Proposal (and the Report later) think about the sort of people you are planning to give the **Report** to. The content might be slightly different depending on if you are writing for administrators, educators, a government, an NGO, a church, or a mission organization. You do not want to have to spend lots of time later editing the things you already wrote in the Proposal so they can go in the Report for a different audience.

Much of the information for Section 1 of the Proposal should already be in your Annotated Bibliography. You might have to do more background research at this point, unless there really is nothing else known about the people group and language. The information in your Initial Plan should also be very useful in writing the Proposal. Also, your Initial Plan should have specified the use of certain Instruments which you should have developed in Chapter 4. Details about the Instruments and their protocols should also go in the Proposal. If you have done the earlier steps of language survey well, then writing the Proposal is just a matter of putting it all together in one document. It is still a lot of work, of course!

NOTE: You can start on the Survey Proposal at this point, but some of the details might have to wait until you have finished the other pre-fieldwork steps (see Chapters 6 "Pre-Fieldwork Logistics" and 7 "Pilot Test Instruments"). You can be working on the Proposal and the other pre-fieldwork steps concurrently.

You should always have someone review your Proposal to make sure you are not forgetting anything or making any mistakes in your plans. **Be humble! It is better to find out you are wrong now, while you have time to make changes, than to end up with bad data.** This means that you have to leave enough time for someone to review the Proposal AND for you to make changes. The sooner you ask for help from someone else, the better your Proposal will be. Do not necessarily wait until you have written it all up... ask for input along the way so you can be more confident that you are doing things correctly.

5.3 Examples

See "Survey Proposal Example" on the Course CD.

5.4 Readings

Survey Proposal (template)

- CD
- Read through this to get an idea of what should be included in a Proposal.

Checklist for Reviewing a Survey Proposal

- CD
- When writing a Survey Proposal, make sure that a reviewer would be able to answer "Yes" to all the questions in this checklist.

Survey Proposal Example

- CD
- Just skim this to get an idea of what a Proposal looks like.

- This is a very detailed proposal. A lot of background information was available. **I do not expect your Proposal term paper to be as thorough as the Lawa proposal.** You simply will not have enough time. Just base your proposal on what you can find in your research in the amount of time you have for this class.

5.5 Assignments

Each student should write up a Survey Proposal based on the background research they have been doing. This is the final part of the Survey Proposal Term Paper. This includes making a first draft, meeting with the instructor to review the draft, and then revising the Proposal and submitting a final version.

5.6 For Further Study

Blair, Frank. 1990. Survey on a shoestring: A manual for small-scale language surveys. Dallas: The Summer Institute of Linguistics and The University of Texas at Arlington.

- LL, CD
- Section 2.2 is about resources, and Section 2.3 touches on aspects of the work plan.
- **LinguaLinks:** Sociolinguistics / Language Assessment / Survey on a Shoestring

Grimes, Joseph E. 1995. Language survey reference guide. Dallas: Summer Institute of Linguistics.

- LL, CD
- Appendix 3
- Even though this is about Survey Reports, not Survey Proposals, all the sections of a Report before the "Findings" section are also in the Proposal!
- **LinguaLinks:** Sociolinguistics / Language Assessment / Language survey reference guide

Loving, Richard. 1977. Guidelines for writing up language surveys.

- LL, CD
- Even though this is about Survey Reports, not Survey Proposals, all the sections of a Report before the "Results" section are also in the Proposal!
- **LinguaLinks:** Sociolinguistics / Language Assessment / Survey reference manual
    - Open the external PDF document.
    - Using the Bookmarks on the left, click on "Statistical Analysis and Write-Up". This article is in there.

6 Pre-Fieldwork Logistics

6.1 Introduction

At this point in the Steps of Language Survey, you have done a lot of research, planning, and preparation for the fieldwork. But before you can actually leave on the trip, there are lots of additional things you have to do or pack to take with you. I call these things "pre-fieldwork logistics." This includes thinking about what medical supplies to bring, what recording equipment you need, arranging for travel, accommodation, food, and much more. Many of these things can be done at the same time that you are writing your Survey Proposal. I would recommend that you allow yourself a few weeks prior to the fieldwork trip to do all the pre-fieldwork logistics. Some tasks will be easy, but others might take longer than you think. Also, this gives you time to think of things which, if you were rushing around at the last minute, you might otherwise forget.

Objectives

After learning the material in this chapter, you should:

- To have a resource you can use later to remember what practical logistical steps are needed before doing survey fieldwork.

6.2 Pre-Fieldwork Items

One important task that you might have to do is to get permission from officials or leaders in order to go where you need to go to do your research. This might involve obtaining a letter of introduction from your sponsoring agency. Sometimes, this kind of letter can take a long time to get if it has to be written by a certain person and then translated by another person and then signed by yet another person... so plan ahead!

Another important task is to make arrangements for travel and accommodation. You also might need to hire some people to go with you as translators or guides. Additionally, you should test all the equipment you plan on using, along with any equipment you are taking as a backup. If you are not already familiar with using the equipment, make sure you practice.

These and other items are listed in "Pre-Fieldwork List" (on the Course CD). This list is not necessarily complete. I suggest copying the list to your own hard drive and customizing it to your own needs. As you move ahead and think of new things you have to do, add them to the list for the next time.

I asked some Payap University graduate students who have gone on survey field trips in Asia to answer some questions about their pre-field preparations. Here are their answers:

1. What items do you bring along with you?
   - "I had a standard packing list for survey... Besides equipment, clothes and snacks, I also brought a book, a game (travel Scrabble, or a deck of cards), a way to listen to music (Walkman) on those long, long bus rides, an immersion heater, a travel mug and instant coffee." (W. Chamberlain)
   - "Clothes, flashlight, batteries, toiletries, bathing soap & washing soap, rehydration powder, water bottle, lunch box. Since I walked, I did not want to be carrying too much. You also have to take notebooks & recording equipment so there is already

a lot you have to bring. If you have to walk the whole day every day for several weeks, it can become a burden." (KS Mang)

- "Notebook, digital camera, plus the materials that I have to have for my research. A hat, some clothes, a backpack (one that is easy to carry), a small bag (in which you can put the things that you have to carry along with you all the time), a rain coat (for rainy season), flashlight, walking shoes, socks, long sleeved shirt or jacket (to protect from the heat), soap, shampoo, towel, toothbrush, toothpaste, dry noodle pack, a water bottle (in some village no cups are available.)" (S. Kya Heh)

2. Which items have you found to be the most useful, the ones you would not leave home without?
   - "Hefty trash bags: I have sat on them in the mud, used them as luggage when mine broke, lined my backpack with them when it was raining, many, many uses. Large Ziplocs: Keeps ants out of your snacks, good for keeping your minidisc and cords dry, storing RTT tapes....I love Ziplocs. An alarm clock. A lot of extra batteries. Little gifts for helpers." (W. Chamberlain)
   - "Water bottle. I did not bring insect repellent but I wish I had brought it. I almost died from malaria. I had a mosquito net, but none of the local people used one so I felt strange about using one. It might make them feel like I thought I was special." (KS Mang)
   - "Notebook, digital camera (take lots of picture and show to them, they love it, easy to build relationships), hat, walking shoes, long sleeved shirt, flashlight, a small bag, soap, toothbrush, toothpaste, dry noodle pack, a water bottle." (S. Kya Heh)

3. Do you bring along any medical supplies? If yes, what supplies do you bring?
   - "Yes. A kit called the STERI-AID. It had clean needles, IV, suture kit, everything to prevent AIDS in a medical emergency, and it was really small. 'Where There is No Doctor'[1] went everywhere we went. A course of antibiotics, Dramamine (for the bus rides), Tylenol, Flagyl, malaria prophylaxis, antihistamine, decongestants, band-aids, antibiotic ointment, and oral rehydration powder." (W. Chamberlain)
   - "Rehydration powder, Paracetamol (Tylenol)" (KS Mang)
   - "Yes. Pain killer, upset stomach reliever, first aid antibiotic ointment, plaster (band-aids), fever reducer." (S. Kya Heh)

4. What do you do about food and water?
   - "We brought salty nuts (for rehydration and protein), a few treats for bad days, power bars, and we used personal Katadyne filters for our water." (W. Chamberlain)
   - "Bring a water bottle, eat in a village and pack extra food in a lunch box or in banana leaves for travel to the next village. Even if the local people tell you the next place is 'close' so you do not need to take water or food, go ahead and take some anyway. You might not be used to traveling as far as they do without food and water. I filled water from a stream and prayed before I drank. If you have it, bring water purification solution or tablets." (KS Mang)
   - "We eat together with the family that we stay with. They cook for us with what they have. Sometime they cook the dry noodles that we brought. At the end we

[1] Werner, David with Carol Thurman and Jane Maxwell. 1994. Where there is no doctor: a village health care handbook. Revised edition. Palo Alto, CA: Hesperian Foundation. (Also can be found on Lingua Links Library under General Reference Works)

give some of the food as a gift to the family. We usually drink boiled water. Lahu people drink tea a lot and it is better. I usually ask for boiled water and put it into the bottle that I brought with me." (S. Kya Heh)

5. Do you bring money to pay helpers (or do you give gifts, or do you not pay at all)?
   - "If the helper worked a whole day, we paid a day's wage. Often, people would not accept pay. It was more appropriate to give a monetary gift in a thank you card, at the end of their time with us. I bring a lot of thank-you cards on survey. If they worked less than a day, we gave a gift, or a lot of food." (W. Chamberlain)
   - "It depends on who you are going with. My guide was a local pastor so he took care of everything and I did not have to pay him because local people supported him. In some places, helpers asked for a lot of money but it depends on what other jobs are available locally. You might not be able to negotiate." (KS Mang)
   - "I pay money for the guide depending on the local labor price per day, but in the village I give money as a gift to the village (which they can use for the whole village)." (S. Kya Heh)

6. Do you have to get permission from anyone before going?
   - "Only from SIL, sometimes from the local NBTO." (W. Chamberlain)
   - "I had to tell the village head what I was doing." (KS Mang)
   - "I discussed it with the SIL Regional Director (SIL)."

