CHAPTER 3. GETTING STARTED

3.1. The first field session

Somewhere, sometime, somehow you bit the bullet and decided that you wanted to be a fieldworker. And now you are planning your first session in the field, wherever that happens to be. From the moment you first enter the field, you will never be the same. You will experience a professional and personal rite of passage. How do you plan for such an experience? Well, it involves both the mundane and the conceptually involved. Let's begin with the mundane by considering first the kinds of things the fieldworker might take to the field and then move on to more abstract aspects of planning for that first experience.

3.1.1. What do you take?

The things a fieldworker takes to the field, especially on the first field trip, can play a significant role in the success of the project and the well-being of the field linguist. Things to be taken fall into two broad categories: things for the work and things for the soul. The greater the cultural gap between the linguist's home community and the language community, the more the linguist will need to take things that enable him or her to feel a sense of 'continuous identity'. As Wengle (1988, 20ff) makes clear, 'identity maintenance' in the field is crucial for successful fieldwork (or, at least, it is crucial for a healthy fieldworker). The isolation of the field can be extremely disruptive psychologically. Wengle (1988, 7ff) advocates the idea that '... the stability of an individual's sense of identity depends directly on the "innumerable identifications" he has established with the familiar, personal and impersonal, concrete and abstract, animate and inanimate objects of his past and present existence.' Judicious selection of mementos, photos, books, and music, for example, can help the linguist to maintain a connection with her or his life outside of fieldwork.

Linguistic equipment is discussed in chapter ___. A list of the other kinds of things I usually take with me to the field includes the items in ():

(3.1) List of personal items commonly taken by D.L. Everett to field sites in Amazonia:

a. Three changes of clothes (one to wear, one to wash, and one drying), hat, flip-flops, closed shoes, and gym shorts for bathing. This would obviously not be an adequate wardrobe for fieldwork among the Inuit. What you take varies on where you are going. But the principle is to travel lightly.

b. Medicines (for first-aid and treatment of serious village health problems).

c. Multiple vitamins (my diet in some villages is largely starch and meat, with few if any fresh vegetables or fruit).

d. Food (the amount and kind depends on whether the group I will be working with has surplus food to sell or trade to me – not all do), including popcorn (people have different 'treats'. For me, the day ends better if I have popcorn).

e. Hammock and mosquito net.

f. DVDs of movies and concerts.

g. Pictures and letters from people I care for.

h. Satellite telephone.

i. Merchandise for paying language teachers (when money is not wanted. Cloth, machetes, files, hoes, axes, munition, fish hooks, sewing needles, flashlights, batteries, etc.).

j. Toiletries and bathroom supplies (I recommend, strongly, deodorant – wherever you work, people are likely to think you smell bad, because you smell different).
k. My entire music library (I have about all my music on iTUNES and nothing cheers me up more during a dull point in the day than ZZ Top or Lynyrd Skynrd, etc. For you it could be Mozart).
l. Books (linguistics, philosophy, nonfiction, and fiction – especially Henry James and PD James).
m. Folding table and chairs.
n. Backpacking stove.
o. Kerosene.
p. Batteries (12 volt and flashlight size).
q. Solar panels and connections to charge 12 volt battery. (see ___)

If there are special treats (like popcorn for me), that you like to eat to cheer yourself up, be sure to take an adequate supply. However, there is an important caveat to consider before you decide what to take: things you take, no matter how innocent-looking to you, could and probably will, be desired by people in the language community. This can lead to theft, hard-feelings, jealousy, demand for equal treatment. Plan to take things to give as presents, to share your coffee and sugar (for instance), to give away most of what you have taken before leaving the village, and to make sure that nothing you take is too important to lose, be destroyed, or be taken. Never let 'things' come between you and the community. If things appear to create interpersonal problems, go without them. Never argue about them. And that entails avoiding taking anything you would be prepared to argue about.

3.1.2. How long to stay

The length of the first stay in the community should be based not only on the fieldworker's available time, but also on a realistic assessment of his or her ability to withstand the separation, newness, anxiety, and work responsibilities of the initial visit. The general rule is to underestimate your staying power, rather than to overestimate it.