7. How do you travel?
   - "Every single way you can think of: Hitchhiking, riding borrowed bicycles, tractors, military convoys, planes, trains, and automobiles." (W. Chamberlain)
   - "Walking." (KS Mang)

   8a. Are there any warnings you would give about certain modes of travel?
   - "Night buses can be dangerous. Do not appear overly protective of your luggage." (W. Chamberlain)

8. Where do you sleep?
   - "Everywhere." (W. Chamberlain)
   - "In a house, normally the village head's house or somebody who has a bigger house. Normally the villagers can tell you where you can stay." (KS Mang)
   - "Usually with the village head's family." (S. Kya Heh)

   If you stay in someone's house...
   9a. Do you bring your own food?
   - "I bring the 'expensive' things, i.e. things they cannot grow, such as tea, sugar, a tin of cookies, cashews or almonds." (W. Chamberlain)
   - "They give food." (KS Mang)
   - "They cook for us." (S. Kya Heh)

   9b. Do you leave a gift?
   - "Often I do. Small pocket knives for men, lipstick or perfume for women. I only pay if it is what a local would do." (W. Chamberlain)
   - "Normally some money. This is not really payment, it is seen as a gift. It is hard to carry gifts (since walking)." (KS Mang)
   - "Yes, some money." (S. Kya Heh)

9. Do you wash your clothes during the trip? How?
    - "Yes. I always have a flat, rubber sink plug. I travel with a bit of rope for a clothes line. I wash clothes in shampoo, in the sink. Hang dry wherever I can find sun, or in front of a fan. Often, I take clothes in the shower with me, and wash them after I wash myself (if there is a shower)." (W. Chamberlain)
    - "Yes. I bring washing soap. Sometimes in a river, sometimes in the village if they have water there. Sometimes I would bathe in the river before entering a village and I would wash my clothes at the same time." (KS Mang)
    - "No, except for small items." (S. Kya Heh)

These tips are meant to get you thinking. Some of the ideas mentioned by these students might not be appropriate for the places you go on language surveys. Think about what is locally acceptable for your situation.

6.3 Readings

0 – Survey Steps (template)

- CD (not in the chapter folder, but in the root directory)
- See Section 6 (Pre-Fieldwork Logistics)
- An incomplete list of things you should do before the fieldwork or bring with you on the fieldwork.
- There are a number of linked files. These files are in the Survey Steps Files folder which is in the same location on the CD.

7 Pilot Test Instruments

7.1 Introduction

Any survey instrument that you are going to use should be pilot tested. A "pilot test" is when you administer the instrument before using it to collect the data you will use in your research. The pilot test should attempt to simulate the real field setting and administration protocol as much as possible. This gives you the chance to practice, train others, and uncover any problems with the instrument while you still have time to fix them.

It is tempting to save time by skipping this step of the survey process. But, in fact, you could save a lot of time and frustration through pilot testing. Pilot testing an instrument gives you the opportunity to uncover problems in the protocol and in the probes. For example, perhaps the wording of a question on an SLQ is confusing. If you are using a word list, it might turn out that certain items are difficult to elicit for the language family you are interested in. Confusing or difficult probes can lead to frustration in the field.

You should always pilot test an instrument in a context as similar as possible to the context in which you will use the instrument in the field. For example, if you are going to elicit a word list, then pilot test the list by eliciting the word list from a speaker of a very similar speech variety. If you are going to administer an SLQ in a rural area, then administer the pilot test of the SLQ with someone from a rural, culturally similar area; preferably from a similar language group, as well. It is also very important to pilot test the instrument using the language of elicitation that you will use in the field. This gives you the chance to test the translations of the probes.

The only exception to the need for pilot testing is when the instrument has been used before *in the exact same form you are going to use it* and has already been established to be a good instrument *in a context similar to yours*. For example, suppose you are going to use an SLQ that someone else has used already. If they used that SLQ in a cultural situation similar to that of the language group you are studying, *and* none of the questions were found to be inadequate, then you can use that SLQ without pilot testing it. But, if the previous researcher used the SLQ in a different cultural context, then there might be previously adequate questions that might now be inadequate. If someone else has used the SLQ but you have altered the wording of some of the questions, or translated them into another language, or added or deleted some questions, or reordered the questions, then you need to pilot test the SLQ. Also, if the previous researcher did not *evaluate* the SLQ, then you have no way of knowing which questions are poor questions.

> "As Fowler (1984:101)[1] notes, 'the mere fact that someone else has used a question before is no guarantee that it is a very good question or, certainly, that it is an appropriate question for a given survey. Many bad questions are asked over and over again, because researchers uncritically use them over and over again.' " (quoted from Showalter 1991[2]).

[1] Fowler, Floyd J., Jr. 1984. Survey research methods. Beverly Hills, CA: Sage Publications.

[2] Showalter, Catherine J. 1991. "Getting what you ask for: A study of sociolinguistic survey questionnaires." Notes on Sociolinguistics 28:19–34. Notes on Scripture in Use and Language Programs.

Even if you really feel there is no need to pilot test an instrument because it has not changed and has already been established as being valid, it is still a good idea to pilot test it for the purpose of **practice**. That is, if you have never used this particular instrument, then you should practice using it before going on a field trip. Even if you have administered SLQs many times, if you have not administered *this* SLQ then practice using it. You just do not know ahead of time what problems you might have and it is better to encounter those problems before conducting your field research.

An added benefit of pilot testing is realized if you need to **train** some of the researchers or other helpers that are going along with you. Even if you yourself know perfectly well how to use the instrument, they will benefit greatly from some practice. This is especially true if the instruments will be administered by multiple teams of researchers. It is vital that all the teams use the same protocol. Pilot testing gives the teams the chance to discuss the full protocol and make sure they are all administering the instrument in the same way. For example, on a questionnaire, there might be a set of questions that are only asked under certain circumstances, or are asked differently under certain circumstances. Each team must use the same criteria for deciding if and how to ask that set of questions.

How much pilot testing should you do? For word lists, SIL's Procedures course suggests eliciting a word list from three varieties related to the varieties you will study. When eliciting a specific item, it should result in a response that is different from all the other items on the list, and should result in words in the three varieties that have the same meaning. If a particular gloss results in words with different meanings, then it is not a reliable prompt. Also, if the gloss results in the same word as another gloss, then one of these should be eliminated. See Section 3.1.1 of "The Steps of Word Lists" (in the Section 4.4 folder of the Course CD) for a list of criteria for excluding words. Regarding word lists, SIL's Procedures course states,

> "Pilot testing a word list helps ensure its reliability by standardizing the elicitation probes. Pilot testing can eliminate items that will be difficult for language assistants to translate, or at least make you aware of them and give you the chance to refine your probes ahead of time. If you take the time to pilot test when it is appropriate, you will have a better chance of coming back from your survey with a full set of usable words from every variety where you collected a list." (SIL 2004, Procedures of Language Survey)

See Section 3.2 of Blair (1990) (in Lingua Links Library) for an example of how a word list was pilot tested.

For a questionnaire, I suggest pilot testing it with at least one subject from each category of people that you think could differ with respect to what you are measuring (e.g. young and old, male and female). Two from each group would be better. It might *seem* clear after pilot testing with one subject that your instrument is fine. But pilot testing with at least one more subject gives you a greater opportunity to uncover problems with your instrument. Given how much time and effort you are investing in the survey, spending a little more time in pilot testing can pay great dividends!

If, after pilot testing, you make changes to your instruments, do you have to pilot test them again? It depends on how drastic the changes were. For an SLQ you could, for example, just pilot test the questions that you changed. It is probably worth your time to pilot test the

revised instrument at least once, just to be sure. If you were to repeat the whole pilot testing procedure after every change, you would go on pilot testing forever! While the more pilot testing you do the better, the rate of return probably decreases with each round of pilot testing. That is, you will uncover the most problems in your first round of pilot testing. Each successive round of pilot testing will help you less and less.

I have been asked a number of times if it is appropriate to include the pilot test results with the field data in the final analysis. My answer is that it depends. If, after the pilot test, you change the instrument in any way, then the answer is "no." If the pilot test subjects are not part of the same target population as your field subjects, then the answer is "no." If the method by which you selected the pilot test subjects could lead to any bias, then the answer is "no." Suppose, for example, that the pilot test subjects were people living in your city who are from the language group of interest, and they are people who happen to be easy to find and interview. But, in the field, you use a random sampling method. Then the pilot test subjects are a convenience sample and should not be included with the randomly selected sample. Also, the fact that the pilot test subjects live in the city might make them different from those in the village. **In general, it is better to not include pilot test results in your final analysis.** That does not mean that interesting information from your pilot test cannot be mentioned in your survey report. Just be sure to mention that the information came from the pilot test.

In summary, pilot testing your instruments is an important step in the survey process which will increase the quality of your data and decrease your frustration during the survey. Additionally, pilot testing provides an excellent opportunity for practice and training.

7.2 Assignment

See the 109-item word list handout (also in the Chapter 7 folder on the Course CD).

Pilot test this word list at least one time.

- ☐ Try to elicit words from two related but different speech varieties. If you only have time to elicit the list from one variety, that is all right.

- ☐ Try to elicit the word list from a group of two or three speakers of each variety. If you are only able to have one speaker, that is still acceptable for this assignment.