I suggest less than one month for the length of the initial visit. There is a psychological/cultural issue involved in this recommendation. In general, when the fieldworker gives a date that they plan to leave the community, whether only to himself/herself or to others, this date is taken as a sort of promise, a kind of moral commitment.[18] So if a fieldworker overestimates his or her staying ability for the initial visit, then they can feel that they are breaking a promise or 'wimping out', that is, that they have failed in some way. In fact, anyone who goes to the field and stays for a reasonable period of time should feel pride in their accomplishment, not guilt. If the fieldworker leaves after the first visit feeling guilty, this would be an unnecessarily inauspicious beginning to her or his field program. Therefore, I recommend that the first session be planned for three or four weeks. The fieldworker can stay longer if things work out well or return quickly if conditions permit.

3.1.3. Estimating the length of the entire project

[18] This no doubt says more about Western Culture's view of language than about fieldwork.

Samarin (1967, p71):

> *"Criticizing linguists because they have not had enough time with informants is like condemning shipwrecked sailors for not having provided themselves with food and water. What we can more wisely do is evaluate how much was accomplished in the time a linguist had at his disposal."*

The estimate of the length of the entire project clearly depends on several factors, including the nature of the project (e.g. to collect data for a grammar, dictionary, text collection, partial study of phonetics, phonology, constituent order typology, etc.), the degree of physical isolation of the community (from the fieldworker's perspective), the degree of bilingualism in the speech community, the state of documentation and description of the language of study, the state of documentation and description of related languages or languages of the area, the goodwill and cooperation of the community, and so forth. And, as the quote from Samarin says, all linguists would like more field time than they have had before writing up their results. Therefore, a *rough* time estimate for a comprehensive grammar (no dictionary, no carefully compiled text collection) of an Amazonian language lacking previous research on it or related languages would be, after all permissions are received (see __ below), in the neighborhood of two full years of near-daily work and contact with the community. The writing up of the grammar would take at least an additional 6-12 months, including follow-up visits to gather, verify, or clarify data (see ___). For a language of North American, where at least some in the community speak English and related languages are well-described, the time for data-gathering might be somewhere between 6-10 months, again of regular, daily work with language teachers. I base these estimates on an assumption of three hours per day of *good* lab sessions, excellent language teacher help for data-processing in the field, good health, and no undue interruptions in the work routine. By this reckoning, a PhD program with the projected output of a grammar as a dissertation (in my opinion the most challenging, intellectually demanding, and personally rewarding type of dissertation), with courses, fieldwork, and writing up, should be estimated to take six years (in the British system, since no coures are required, four years are the maximum allowed by national regulations).

3.2. The first day

In early 1977, I began a four-month 'Field training course' offered by the Summer Institute of Linguistics (for more on SIL, see ___ below) in Chiapas, Mexico. To all participants, however, it was known informally as 'Jungle Camp'. Jungle Camp had five phases. First, there was an orientation to Mexico, cross-cultural relations, and equipment purchasing in Dallas, Texas. Next, there were several days of adaptation to Mexico, including visits to the Ballet Folklórico, Tenocticlan, Basílica de San Guadalupe, etc. After this general orientation to the country, we proceeded south to Chiapas, to SIL's initial training base, Yaxmiquilpan, where we learned to butcher beef, preserve meat, give injections, provide first aid care, travel in dugout canoes over rapids, repair kerosene lamps, live under primitive conditions, learn how not to get lost in the jungle, which jungle plants can be eaten, how to hang a hammock with mosquito net, etc. and we began physical conditioning, involving multiple day-long hikes of up to thirty miles through the jungle, in very hard conditions (90%+ humidity, knee-deep

mud, mosquitoes, etc.), including one fifty-mile hike to the village of the Lacandon people. The training's principal highlight was 'survival hike', when people were pulled out of the group at random and taken into the jungle to spend 3-6 days alone, with no food, no water, and only what they were wearing, no change of clothes. This meant that everyone walked around with rope, matches, a machete, and a few other tools that could be carried, in anticipation of the survival hike. The lesson learned was very simple indeed – be prepared (and all that preparation did help when I was called out and spent 5 days alone in the jungle, foraging and fishing and other things that linguists don't normally expect to do).