- ☐ English and Central Thai elicitation probes are included in the word list already. Pick one language of elicitation for this whole assignment. If you would like to translate the elicitation probes into another language, you may. This then would serve as a pilot test of your translated elicitation probes.

(more on the next page)

For each language resource person, note the following information:

- ☐ Gender
- ☐ Age
- ☐ Education
- ☐ First language
- ☐ Best language
- ☐ Birth place
- ☐ Place they grew up
- ☐ Where they live now
- ☐ Other places they have lived (and how long for the 1-3 places they lived longest)
- ☐ The language that their mother used with them the most when they were a child
- ☐ The language that their father used with them the most when they were a child
- ☐ (If married) The language of their spouse
- ☐ (If married) What language the informant and his/her spouse use together.

(In all of the above, "language" should be very specific. That is, note the variety of the language. If each village has its own accent, make sure to note which village the variety is from.)

Turn in the following:

- ☐ The word list transcriptions
- ☐ Identify the language that this list represents (including dialect and village)
- ☐ Identify the language you used for elicitation
- ☐ If you needed a translator, identify all the languages you used to elicit
- ☐ The language resource person information
- ☐ An evaluation of the word list. Which words would you consider bad and why?

8 Fieldwork

8.1 Introduction

Finally! You have done lots of research, planning, and preparation... now you get to put all that hard work together and go to a language community and collect data. For some people, the word "survey" means exactly the same thing as the word "fieldwork". That is, when someone says "I'm going on a survey in January," what they often mean is that they are going to do the fieldwork phase of a survey in January. A survey, really, is *all* the steps from background research to report writing to archiving. I think it is helpful to use the term "survey" when talking about the *whole* process and to use the more specific term "fieldwork" for the actual field trip. This helps those less familiar with language survey keep in mind how long the whole process takes. You might have to educate your colleagues or your supervisors about what actually is involved in a survey so that they do not ask you to do something on short notice or expect results within a few weeks.

The best way to learn how to do fieldwork is to do fieldwork, preferably teamed up with a more experienced researcher who can mentor you. But even if you have to go without a mentor, you will still learn a lot. Make sure to take time to reflect on what works and what does not work so you and others can learn from your experiences.

In this section, I am not going to give you an exhaustive treatise on fieldwork, just a few tips to get you going in the right direction. Ideally, this course would include a field trip where you could administer some survey instruments in a minority language community.

8.2 Building Relationships

In some language communities, you might be able to just show up one day without knowing anyone and ask a lot of questions and get the data you need. But in other communities, you have to first build relationships so that people will trust you. If they do not trust you, they might not cooperate with your research, or worse they might *seem* to cooperate but in fact be giving you incomplete or false information.

Recently, a Payap University MA student conducted language survey fieldwork in which she spent 15 days visiting 4 villages. After returning from the field trip, she mentioned the following items as important for her research.

First, dress like the people you are interviewing. If you do that, they will feel more comfortable with you. Her research took place in a part of the world where this worked well. In other places, there might be other ways to dress that are more appropriate. The point is that your appearance is important. If the way you look makes people uncomfortable around you then you will have less of a chance of getting good data.

Second, before collecting any data in a formal manner, spend a day or two living in the village just building relationships. This relationship building time will lead to better data collection. You will be able to make observations that will add to your data. You might be able to identify potentially helpful people. You will build trust. You will have the opportunity to learn some of their language, showing you are interested in them and enabling you to set people more at ease by greeting them or taking leave in their language. It is possible that you might be the first outsider to ever make the effort to learn their language! I was in a village

where one of my colleagues and I were writing down language data using the IPA. When we then said phrases in their language that sounded something like the right way to say them, they were very happy and said that we were the first people to ever be able to write their language. Another variety of their language had been written and they always felt that the reason theirs was not chosen to be written was because it was impossible. All this is to say that spending time interacting with the community before formal data collection can be very helpful. It is a wise investment of your time. Of course, due to time limitations, you might not be able to do this in every, or even in any, locations for a particular survey field trip. If your schedule does not allow you to spend time before data collection in relationship building, you can at least keep it in mind and build relationships during your time in the village as you interact with people. If you are spending the night in the village, there will be many opportunities.

8.3 Instrument Administration Protocol

How you administer a survey instrument depends on the instrument, of course. In Chapter 4, I discussed protocols in the context of instrument development. When you develop an instrument, one of the things you have to plan for is how you will administer it in the field. In particular, for word lists see Section 4.4, for sociolinguistic questionnaires, see Section 4.6 (especially Sections 4.6.2.4 and 4.6.5.4), and for RTT administration see Section 4.7.

8.4 Fieldwork Tips

Introduce yourself and your work.

When you first arrive people will naturally wonder who you are and why you are there. So the first thing you should do is contact those in authority and introduce yourself and your work. If appropriate, ask them for help in locating a suitable helper. This is not always a good idea, however, as they might have their own idea (different from yours) of what is "suitable." You also need to consider whether or not your sampling plan will be feasible and permissible. Are you planning on using random sampling? Then you need to ask those in authority for a list of names or households. Are you planning on using systematic sampling of houses? Then you need to survey the village in order to number and order the houses.

Stick to the plan.

When I heard about how the Payap student previously mentioned conducted her thesis research, I was impressed by how hard she tried to follow her well though-out plan. In general, you should stick to the plan you spent so much time developing. Do not change it just to save time or to make things easier. If you change your sampling or administration protocols during the survey, you might compromise the quality of your research. Do not give up trying to find a place or person just because they are hard to find or not available. When you locate a place or person, make sure it is the place or person you think it is before proceeding. Basically, do not change your plans and do not cut corners. All the details matter.

In some situations, there might actually be good reasons for changing your plans or methods, but getting home sooner is usually not one of them. I am not really a people person and when I am on a field trip, I am constantly tempted to say that I already have enough data. It feels too hard to keep finding and interviewing people and I think that I can get by with less data because I would really rather go home and get back to working in my comfortable quiet office. Fortunately, I have always had teammates who were more persevering and committed! One time, however, we were all worn out and we decided to cut a corner. We skipped the step of back-translating the questions for a RTT practice test. We found out later that our first question was at least confusing and at worst offensive! Had we spent an extra few hours

doing the test development the right way, we could have saved many more hours that were wasted having to drop subjects and find new ones, as well as saving ourselves lots of frustration.

Good reasons to change your instruments or plans might include a bad question translation, screening criteria that are too strict or too loose, or wrong assumptions about which villages are the same and different.

End of the day routine
At the end of each day, write a summary of what happened that day[1]. Also, look through the data you have collected. Is everything you wrote clear? Fill in any missing information and rewrite anything that is too messy, hard to understand, or ambiguous. Later, you might not remember what you meant when you wrote it! You might not actually enter the data for another few weeks, or someone else might be entering it for you. If anything is not totally clear, make it so right away, while you remember the details.

After reviewing the day, get organized for the next day. Where will you go? How will you get there? Is there anyone you need to contact? Are there any appointments you need to keep? Are there any arrangements you need to make? Take time to pray and ask God to guide and help you. He likes being asked!

Data notebooks
The following is a list of tips (adapted from Noel Mann) about standards for a data notebook.

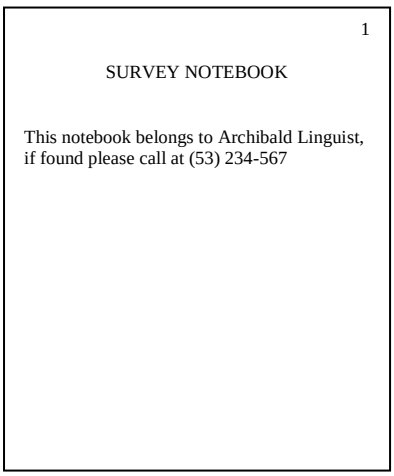
- Number all the pages of your data notebook. It is best if you do this ahead of time, before you leave for the field trip.

- Leave the first 4-6 pages in your data notebook blank.
  - Write the names of the researchers, the date, and the name of the survey. Also include your phone number and email address (in case the notebook gets lost). You could add "Please return to..." so whoever finds it knows you want it back. Make sure to write in a language that a local person would know how to read!
  - Make a Table of Contents.
  - The other pages are there because you do not know ahead of time what other relevant information you might want to record at the beginning of your notebook.

- Fill in your Table of Contents as you collect your data. This will help you to quickly locate anything you might want to refer to.

[1] After you return home from the field trip, you can compile these daily notes into a "Trip Summary" that you can give to your supervisors so they will know what you did.

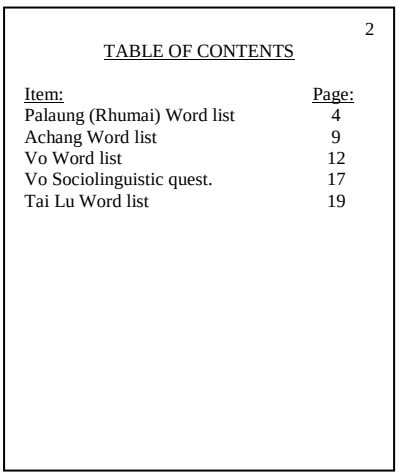
Here is an example of what the first two pages of your notebook might look like:



1

SURVEY NOTEBOOK

This notebook belongs to Archibald Linguist,
if found please call at (53) 234-567



2

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- If you are going to record the answers to questionnaires or transcribe the words from a word list in your notebook, it is helpful to set-up your data notebook before your data collection sessions with numbers for questionnaire questions (and possibly the questions themselves), numbers (and glosses) for wordlists, etc. Your wordlist, questionnaire, etc. should be either written in your data notebook or attached for future reference. Setting up your notebook beforehand will free you from being distracted by this during the data collection session.
    - You might find it more helpful to have separate answer sheets that are bound together into an answer book. In that way, you can just print one copy and photocopy it. That is much easier than writing out the questions and/or question numbers in the data notebook.
    - Similarly for a word list, it might be easier to type the list in the computer in a spreadsheet. Print a copy that includes grid-lines and enough blank columns that you can enter the transcriptions for a number of varieties.