The Lacandon village was the first completely new cultural experience for me. All other trips I had made, I could at least identify a few points of similarity with my previous experiences. Not with the Lacandones, however. Everything seemed so different than anything I had ever experienced before, that I felt somewhat overwhelmed. Unfortunately, I had not received any suggestions on what to observe or how to observe in such circumstances, no background on the Lacandones, no linguistic orientation to them, etc. I arrived in utter ignorance and left no less ignorant and shocked at how different things were than I had expected to find. It is never excusable for a student of culture or language to enter another group without preparing themselves carefully first with good questions to answer.

3.2.1. The significance of the first day

No serious fieldworker should ever go as ignorantly to a location as I did to the Lacandon village (see box). So many things could have commanded my attention. For example, how was the village located in relation to the jungle, bodies of water, other villages or settlements? Who lived in each house and what were their kinship or other relations to people in other houses? What were the kinship constraints on spatial distance or proximity of dwellings? What greetings were used? (By the people for foreigners? Between men and women?, etc.) How were people dressed? (e.g. differences by age? By gender? By village prestige?) What were the dimensions of the houses? Of the open spaces between them? What were the terms for basic vocabulary (e.g. the Swadesh word list, see ___ below)? And on and on. I measured nothing. My photography had no real scientific objectives. My first day among the Lacandons was largely a day lost, a precious opportunity squandered. The first day in a new environment is the only time you will ever see the culture without previous experience of it. At the same time, from that first day, the sensory meter starts running. And this flow of sensory experience biases the mind, by accustoming it, by making the new old, by dulling curiosity. This in turn means that it is unlikely that you will ever be as acutely aware to the newness and strangeness of this culture and language as on the first day. It is your responsibility, therefore, to arm yourself with questions and to begin asking and trying to answer them within your first hour in the community.[19]

This first day is also the day when the community will form its opinions about you. Are you a trustworthy person? A nice person? What are your purposes here? How

[19] In my favorite movie of all time, *Unforgiven,* Clint Eastwood shoots the unarmed owner of a brothel, in front of the local law officer, Gene Hackman. Hackman remarks that it is very cowardly to shoot an unarmed man. Eastwood says 'Well, he shoulda armed himself.' Opportunity does not always wait for one to arm oneself intellectually. A linguist needs to be prepared.

approachable are you? Will you give them things 'for free'? Are you someone people want to know better? Linguistically, you are more likely to impress positively by accurate mimicry and quick learning and use of phrases. As you unpack your bags, you should listen for question-like intonation and try to mimic it. Don't worry about mimicking things you do not understand. Of course you will embarrass yourself. Just do not take yourself too seriously and you will be fine. Have a good time.

This is also when you begin to form your working and personal relationships within the community. First impressions are very important. The consequences of a bad first impression are difficult to gauge. So it is better to give a good first impression and to make an effort to receive one. Yet, that can be tricky. If someone asks you for something, will giving it to them make you seem like a pushover, forever dooming you to nagging about giving away your possessions, or will it be seen as a sign of generosity, not necessarily inviting more requests? You must watch others, ask others, read, learn from others' experiences, etc.

On this initial day of '*National Geographic*' newness, you should be learning more than linguistics. For example, this is the time to draw maps of the community, learn who the community leadership is, where they are located, etc. Talk to the community leadership on this first day (and before ever entering the community if this is possible, by radio, one-day visit, in a nearby city, etc.). Explain your objectives, your aspirations, etc. Find out about theirs. Begin negotiating the understandings necessary for all to benefit from the research (see ___ below). Learn where and how to get water, take care of your rubbish and other waste. Find out about proper relations between foreigners (you!) and the community. Photographs are best taken at this stage, before jadedness sets in. This is also a vital time for gathering metalinguistic phrases, e.g. 'What is this?' 'What is she doing?' 'When are you going?', etc. Use this day to the fullest. It will never come again. And no other days will be remotely similar. Another important, crucial task of the first day or so in the community is the selection of language teacher(s). We turn then to consider that vital part of the first visit.