- Always write in ink in your data notebook. If you use pencil, it may smear or fade and you may lose your data. Also, with pencil, it is too easy to erase your "mistakes" and you might erase something you wish you could have back.

- Use pens that do not bleed through the paper.

- If you have to change anything you have already written down, do not scratch out the old information so it is unreadable. Just cross it out with a single thin line so you can still read it. You might wonder later what you wrote down the first time, or it might be that you crossed it out incorrectly.

- Use notebooks that are durable. A waterproof plastic cover is helpful. The notebook should be bound so pages do not get lost. I generally do not tear out any pages unless I need a piece of blank scratch paper. When I do tear out a page, I try to add a note in the notebook on the facing page as to what was on that page (even if it was blank) and why I tore it out. In this way, I can have confidence later that I have not misplaced any data.

- Anytime you start a new entry in your notebook, note the date and location, as well as your name and any other context that is relevant. Do not rely on your memory!
    - When you collect data from a person, always write a basic sketch of that person or persons, including their language.

- If you want to write on both sides of a page, see if you can still read the writing easily on both sides. If you cannot, then only write on one side of each page. Another advantage to writing only on one side is that you will have space to take other notes now or later. If you add any notes later to a page, it is helpful to use a different pen color. Whether you use a different color or not, always note the date of a later entry.

Tips for interviewing women

In some parts of the world, male surveyors find it difficult to interview women. The women might be too shy to participate or it might be inappropriate for a man to talk to a woman he does not know, especially alone. The following tips are from Loren Maggard (former SIL SAG Survey Coordinator):

- First interview a bold, older woman who will then nag other women into participating.

- Ask local colleagues to administer the questionnaires with women if the women are very shy of foreigners.

- Let women answer from within a house, out of sight, to avoid contact and crowds gathering and intimidating the subject.

- Women will rarely stop working to answer questionnaires, so, where appropriate, join with them in doing their chores in order to encourage them.

- Ask a man if his wife can answer a questionnaire. This is sometimes not helpful, however, since the wife may give the answers she thinks her husband would want her to give.

- Ask a young boy for his mother. Boys are often also good as "guides" and can tell you which caste, class, or race of people live in which houses or areas in a village.

- Ask officials to influence people to participate, or at least to find out the location of institutions such as schools, knitting co-ops, etc.

Getting Extra Data

Your survey plans will call for the collection of a certain set of data, such as a word list, a questionnaire, etc. However, sometimes you can get extra data that might help you later on. For example, when collecting a word list in a village, if you have time, go ahead and try to elicit, record, transcribe, and translate an RTT story. If you decide later that you need to use intelligibility testing, these texts will save you time. Even if you never use the texts for RTT, they will be valuable for other linguistic researchers.

8.5 Readings

Chapter 4 in “The Steps of Wordlists”

- CD
- On the CD, this is in “Chapter 4 Developing Instruments” folder
- This deals specifically with collecting a word list, but many of the fieldwork principles are more widely applicable.

Tips for Surveyors (Noel Mann)

- CD

9 Data Entry

9.1 Introduction

Between collecting survey data and analyzing survey data is a critical step: data entry. Sometimes, there is so little data that you can just summarize the data directly from the answer sheets into the survey report. With any survey of reasonable size, however, the fieldwork will result in enough data that it would be wiser to enter the data into a computer prior to summarizing it. First, this provides a way to back up the raw data easily in case the originals are lost. Second, any analysis will be more easily reproduced from data entered in a computer. Third, some forms of data summary and analysis are simply too cumbersome to do by hand. Having the data in a computer allows for greater analysis power.

I recommend that, as soon as possible after returning from a field trip, you enter the data into a computer spreadsheet program such as Microsoft Excel. This provides a convenient way to store, sort, check, and summarize the data. Additionally, any popular statistical software can easily import data from Excel. The reason to enter the data as soon as possible is that you will often find data in your notebooks that is unclear in meaning or illegible. The sooner you enter the data, the more likely it is that you will remember the details.

Data entry and double-checking can be done more quickly by two people – one reading and the other typing. The principles presented in this chapter will help your data entry be more standard, thus more useful, especially if you later wish to perform any kind of data summary or statistical analysis using software such as Excel, Minitab (www.minitab.com), or a multitude of other data analysis packages.

The principles given here are most applicable to SLQ data, but also apply to data from any other kind of instrument, as well. See Sections 9.4 and 9.5 for principles specific to word lists and observations, respectively.

Objectives
After learning the material in this chapter, you should:

- Understand the principles of data entry and data cleaning.
- Have a sample SLQ data entry spreadsheet.

9.2 Principles of Data Entry

9.2.1 Faithfulness

When you enter the data into the computer, enter **exactly** what the subjects said. Resist the temptation to summarize or categorize. You might end up ignoring seemingly meaningless distinctions that are actually meaningful. It may turn out later that the distinction is irrelevant and you can consider these responses to be the same, but it may turn out that the distinction matters. The computer version of the data should be a faithful representation of the answer sheets and data notebooks.

If you do wish to summarize a variable by considering various different responses to be the same, *create a new variable*. In that way, you retain the original in case you have summarized incorrectly.

9.2.2 Rows and Columns

Most statistical packages expect that your data is set up such that each row represents data from one subject and each column represents data from one variable. Table 3 illustrates this for three subjects and three variables (gender, age, and mother tongue) as entered in a Microsoft Excel spreadsheet.

Table 3 - Example Data Entry

	A	B	C	D
1	Subject	Gender	Age	Mother Tongue
2	1	F	23	Lahu Na
3	2	F	46	Lahu Na
4	3	M	51	Lahu Na

It is important to have a unique number assigned to each subject. When you first wrote the subject's responses on an answer sheet, you should have written a number identifying that answer sheet. It can happen, especially if there is more than one team collecting data, that a number will be duplicated. Re-assign unique numbers to all the answer sheets (using a different color) and use these new numbers in the spreadsheet. In this way you will have an unambiguous link between the computer data file and the paper answer sheets.

9.2.3 Consistency and Clarity

When entering data that is going to be summarized and tabulated, it is important to be consistent in the data entry. For example, when recording the gender of women, you might have typed the whole word "Female" or "FEM" or "F" or "f". Any of these are acceptable as long as you are consistent. Whichever form you pick, use just that form for all the entries. The same goes for any other variable that has a limited number of possible values. Table 4 illustrates the difference between consistent and inconsistent data entry.

Table 4 - Example of Data Consistency

Inconsistent		
	A	B
1	Subject	Gender
2	1	FEM
3	2	F
4	3	f

Consistent		
	A	B
1	Subject	Gender
2	1	F
3	2	F
4	3	F

If the values you type in the cells are abbreviations, it is good to make a table describing the codes for clarity. For example, if you visit three villages called Ban Ek, Ban Tho and Ban Tri, you might enter them in your spreadsheet at B1, B2, and B3. If you do, then document somewhere what these abbreviations stand for. This may seem unnecessary at the moment. However, if for some reason you have to stop the analysis and go do something else for a week or a month or a year, then when you (or someone else) get back to it you will be

thankful to have documented everything. What seems like an "obvious" coding at the moment might become highly obscure in the future.

9.2.4 Coding Missing Values

Do not ever have blanks in your data spreadsheet. Blanks are very ambiguous! Did the subject not respond? Did you not ask the question? Did you forget to enter that response? It is important to have a consistent way of coding missing values. A value could be missing for a number of reasons. It could be that a question was skipped for one subject. It could be that the subject did not give a response for that question. There could be various reasons why a question was skipped or why a subject did not respond. You need enough codes to distinguish between all the relevant possibilities. The code "NA" is traditionally used for "not applicable". That is, the question was not asked because it did not apply to that subject. For example, you would not ask someone with no children what language they use with their children. Since "NA" is already in use, you need to think of another code for "not asked." This occurs when you skip a question for some other reason (i.e. it was applicable but you skipped it anyway). I suggest you just write "Skipped" and also note the reason you skipped it. The code "NR" can be used for "no response", that is, when the question is asked but the subject gives no answer. If the subject actually said "I do not know" then record that rather than "NR".

It is possible that a particular software has a certain character that must be used for missing values, such as a period (".") or "NA". I still recommend that you use the suggestions above for your raw data entry. Then, you can copy the file and replace all the missing values with the appropriate character before exporting the data to the software in question.

In summary, I suggest that you use the following missing value codes when entering the raw data into the computer:

- NA = Not applicable
- Skipped = Question was skipped (also note the reason)
- NR = No response
- I do not know = I do not know
- Never use blanks!

Whatever missing value codes you use, document somewhere what they represent.

9.3 Data Cleaning

9.3.1 Back Up

Before proceeding any further, make a backup copy of your data file. Keep a backup on your computer and another on a CD or in some other location off of your computer. If you make a mistake in the data cleaning process, you can always go to the backup in order to correct your mistake.

9.3.2 Double Check

It is highly unlikely that you have entered the data without making any mistakes. Always **double check your data entry** into the computer from the original data source (e.g. the data notebook you wrote the data in).[1] This is easier with two people – one to read from the answer sheets and one to read from the computer file.

Double-checking is important for uncovering data entry errors, but also because, as you go through the data, you often change the way you are entering something or handling something. This second run through the data allows you to keep the earlier records consistent with the later ones.

After double checking, **make another back up** and replace the first back up. Since you might not be able to erase a file on a CD, make sure to give the files names such that you know which one is the more current file. Do not rely on the "date" of the file as that might change even with a small formatting change in the file. I find it helpful to have a folder called "Old" in which I put all non-current files. In that way, if there is a delay in the work and I come back to the data after a week or two doing something else, I (or someone else) will know which file to use.

9.3.3 Check Consistency

The next step is to **check for consistency**. For example, if you decided to use "F" and "M" as the codes for the variable "Gender", make sure that no other codes were accidentally used. Make a frequency table for this and every variable. A frequency table is an alphabetic listing of all the unique values for that variable with a number telling you how often each value occurs in your data, that is how many subjects responded in that way. Make sure that the software options are set to include all missing values as well. The total number of observations shown in the frequency table should match the total number of subjects. If there are any values that are inconsistent, you can see them, search for them, and change them. If they look like data entry errors, they can be checked against the original source data. Consistency in coding missing values can be checked as well. An example of a frequency table for checking consistency is shown in Table 5.

Table 5 – Sample Frequency Table for Checking Consistency

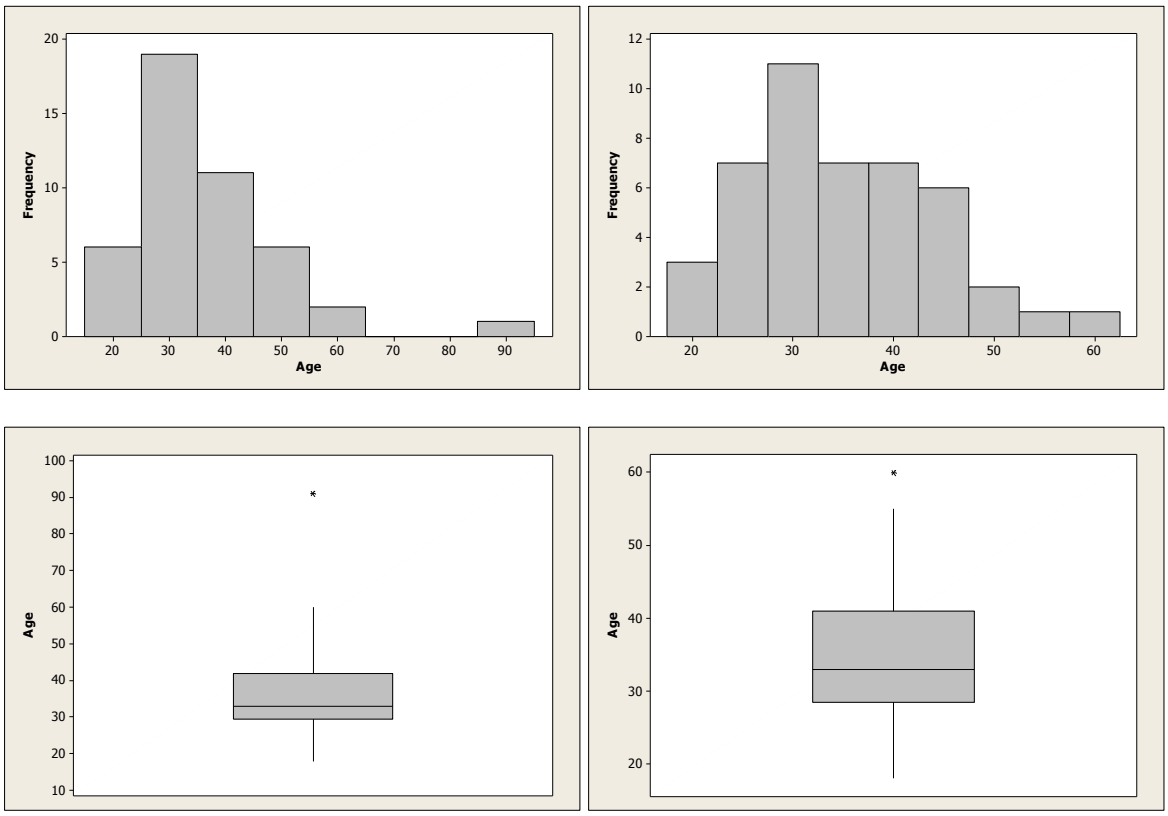
Gender	Number of Subjects
f	2
F	12
FEM	1
M	15
Total	30

See "Data Cleaning in Excel" for instructions on how to create frequency tables in Excel using "pivot tables".

[1] If the data were entered electronically in the field (e.g. using a PDA device) and then exported right to Excel, then double checking the data entry will not be possible… the electronic data is the original source.

For numeric data, a frequency table listing will show you if there are any unusual values. For example, if you have entered someone's age as "91" instead of "19", you will see it in the listing. Alternatively, for numeric data, you can make a plot of some sort such as a histogram or box-and-whisker plot that can graphically show you if there are any strange values.

The figures below illustrate the use of histograms and box-and-whisker plots in finding possible data entry errors for numeric variables. In each of these examples, the plot on the left includes an age value of 91 while the plot on the right has that value changed to a 19. Note that you would not change this value without consulting your original data, or without the distinct knowledge that you never interviewed anyone so old.



If you identify any strange values, you can search for that value in the data file and correct it. You will have to look at the original data (the answer sheet or data notebook) to find the true value.

If you entered the data electronically in the first place in the field, then you have not other data to refer to. There is no way of knowing if the value is a data entry error or the correct value. So you will have to decide how to handle this value. You could assume that it is not an error at all. Or, you could assume it is an error and assume another value to be the true value (if you have a reasonable guess as to what the real value should be). If you are really not sure, then you can just make it a missing value. Whatever you decide, make sure you document what you did. Record somewhere the subject number, the variable, the original value, and the new value. In this way, if you change your mind later you can do things differently.

In practice, you can check consistency at the same time as you summarize the data for the survey report. Your report should contain some kind of summary of every question on your

SLQ and of every other piece of data you collected. As you make these data summaries, keep an eye out for inconsistencies. You can correct them as you go and immediately create a table or chart for your report.

9.3.4 Maintain Faithfulness

This subsection is not about something you should do... it is about something you should *not* do. Coding of data should not change the underlying data in any way. For example, consider the following listing (using Minitab) of responses from 14 subjects regarding names for their language. This listing is faithful to the data file.

Language Name (own)	Count
Chumnom Pi	1
Mapi	2
Mapi or Chanom Mpi	1
Mpi	6
Phasaa Ban Dong	4
N=	14

Notice that two subjects responded "Mapi" and six responded "Mpi". It would be a violation of the "faithfulness" principle to combine them into one (either all eight as "Mapi" or all eight as "Mpi"). However, suppose that later you find that this distinction is not really relevant. The best way to handle this is to keep the distinction in your Excel spreadsheet and group them together in the survey report as shown below:

Language Name	Number of Subjects
Chumnon Pi	1.5
Mpi	8.5
Phasaa Ban Dong	4
Total	14

In this case, you would want to add a footnote in the report explaining the "1.5" and "8.5" entries. These come from the one subject who gave two answers. His answers were counted in two categories, but only as half a "vote" for each.

Data cleaning should NOT result in loss of information, just in fixing errors and increasing consistency in coding.

9.3.5 Other Checks

Some variables are related to other variables in specific ways. For example, you may decide to group people into age categories such as "young", "middle" and "old". Thus, your original (numeric) age variable and your new (categorical) age variable are predictably related. You can list or plot the actual ages for each age category to see if there are any errors in your coding.

Another example of data you could check is if both birth date and age were asked of subjects. In this case, the reported age could be checked against the calculated age (by subtracting the birth date from the interview date). Additionally, if a subject only reported one or the other of birth date and age, then the other could be filled in. We do not typically ask about birth dates during a survey... this is just meant as an example of how variables could be related.

Two-way cross-tabulations (for two categorical variables), scatter plots (for two numeric variables), and side-by-side boxplots (for a numeric-categorical pair of variables) can be used to check for coding or data entry errors and for unusual observations.
If there were certain variables you used to screen subjects, then you can check that all the subjects you are using in your analysis passed the screen. For example, if you only wanted mother tongue speakers of the language age 20 and above, you can check the appropriate variables for values that are out of bounds and exclude those subjects.

9.3.6 Backup Again

Finally, before starting on the data summary and analysis steps make another backup copy of the data. As before, save a copy on your computer and another off your computer. If you lose the data or make unintended changes, the backup will save you a lot of time and frustration.

9.4 Entering Word List Data

Word list data is typically a column of glosses and a column of IPA transcriptions for each variety for which you have elicited a word list. This kind of data can be entered into an Excel spreadsheet. You will need to have Keyman[1] installed on your computer as well as the Unicode font Doulos SIL[2].

I suggest you type the word list in Excel. Alternatively, you could use the program WordSurv[3]. The current setup of WordSurv 6.0 (released in October 2006) seems too restrictive for data entry. Excel is much more flexible. WordSurv can then import the data from Excel (assuming you used a Unicode font). The reason to import the data into WordSurv is that it provides some nice data summaries.

9.5 Entering Observations

Hopefully during your fieldwork you have taken notes in your data notebook and in the margins of your answer sheets of interesting observations and comments. It is easy for all of this valuable information to get lost. The following systematic method will help ensure that this does not happen.

First, create a Word file called “Observations”. As you enter data from your answer sheets into your other data files, notice any observations you have written. Type those into a list in the “Observations” file. Then make a red checkmark on the answer sheet to denote that this observation has been entered already. Then go through all your data notebooks and do the same. In this way, all your observations have been transported from your paper records into a computer file.