3.3. Language teachers

3.3.1. Selecting the teacher(s)

Before discussing the selection of a language teacher(s), we should consider what to call the person or people who work for the linguist to teach him or her the language. The traditional term for these members of the language community is 'informant'. But in today's world this sounds rather sinister. Even worse than 'sinister', however, the term 'informant' is bad because it implies that the language community participants in the linguistic research are passive, with no goals of their own, little more than inert sources of information for the fieldworker. The crucial desideratum for any term chosen in this regard is that the term reflect the active and pro-active role of the language community in shaping the research. I use the term 'teacher' here. There may be better terms, but 'teacher' seems to be simple and accurate. Other terms people might find useful are 'consultant', 'co-linguist', 'John' (i.e. simply refer to the teachers by their first names/preferred titles in the first instance), etc.

There may be a range of people with different backgrounds, linguistically, socially, and economically, to choose from. Ideally, one should choose to work with as representative a sample as possible, never being locked into just one language teacher. There are various reasons for this. Linguistically, one wants diversity and statistical significance (sometimes these conflict) in one's sample. But another reason for not working with a single teacher is that the linguist should avoid becoming a *patron* (in

the Latin sense), i.e. an employer responsible for the employee's overall well-being. I recommend working with at least 6 women and 6 men over time, from a variety of ages. (But at the same time the fieldworker must guard against confusing data from different dialects and offer suggestions on how to keep dialects separate.)

There are of course situations in which, initially at least, you may have little or no choice as to who your teacher is going to be. When I first began research on the Kisedje (Suyá) language, I saw several potentially good teachers. The best it seemed to me was a man who was the community's official translator. He was bilingual in Portuguese and Kisedje. But when I approached him, he said that he had no time for such work. Moreover, he said, it had already been decided by the chief that my teacher was to be his daughter. Faced with a community-based decision of this type, it may be acceptable to explain why you'd prefer someone else. But that can be risky at the outset of field research, when you do not know the people or the culture well. By and large the safest course of action is to make the best of the community's selected teacher(s) and later, when you are better attuned to values, decision-making, persons, and consequences in the cultural context, you can ask for a change in or additional teachers if you think it would work better. Once again, however, linguistic research always requires multiple teachers. This is because all conclusions are based on the assumption that they have inter-speaker validity. You cannot make this assumption if you work with only a single language teacher. (So don't worry too much about who you get as your first teacher if this person is selected for you.)

Let's assume that the linguist can work with anyone they please. How do they go about selecting a language teacher? Some qualities to look for in a language teacher are given in (3.2), although none of these are ultimately necessary or sufficient to guarantee a good teacher. But they are all helpful, I believe.

(3.2) Selecting a language teacher:

a. Good story teller

This is important because it will affect the quality of the texts you collect. Especially when collecting oral literature, you should attempt to work with someone respected in the community for telling stories of this sort well and appropriately.

b. Friendly

I have worked with good teachers who are rude or otherwise less than friendly. Other things being equal, it would be nice to work with someone that you have a good chemistry with, someone you consider friendly, for example.

c. Speaker of the correct dialect

It would be a disaster if you concluded a significant portion of your field time only to discover that one of the speakers you had worked with in fact spoke another dialect or had given you a very different register than what you thought you were getting. So you must check out from the outset whether your teachers are representative of the dialect you are studying.

d. Mother-tongue speaker

This sounds obvious, but if you have not worked on a language previously, you might mistake someone for a native speaker of the language when in fact it is their second or third language. You must find out what language their mother spoke to them and what language they now speak in their homes.

e. Patient

The fieldworker is continually asking questions that a child should now, from the perspective of the native speakers. And they ask questions about details that

are extremely uninteresting, asking one to repeat the same word over and over. Thus, working as a teacher for a linguist can be extremely tiring. A good teacher should be patient.

f. Reliable

The linguist's time in the community and the success of the entire field research program depends on the ability to plan. If a language teacher cannot be relied on to show up sometime near the pre-arranged time and if this goes on for too long (the 'too' to be determined by the linguist), then the teacher is not reliable and should therefore be switched, however delicately, to avoid offense, etc.

g. Unintimidated by linguists

Some language teachers are intimidated by the linguist's education, nationality, money, big words, cushy job, and so forth. Some of these teachers therefore do not like to correct the linguist's pronunciation, or his or her conclusions, data, etc.