The next step is to make sure that they end up in the right place in the survey report. Start with the survey report template in Chapter 11. Modify this file to reflect the outline for your survey report. In particular, in the Results section, there should be a subsection for each research question. Go through the “Observations” file and paste each entry in the list into the sub-section(s) of the relevant research questions. Not all the observations will be usable. Using some kind of formatting, note which observations have been pasted into the report and which have not (you could have two lists, one for those that have been moved and one for those that have not).

[1] See the SIL website at http://www.sil.org/computing/catalog/show_software.asp?id=20
[2] See the SIL website at http://www.sil.org/computing/catalog/show_software.asp?id=91
[3] See http://wordsurv.css.taylor.edu/

Later, after the data analysis, when you are writing the Results section of the report, all the necessary observations will be right there for you to incorporate into your text. Observations can be very helpful in illustrating the data by providing interesting anecdotes or comments from subjects.

9.6 Example

See "SLQ Data Entry Example" on the Course CD. This illustrates the standard row and column format for entering data. The first row contains the corresponding question number from the SLQ. Columns without a number in the first row were added later

9.7 For Further Study

Wetherill, G. Barrie. 1995. Research design and analysis. Unpublished.

- LL, CD
- Part II, Chapter 6 "Data Entry"
- **LinguaLinks:** Sociolinguistics / Language Assessment

10 Data Analysis

10.1 Introduction

After entering the data into a computer, you need to analyze the data. This means referring back to your Survey Proposal where you discussed the criteria for answering the research questions. In that section you should have discussed how you will use the data to answer the research questions.

In this Chapter, I will cover the analysis of word lists using lexical similarity, SLQ data, and RTT results.

Objectives

After learning the material in this chapter, you should:

- Know how to compute a lexical similarity percentage using the method described by Blair (1990) and illustrated in "The Steps of Word Lists", as well as how to represent the percentages in a matrix.
- Know how to form lexical similarity dialect groupings.
- Know how to summarize SLQ data using Pivot Tables in Excel.
- Know how to summarize RTT results.

10.2 Word Lists

The analysis of word lists is discussed in Chapters 5 and 6 of "The Steps of Word Lists" (see Course CD\04 Develop Instruments\4.4 Word Lists) and will not be reproduced here.

10.3 Sociolinguistic Questionnaires

On one hand, SLQ data is much easier to summarize than word list data... you just have to say how many people answered in each way to each question. On the other hand, they are rather tricky to analyze and interpret... they do not lend themselves well to strict criteria. You could say, I suppose, something like "if more than 75% of the subjects answer that they use the mother tongue at home then I will conclude that language vitality is high." But even more than the cutoffs for lexical similarity and intelligibility, this kind of cutoff seems very arbitrary. I suppose you could have cutoffs below or above which further investigation will be done (similarly to inferring intelligibility from word lists).

I prefer to just say something like "the SLQ data will be used in a qualitative manner to inform language planning decisions." What I mean by that is that I will tally the answers and present these summaries in tables. This seems like numeric data but I will use it qualitatively in that I will just look at it and let my intuition guide me. This can be dangerous, but that is why it is important to have someone else review your work! Language surveys are rather imprecise... people are hard to measure. Also, we tend to use awfully small sample sizes. So using loose criteria seems fine to me as long as any conclusions based on the data are held loosely (unless the data is very clearly pointing in one direction). In other words, intuition serves as a reasonable analysis tool when more rigorous methods are arbitrary and when conclusions based on intuition are held loosely.

10.3.1 Summary Table Examples

Here are some examples of data summary tables from surveys of Mpi (Nahhas 2005) and Lawa (Nahhas 2007) in Thailand.

The following tables summarize the results from one question at a time:

Appropriateness of Lawa-Thai Intermarriage (Valley Lawa)

"Would it be appropriate for a young Lawa man to marry a Thai / Northern Thai woman?"	**Bo Luang, Bo Sangee, and Bo Phawaen**	**Kong Loi**
Yes	15	13
Depends on them	0	2
Other	2	2
No answer or Not asked	5	2
Total	**22**	**19**

People Group Names by Location

People Group Name	**Number of Subjects**			
	Ban Dong		**Ban Sakoen**	
	Own Name	**Others' Name**	**Own Name**	**Others' Name**
khon Mpi	7	4	---	---
khon Ban Dong	6	9	---	---
[tɕʰumˈ nomˈ piˋ]	1	---	---	---
khon Ikaw	1	4	---	---
khon Kaw	---	---	5	5
(No Response)	---	---	1	1
(Not Asked)	---	---	5	5

Languages Spoken by Domain

Domain	Language	Number of Subjects	Domain	Language	Number of Subjects	Domain	Language	Number of Subjects
at home	Mpi only	9	with class-mates	Mpi only	---	at the market	Mpi only	5
	Mpi & Thai	1		Mpi & Thai	2		Mpi & Thai	6
	Thai only	4		Thai only	2		Thai only	3
with parents	Mpi only	10	with teacher	Mpi only	---	at a funeral	Mpi only	5
	Mpi & Thai	1		Mpi & Thai	---		Mpi & Thai	6
	Thai only	2		Thai only	4		Thai only	3
with grand-parents	Mpi only	10	with spouse	Mpi only	4	at a village meeting	Mpi only	3
	Mpi & Thai	1		Mpi & Thai	1		Mpi & Thai	5
	Thai only	1		Thai only	4		Thai only	5
with siblings	Mpi only	10	with children	Mpi only	3	at the temple	Mpi only	4
	Mpi & Thai	2		Mpi & Thai	4		Mpi & Thai	5
	Thai only	1		Thai only	2		Thai only	4
with friends	Mpi only	7	at work	Mpi only	1	with a gov't worker	Mpi only	---
	Mpi & Thai	6		Mpi & Thai	3		Mpi & Thai	1
	Thai only	1		Thai only	4		Thai only	13

The following tables summarize the results from more than one question at a time. This can be done in various ways.

Inventory of Children's Languages

First Language	Number of Subjects							
	Other languages learned before school (NT = Northern Thai, CT = Central Thai)							Total
	Mpi	Mpi & CT	NT	CT	NT & CT	None	Not Asked	
Mpi			3	---	1	---	---	**4**
Northern Thai	1	3		1		2	2	**9**

Mpi in 20 Years

"Will Mpi be spoken in 20 years?"	Number of Subjects		
	"Do you think this is good?"		Total
	Good	Not Good	
Yes	9	---	**9**
Yes, but not by many people	1	1	**2**
No	1	2	**3**

Reason for Attitude to Children's Use of Thai at Home by Location (Valley Lawa)

"How do you feel when they do that?"	"Why?"	Bo Luang, Bo Sangee, and Bo Phawaen	Kong Loi
General positive response	They can speak with Thai people	1	1
	They study Central Thai at school	1	0
	Not asked or No answer	2	0
Neutral	They can use more than one language	0	1
	They study Central Thai at school	1	0
	It is normal for children to know Northern Thai	1	1
	It is a good opportunity for them to practice	0	1
	Not asked or No answer	1	1
Other	Not asked or No answer	15	14
Total		**22**	**19**

You can see that some of these tables are rather simple. They just have a row for each response and a column for each location. Others are more complicated. How you arrange the table depends on what you are trying to highlight. You should not hide anything, but it is fine to arrange the table in such a way as to make your point clearer. A good example of this is when there is a trend you are trying to show. You might order the locations from lowest to highest vitality using the same order for all the tables. Then the reader can clearly see the trends and your writing can refer to the tables and be much more persuasive. It would *not* be good to use different orderings of the locations in the tables unless there is a really good reason to do so. Readers will tend to assume that a table is set up just like the last one and so might interpret your data incorrectly.

10.3.2 Creating Summary Tables

Data summary tables like those in the last section can be created in a number of ways. Usually, you would tabulate the results in some way, create a table in Word, and then fill in the cells of the table. If there are very few subjects, you might be able to tabulate the results by hand. If you do this, it is especially important to double-check your results. Alternatively, the tabulation can be done using various computer programs, such as Minitab or Excel. I will not discuss the use of Minitab here, but for Excel you would use a Pivot Table. See "Data Cleaning in Excel" on the Course CD in the Chapter 9 (Data Entry) folder to learn how to create Pivot Tables. You can use the file "Sample SLQ Data" in the Chapter 10 folder to practice on.

10.3.3 Analysis

In fact, the data summaries and data analysis are done hand-in-hand. Start by making tables of all the data and inserting them in the right places in your report. As you do so, think about what the data means and start drafting your thoughts. Later you can come back and synthesize all your data summaries and initial thoughts into a comprehensive data analysis. See "Nahhas 2005 (Sociolinguistic Survey of Mpi in Thailand)" on the Course CD in the Chapter 0 (Overview) folder for an example of summarizing and analyzing SLQ data. In that report, the data summaries are put in the appendix while the analysis is in the main body of the paper (in Section 4.4), referring to the appendix as necessary.

The basic strategy for analyzing and writing up SLQ data is as follows.

1. Summarize the responses to each SLQ question in a table. Make sure to add comments that clearly describe all aspects of the table if they are not obvious. Clearly indicate which SLQ question corresponds to which table.

2. You should know from your RAID planning which SLQ questions provide data for which research questions. When writing the answer to a research question, refer to the tables for the relevant SLQ questions and summarize the findings in prose. Your answer to the research question must be supported by your data. Of course, for many research questions, data other than SLQ data will be used, as well (e.g. observation, RTT results, etc.).

There is no one method for analyzing SLQ data. It is really an art more than a science. The more knowledge you have of sociolinguistics and the more your SLQ was designed based on your research questions, the better your analysis will be.

10.4 Recorded Text Tests

Section 5.13 of "The Steps of RTT" (see Course CD\04 Develop Instruments\4.6 RTT) describes the process of scoring an RTT pilot test. This same procedure is used to score the RTT. With the pilot test, what are of interest are the total scores for each *question*. But for the RTT, what are of interest are the total scores for each *subject*. These scores estimate each individual's comprehension of the L2 RTT story and we use these scores to infer comprehension of L2. Of course, the scores differ between subjects so we need a way to summarize them.

The standard method of reporting RTT results is a matrix showing the average RTT scores along with their standard deviations. This method is described in Section 5.16 of "The Steps of RTT". See also "RTT Summary assignment" on the Course CD.

Another aspect of the analysis of RTT data is creating intelligibility groupings and mapping the results. There is an example in Section 5.16 of "The Steps of RTT".

10.5 Readings

The Steps of Wordlists
- CD (see Course CD\04 Develop Instruments\4.4 Word Lists)
- Read Chapters 5 (Data Analysis) and 6 (Interpretation)

The Steps of RTT
- CD (see Course CD\04 Develop Instruments\4.6 RTT)
- Read Sections 5.13 and 5.16

Exercises for Grouping Dialects into Languages
- CD
- Part I – A lexical similarity exercise which uses the ideas contained in the Comparative Method rather than the Blair Method. *We are skipping this in this class.*
- Part II is about creating lexical similarity groupings using a lexical similarity matrix
- Part III is about creating intelligibility groupings using RTT results
- We should have done Parts II and III in class already.

10.6 Assignments

Lexical comparison assignment
- CD, Handout

Interpreting a Matrix assignment
- CD, Handout

RTT Summary assignment
- CD, Handout

10.7 For Further Study

Casad, Eugene. 1974. Dialect intelligibility testing. Norman, Oklahoma: Summer Institute of Linguistics of the University of Oklahoma.

- LL
- **LinguaLinks:** Sociolinguistics / Language Assessment

Grimes, Joseph E. 1995. Language survey reference guide. Dallas: Summer Institute of Linguistics.

- LL
- See "Turning Numbers into Trees" in Appendix 1
- **LinguaLinks:** Sociolinguistics / Language Assessment

Hatfield, Deborah. 1991. Language standardization: Principles and implications. ILAC89, part VII, paper 24.

- LL
- **LinguaLinks:** Sociolinguistics / Language Assessment / Proceedings of the Language Assessment Conference: Horsleys Green, 23-31 May 1989 / Part VII. Standardization

More Word List Stuff

- CD
- Contains information about Historical Linguistics, the Comparative Method, and some more lexical comparison assignments.

Radloff, Carla F. 1991. Sentence repetition testing for studies in community bilingualism. Dallas: The Summer Institute of Linguistics and The University of Texas at Arlington.

- LL
- **LinguaLinks:** Sociolinguistics / Language Assessment

Sadembouo, Etienne. 1991. Constitution and function of a language committee and the choice of a reference dialect. In Bergman, Ted G. (compiler). Survey reference manual, 2nd edition. Dallas, TX: Summer Institute of Linguistics.

- LL
- **LinguaLinks:** Sociolinguistics / Language Assessment

Sanders, Joy. 1977. On defining the center of a linguistic group. In Loving, Richard E. and Gary F. Simons (eds.). Language variation and survey techniques. Workpapers in Papua New Guinea Languages, volume 21. Ukarumpa, PNG: Summer Institute of Linguistics.

- LL
- Especially up through Section 6
- **LinguaLinks:** Sociolinguistics / Language Assessment

Simons, Gary. 1977. Principles of multidialectal orthography design. In Loving, Richard E. and Gary F. Simons (eds.). Language variation and survey techniques. Workpapers in Papua New Guinea Languages, volume 21. Ukarumpa, PNG: Summer Institute of Linguistics.

- LL
- Especially sections 1 and 2
- **LinguaLinks:** Sociolinguistics / Language Assessment

Simons, Gary. 1977. Recognizing patterns of divergence and convergence in a matrix of lexicostatistic relations. In Bergman, Ted G. (compiler). 1990. Survey reference manual, 2nd edition. Dallas, TX: Summer Institute of Linguistics.

- LL
- **LinguaLinks:** Sociolinguistics / Language Assessment / Survey reference manual

Wetherill, G. Barrie. 1995. Research design and analysis. Unpublished.

- LL, CD
- Part II, Chapter 7 "Data Analysis"
- **LinguaLinks:** Sociolinguistics / Language Assessment

WordSurv

- The most current version of WordSurv can be found at http://wordsurv.css.taylor.edu/
- This program is meant to be a database where you can enter, analyze, and store your word list data. I think it still has some bugs and sub-optimal features (as of October 2006).

11 Survey Report

11.1 Introduction

Writing up the results of the survey in a Survey Report is very important. First, it helps you think through your data analysis to make sure that your conclusions really do follow from the data. It might seem clear what conclusions the data point to, but a careful analysis and write-up will give you the opportunity to find the not-so-obvious results as well as confirm what you think is obvious. Also, others will have more confidence in your findings if they read them in a report rather than just hearing them from you over lunch or in an email.

Second, writing a survey report allows others to review your work and critique it. Other people might see weaknesses in your inferences that you have missed, or they might see different ways of interpreting the results that you did not think of.

Third, it is important to document all aspects of the survey so that others can know exactly what you did. This knowledge will help them know how much weight to attach to your findings. You might have some very important results, but lack of documentation will cause many to disregard them as just your opinions.

Finally, there are many inside of and outside of your organization who would be interested in your work if only they had the opportunity to see it. Neglecting to write a survey report following your field trip is a disservice to your organization and the wider linguistic community.

Objectives

After learning the material in this chapter, you should:

- Understand the components of a good survey report.
- Realize the relevance of the audience to your writing style.
- Be able to tell the difference between an adequate survey report and an inadequate one.

11.2 Survey Report Outline

The Course CD has a template for a Survey Report that you can use to get started. Just delete the instruction paragraphs in each section and insert the information relevant to your survey. One possible outline for the Report is as follows. You could organize things differently if you want to, but your Report should still contain all this information and be in some logical order.

1 Introduction
- 1.1 Geography
- 1.2 Peoples
- 1.3 Languages
- 1.4 History
- 1.5 Previous research
- 1.6 Other background information

2 Research Purpose, Goals and Questions

3 Methodology
- 3.1 Site Selection
- 3.2 Instruments
- 3.3 Subject Selection
- 3.4 Fieldwork Timeline
- 3.5 Analysis

4 Results
4.1 Summary of Data
4.2 Research Question #1
4.3 Research Question #2
4.4 Research Question #3
[One sub-section for each Research Question]
5 Conclusions
6 Recommendations
7 References
Appendices

Sections 1 to 3 are the same as the Survey Proposal. You will want to update them based on anything new you have learned since, of course.

Section 4 contains first a summary of the data. If the data summary is very long, it might be better to put it in an Appendix. Alternatively, you could present the data during the following discussion of the Research Questions. You should have one sub-section for each Research Question in which you attempt to answer that Research Question based on the data in Section 4.1 and the criteria in Section 3.5. The research question should be re-stated (use the same wording as in Section 2), the relevant data referred to and interpreted, and a clear statement of your answer to the Research Question given. I find it helpful to highlight the research question and its answer in some way such as bold, italics, or by leaving space before and after.

In Section 5, you should relate the answers to the Research Questions to your survey's Purpose(s) and draw conclusions. In Section 6 you can make recommendations for action and/or further research, if appropriate. Remember your audience! Do not make recommendations that might be interpreted as promises unless you intend on following through. Also, distinguish between further research that *could* be done and further research that *should* be done. Some things are interesting but not directly useful to your organization. But other things are necessary for your administrators' agenda. Your administrators might, depending on their knowledge of sociolinguistics, need you to educate them on what is really needed to accomplish their purposes.

11.3 Strategy for Writing a Survey Report

Report writing can actually be started at the same time as the data analysis. A good way to start is by pasting in all the information from the Survey Proposal. As you summarize the data and analyze it, paste the results into the report as you go.

Organize your report around your research questions. Your methodology section should specify the criteria by which you plan to answer the research questions. If you are using an SLQ, for example, then you should have specified which questions on the SLQ relate to which research questions. This makes writing the Results section easier in that you know exactly which data summaries to refer to in answering each research question.

11.4 Audience

Before writing a survey report, think about whom your intended audience is and what their assumptions are. Write your report with such people in mind. You want them to be able to understand quickly what you have done and why it is important, and to not get bored or confused along the way. Some facts or concepts that are obvious to you are not nearly so for your readers. Remember that you have been researching this language for a while now while

your reader may have never heard of them before! The reader also might not be familiar with the geography of the region. Include good maps that clearly mark any places or regions you write about. Additionally, facts and details that you find captivating might be too much information for some readers, causing them to lose interest or lose track of the main point of your report.

As stated in SIL's Principles of Language Survey Course,

> "A survey report is not addressed specifically to the administrators who called for the survey; rather it is addressed to anyone who might be interested in learning about the survey's findings. It should therefore not make many assumptions about what the reader already knows. It must instead explain clearly things like the goal of the survey, the location and identity of the languages surveyed, the methods used to gather and analyze data, tabulations that summarize the results of analysis, the criteria used for drawing conclusions from the results, and the conclusions themselves. It should follow the formal style of an academic paper."