h. No speech impediment

You need to be sure that the pronunciation you are hearing is a standard one in the dialect/language under study. If someone has an obvious speech impediment, you cannot be you are getting standard pronunciations. This can lead to faulty generalizations about the language's phonetics or phonology. Hence, at least for sound-system analysis, language teachers should be free from any speech impediment.

i. Shows ability to reflect on language as a formal system

For some language teachers, the linguist's structural investigations will have little interest or meaning (moving stress around in the word, building and testing sentence paradigms, i.e. avoiding questions on meaning for questions on structure. But there are rare teachers who (like rare university students) turn out to be talented, natural linguists and show an ability to reflect metalinguistically on their own grammar. Such speakers can suggest paradigms, find regularities before the fieldworker sees them, provide transcribed, translated data, etc. They are marvelous linguistic resources and should be looked for, cultivated, and trained. Where appropriate, the fieldworker should attempt to get linguistically talented teachers more formal training if they desire it.

Alan Vogel offers the following suggestions on training native speakers, based again on his Jarawara experiences:

"I think two kinds of training may be relevant here. First, I trained Jarawaras to transcribe tapes of recorded stories. These transcriptions are not perfect by any means, but they are a huge help to me. For one thing, they hear a lot of things that I would not. They gladly spend 8 hours a day transcribing tapes. Secondly, I made up a questionnaire on plants with about ten questions. I gave the younger Jarawaras, who write well, the questions, along with sheets of paper, each with a name of a plant that I had gotten, and asked them to get the answers to the questions from the old men who know all about the plants. It produced volumes of information on hundreds of plants. It's important to realize, of course, that when we started with the Jarawaras, no one knew how to read or write in Portuguese or their own language. We had to devise the orthography (adapting the Jamamadi orthography), and after members of another missionary organization made up a primer, my wife taught several young men how to read and write Jarawara. She taught them how to teach others, and they did. The other missionaries among the Jarawara did the same thing in Agua Branca, and today the Jarawaras are basically literate in their own language."

j. Well-respected in the community (at least not marginalized)

Occasionally someone available to work as a language teacher is ostracized from the community or seen as marginal (in fact they may be trying to get work as a teacher because they have no other employment). This can be detrimental to the research if when you proceed to check examples with other language teachers they reject all examples given to you by your 'marginal' teacher, simply because of that person's social status rather than because of their linguistic ability. But you will not be able to tell the difference easily, affecting the research in ways that might not be easy to predict.

k. Expects to teach language, not translate the Bible, etc.

In some field situations, communities with a strong or new church, with a history of close ties or cooperation with foreign missionaries, the community or individual language teachers might confuse the fieldworker with a missionary and expect that the linguistic work on the language is ultimately directed towards a Bible translation. The linguist must make it clear at the outset that this is not what they are there to do. Avoid creating false impressions. (See __ below on ethics for further discussion.)

Regardless of how many or how few teachers you actually work with, it is important to know how to select them. As you select your teachers, you should also give thought to how you present your linguistic objectives, the nature of your job and the nature of your teacher's job to the community. Perhaps the community will have had previous experience with anthropologists (as with the Kisedje). In this case, it is important that you distinguish your objectives, because the linguist will work quite differently from the anthropologist, with objectives that are perhaps harder at times for the people to grasp or sympathize with. Avoid claiming that your objective is to learn their language unless you in fact intend to learn it. It can cause misunderstandings if you are cheerfully working away but with no marked progress in your ability to speak the language. If the teachers saw that as their primary goal yet you have not progresssed much, this could lead them to conclude that they are bad teachers, you are a bad student, or both. This can lead in turn to a lack of interest in helping you.[20]

3.4. The laboratory session

3.4.1. Linguistic planning of the session

The fieldworker must develop and maintain a high degree of professionalism in preparing the space, time, language teacher, and their own mind for the lab session. This section provides some suggestions for this preparation.