Here is a list of possible audiences for survey reports (Noel Mann):

SIL
- Branch administration
- Area administration
- Ethnologue

National Organizations
- University
- Linguistic research organizations
- Literacy organizations
- Government (education department)
- National Bible Translation Organization
- Religious institutions

Other Organizations
- Database projects
- Academic journals and conferences
- Word list archives
- Missions / local missionaries

Note that not everyone needs the same version of the report. You should write an in-house report that covers all the details. But when distributing the results outside your own organization, you should be more selective. Not everyone is interested in all the details. You might, for example, write a short summary translated into the national language that highlights the main points of the survey. While your in-house report might contain recommendations specific to your own organization, you could modify the report for a wider audience such that it simply presents the background, methods, and results, leaving the implications of those results up to the reader. It is better to write the detailed in-house report first. It is easier to take things out to modify a report than to add more in.

11.5 Ethics

When writing your report, make sure acknowledge those who have helped you such as a sponsoring organization or university, local or national leaders, research assistants, etc. This kind of thing can be included in an "Acknowledgments" section at the beginning of your report.

Throughout the report, make sure to appropriately reference others' work, whether published or unpublished. If you use an exact quote, put it in quotation marks. Do not include anyone's name or picture without asking their permission first.

Finally, when the report is completed, it is polite to provide copies of it to those who helped you as well as to local universities, government officials, libraries, and local leaders.

11.6 Judging a Survey Report

The table on the next page contains a description of the characteristics that distinguish an inadequate survey report from an adequate one. See also "Survey Report Checklist" on the Course CD.

Table 6 - Judging a Survey Report

I do not know the original source of the following table, but I like it!

	INADEQUATE	"MEDIUM"	ADEQUATE
RESEARCH QUESTION			
Clearness of expression	unclear, inconsistent, distorting or irrelevant	requires deduction from incomplete, unclear expression	clear, precise, concise
METHODS			
Appropriateness	method doesn't answer research question	method answers research question only partially or on an experimental basis	research question can be (fully) answered with the chosen method
Sample	too small, inappropriate or distorted	subjects chosen are appropriate, but results can't be extended to general population	sample is representative; results are valid for whole population (with little error)
RESULTS			
Completeness	relevant results missing	relevant results summarized	relevant results given (even details)
Intelligibility	results are incomplete or incomprehensible	understanding of results requires special knowledge	results are (fully) understandable after first careful reading (for the desired audience!)
INTERPRETATION			
Accuracy	errors in calculations, application, expression, logic or facts	difficulties inherent in methods; no gross errors	difficulties inherent in methods are controlled for
Distortion	obvious distortions in presentation and interpretation of results	some distortions in the interpretation but not in the presentation of results	no distortions - possible sources of distortion are controlled for

11.7 Examples

See SIL's Electronic Survey Reports (www.sil.org/silesr/) for examples of survey reports from around the world. The Course CD has examples in the "00 Overview" folder.

11.8 Readings

Ellis, Jim. 1990. Writing up the survey report. In Bergman, Ted G. (compiler). Survey reference manual, 2nd edition. Dallas, TX: Summer Institute of Linguistics.

- LL, CD
- **LinguaLinks:** Sociolinguistics / Language Assessment / Survey reference manual
    - Open the external PDF document.
    - Using the Bookmarks on the left, click on "Statistical Analysis and Write-Up". This article is in there.

Grimes, Joseph E. 1995. Language survey reference guide. Dallas: Summer Institute of Linguistics.

- LL, CD
- Appendix 3
- In Course CD\05 Survey Proposal\For Further Study
- **LinguaLinks:** Sociolinguistics / Language Assessment

Loving, Richard. 1977. Guidelines for writing up language surveys. In Bergman, Ted G. (compiler). Survey reference manual, 2nd edition. Dallas, TX: Summer Institute of Linguistics.

- LL, CD
- In Course CD\05 Survey Proposal\For Further Study
- **LinguaLinks:** Sociolinguistics / Language Assessment / Survey reference manual
    - Open the external PDF document.
    - Using the Bookmarks on the left, click on "Statistical Analysis and Write-Up". This article is in there.

12 Evaluation

12.1 Introduction

You might think that the survey steps are over now that you have written the survey report... Think again! An often overlooked step is to take time to evaluate the survey process. This helps you and your survey team to learn from the experiences and improve the process for next time.

12.2 Keeping Track

Implied in the need for evaluation is the need for a way to record the evaluation and be able to find it later. One idea is to have some kind of document for your survey team that outlines the survey steps and contains tips based on your own experiences. The outline can also contain the basic steps that you have to do on every survey. Use this document as a guide to each survey you do. In this way, the evaluations from past surveys can show up in front of your eyes as you plan the next survey.

For more specific evaluations, such as of certain SLQ questions, it is helpful to have a customized version of the RAID outline for your survey team. As you plan which questions to use for the next survey, you will click on the linked files for certain questions. If you have recorded your evaluation of a question in that linked file, then you and others will see it the next time one of you thinks about using that question on an SLQ.

In general, you want to keep track of evaluations of instruments even if you have found something to be no good at all. This is to protect others in the future from repeating your mistakes. For example, do not just delete bad questions from RAID. Later someone might add them back in thinking they are coming up with something new and improved! Better to leave them in RAID with a clear warning about why they are bad. The same goes for question translations – both good and bad translations can be stored in RAID.

12.3 Evaluate the Instruments

Regarding the evaluation of SLQs, Showalter (1991)[1] writes,

> "However, in spite of the growing number of sociolinguistic survey questionnaires, we in SIL are still asking ourselves, 'Are we getting the information we need? Are we asking the right questions?' Unfortunately, contributors to survey question databanks rarely include evaluations of or comments on the questions they used. As Fowler (1984:101) notes, 'the mere fact that someone else has used a question before is no guarantee that it is a very good question or, certainly, that it is an appropriate question for a given survey. Many bad questions are asked over and over again, because researchers uncritically use them over and over again.' What is needed is some evaluation of the question's validity and effectiveness.

- Does it measure what it is supposed to measure?
- Was the question understood as it was written or did the surveyor have to rephrase it or explain it?
- Were there questions that really caught people's interest and got them talking?

[1] See Section 4.6.7 "Readings – SLQs" for the reference.

- Were there questions that did not seem to be understood, or that were understood differently by different people?
- Were some answers completely unexpected, or difficult to understand?
- Did people ever refuse to answer a question, or seem embarrassed by it?

This kind of information can make a questionnaire databank much more helpful."

Unless you have an incredible memory, it is best to have these criteria in mind during the fieldwork so you can record observations about the quality of questions as you go. The survey team should discuss any problematic questions as you notice them. The sample SLQs provided on the Course CD (see Course CD\04 Develop Instruments\4.5 SLQs\Sample Questionnaires) contain a section at the end called "Interviewer Observations" which provides a place to write observations about the questions.

Not only should you evaluate SLQ questions, but also the administration protocol for the SLQ, as well as for any other instrument used. You can evaluate the elicitation probes for a word list and the methods you used to elicit. You can evaluate the way in which you administered the RTT, or went about eliciting stories. Any aspect of an instrument is fair game for review and evaluation.

You can also evaluate the entire survey process, from background research to report writing. Are there any things that you would do differently next time? Keep track of any ideas you have that could improve the process.

12.4 For Further Study

Fowler, Floyd J., Jr. 1984. Survey research methods. Beverly Hills, CA: Sage Publications.

13 Archive

13.1 Introduction

You have reached the final step in language survey: data archiving. After all has been done, make sure you archive everything related to the survey. The reason for doing this is so that you or others can find the information later if you need to, either to revise a report or to learn from the past. You never know when you might need some old piece of information. Having an organized system for data archiving will help you and your team keep your desks and computer hard drives uncluttered and provide a predetermined location for storing anything related to a survey for easy retrieval later.

I suggest you talk to your team's computer support personnel for ideas on how to set up a good archiving system. This could be writing all the files to a CD or DVD, or moving all the files to a secure network, or something else. Also, think about data security (who will be able to see the archived data?), ease of archiving, ease of retrieval, and the chance that your archived data will be lost. Technologies change often so outlining a specific method here would probably not be that useful.

One more thing... For your computer files, make sure to use common Unicode fonts. If there is any doubt about the font being available later, embed the fonts in the document and/or archive the fonts along with everything else. This is especially important for IPA and for any non-Roman fonts.

In summary,

- Make it standard practice to archive everything related to a survey in one place.
- Have a standard system for storing archived data in a way that is easy to retrieve later.
- Think about data security.
- Decide what you will do with paper files and notebooks. If you have already entered their contents into the computer (via data entry and scanning) will you keep them indefinitely? Will you destroy them once everything has been archived electronically?
- Decide what to do with recordings, videos, and pictures from the survey. Will you store them electronically? If so, will you erase the original media? If you keep the media, where will you keep it? What format will you use?
- If you have both electronic files and non-electronic information, have a clear system for associating items from the same survey.

Make it a habit to do this as soon as the report is finalized. Once you get working on the next survey, it will be hard to get back to it. Neglecting survey data archiving means that if there comes a time when you are not physically present with your survey team, or when your computer hard drive crashes, others will not have access to all the details of the survey into which you have poured so much of your time and energy. Yes, it takes some extra time to archive, but it is worth it.

Congratulations! You have finished a survey! Now get back to the library and start the next one =)

References

Mann, Noel. 2004. Mainland Southeast Asia comparative wordlist for lexicostatistic studies. Chiang Mai: Payap University, ms.

Nahhas, Ramzi W. 2005. Sociolinguistic survey of Mpi in Thailand. Linguistics Department Research Paper #202. Chiang Mai: Payap University. (Also to appear in SIL Electronic Survey Reports, see http://www.sil.org/silesr/)

Nahhas, Ramzi W. 2007. Sociolinguistic survey of Lawa in Thailand. Linguistics Department Research Paper #203. Chiang Mai: Payap University. Forthcoming. (Also to appear in SIL Electronic Survey Reports, see http://www.sil.org/silesr/)

[If I've missed some, let me know!]