Have a point! Each lab session should begin with a well thought out, measurable objective. For example, 'Today I want to record and translate a narrative of 15-20 minutes in length.' Do not waste your time or your language teacher's by scheduling sessions for improvisation. As Peter Ladefoged told me, *"...when in the field spend more time thinking what you want to record than making recordings. I so often see students and others wasting time recording masses of useless stuff, hoping they can use it later when in fact it will simply delay their later work by their having to go through*

[20] My opinion is that you should do your utmost to learn to speak the language and to demonstrate regular and obvious progress at each meeting with the language teacher. It would be nice if others in the community complimented you and your teacher(s) for your progress (if complimenting is something they do).

*it all. **Think hard first, record later**." [emphasis mine, DLE] Peter Ladefoged, email to Dan Everett November 26, 2003*

Additionally, you should have back-up plans. As Mick Jagger reminds us, 'You can't always get what you want.' For example, if the speaker(s) do not seem to want to give you a narrative text, you could have planned a series of questions, e.g. 'Tell me about your hunting trip', 'Can you tell me how to weave a basket', etc. That is, open-ended questions that likely will involve multi-sentence answers and can give you at least something text-like. The secondary goals need not be related to the primary goal. But time with the language teachers is precious, literally, and it should always be fully and productively utilized. On the other hand, do not keep the teacher with you if you have run out of planned material. There is no sense in paying someone to watch you sputter and spin your wheels. In fact, you could give them evidence that you have no idea what you are doing, which is not a good impression to make.

There are various types of elicitation that can be undertaken in the lab session (and in this section I am heavily indebted to Samarin (1967, 112ff), where some of these types are first spelled out).

(3.3) Types of elicitation

a. Questionnaire-based: I often find it useful to follow a questionnaire, modifying it for intelligibility and local relevance, e.g. the Lingua Descriptive Questionnaire. (I have included an appendix to this book with a phonology questionnaire I developed, for the fieldworker thinking of doing more serious phonological studies, though it is not necessarily a tool appropriate for elicitation.)

b. Complementary: looking for further examples of material already collected.

c. Probing: asking open-ended questions, looking for explanations and paradigms provided by the language teacher. (Answers in such elicitation are simply one form of input and should never be taken as settling any issue.)

d. Hypotheticals: testing lists of hypothetical words generated by computer (see William Poser's webpage (http://www.ling.upenn.edu/~wjposer/) for one such program).

e. Translation: getting translations for texts and other material. Matthewson (2004) discusses semantic elicitation (see also __) and some of the pitfalls of eliciting translations. In spite of her well-taken warnings, though, getting translations of the data collected is vital and lab sessions need to be dedicated to this task. The fieldworker, however, must be careful to treat native speaker translations as only one source of data about the meanings of texts, sentences, etc.

f. Reverse translation: another way of getting at the meanings of texts, etc., is to have one set of speakers translate a vernacular text (a text in the language under study) into the national or local trade language and then have a different set of speakers translate the translation back into the vernacular. The fieldworker can then compare and contrast the different forms given and design further lab sessions to probe and test the resultant hypotheses.

g. Corrective: this type of elicitation tests the linguist's understanding of a certain set of constructions, expressions, texts, constraints, rules, etc. by discussing examples that have been devised based on the linguist's current understanding of the grammar. This is likely to have a low and unreliable rate of

return but, so long as the fieldworker bears this in mind, it can play a useful role in analyzing the relevant structures.

h. Filling in gaps: looking for missing paradigm forms, gaps in phonetic charts, sentence types, different participant lists, etc.

i. Experiments: It is important, where expertise is available, that some questions of structure, meaning, and understanding be tested by standard psycholinguistic experimentation. Although I have nothing to say about experimental design here, fieldworkers should either acquire the skills necessary to design, carry out, and interpret psycholinguistic experiments or they should recruit expert help, to either help them design experiments before leaving for the field or to accompany them to the field to carry out the experiments en loco.

3.4.2. Non-linguistic planning for the lab session

An early decision is where the lab session will be held. It would be nice of course to have a sound-protected location, comfortable, bug-free, dry, and free from distractions. However, this is not usually possible. But it is vital that the site chosen be as close to ideal as the fieldworker is able to get in the community. This could mean little more than taking a couple of folding chairs and table out of the village, busy neighborhood, etc. to a relatively calm, isolated area. Peter Ladefoged and I once commandeered a hut in a Pirahã village to carry out phonetic investigations and I simply asked people to keep the children and dogs away and to keep the general noise level as low as possible. They kindly accommodated us. Care in the choice of location will directly improve the research. And it can indirectly improve the quality of research by showing that this is serious business.

Of course, like any field activity, selecting and developing a location for lab sessions can have unintended consequences. For example, among the Pirahãs, I built a small wooden structure about 100 meters outside the village, raised above the ground, and screened in, with a lockable door. I discouraged people from looking in during sessions and tried to allow in only the teachers working in a given session, rather than them and all their friends. The Pirahãs do not mind this. But a Brazilian government agency investigating the activities of a 'gringo' in the area asked the Pirahãs about this small structure when I was absent from the village. The Pirahãs, in their nearly non-existent Portuguese, were able to communicate that I spent a lot of time in there and that few people were allowed in. The agency representatives wondered what sort of fiendish experiments I might be running out there. Finding out about this, I quickly visited the agency headquarters and gave them a full explanation.

I cannot imagine a successful lab session without the following equipment: headset microphone, digital and analog recorders, computer, pen and paper, chairs, table, and protection from the most intense features of the elements. In ___ below I discuss the linguistic equipment and its use in more detail.

The time of the lab session must take into account primarily the constraints of the community and the language teacher. When is it best for the community and the teacher for the lab session to take place? If the linguist can choose the time to work freely, then I suggest that the session take place while the community is quietest and calm. The linguist must keep lab sessions appointments and show that they take these times seriously. This could be in some cases part of the training of the language teachers as well – all participants must respect the research time. If language teachers show

themselves unable (for whatever reason) or unwilling to show up at agreed times, then they and the linguist should discuss possible solutions. If such discussions still fail to provide a satisfactory solution, the linguist may need to take the issue up with the community leadership, asking for advice.

3.4.3. During the session

Fieldwork is about getting high-quality data in the appropriate quantity (see ___). Nowhere is the data more likely to be gathered than the lab session. And the success of these sessions depends largely on the rapport, trust, and mutual understanding of the linguist and the language teacher. Therefore, the lab session must be a meeting of equals. The language teacher must be fully confident that they are respected by the linguist, and vice-versa. Care must be taken to ensure that the physical arrangement of the space (chair, table, etc.) reflects equality rather than hierarchy. The linguist's facial expressions, tone of voice, and body language must at once show professionalism, respect, and enjoyment of the task at hand.

Frequently in the sessions the linguist will find a particular response puzzling, apparently irrelevant, or otherwise unhelpful. Receive any 'unhelpful' response with the same gratitude that should mark the linguist's attitude towards every response and help from the language teacher. Respect means allowing the teacher to offer information that does not always coincide with the linguist's request.

As I have listened to some of my more than twenty-five year old tapes of the Pirahãs, I have, with my hard-earned ability to speak the language, realized that some of these 'unhelpful' responses were in fact attempts to correct some of my mistaken impressions, offering, instead of what I had ignorantly asked for, a response that was much more helpful, had I only recognized the Pirahãs' ability to teach me, rather than to simply answer my questions. That is, had I realized that they were teachers rather than mere passive 'informants'.

Further, the language teacher will look for evidence that the linguist has understood or at least heard correctly their response. The best way to show this (and that the linguist is paying attention) is to repeat every example back to the teacher. Make it clear that you want to be corrected.

One source of potential pressure on the language teacher that can lead to less useful responses is for the linguist to reveal too much about his or her predictions and analysis before it has been carefully verified. this could bias the results, leading the teacher to, in a friendly way, look for examples to confirm what you are saying or otherwise bias the nature of the results obtained. (This excellent bit of advice is taken from Boas (1911, 59)).

Finally, the linguist and teacher must know when the session should conclude. There are various criteria. First, conclude at the agreed time, unless there is mutual agreement that the session should continue for some reason. Second, conclude when the linguist runs out of material for the session. Third, the session should be concluded if this is a bad day for the teacher and they cannot get focussed. Fourth, conclude the session if there are too many distractions (e.g. a hunter has just brought back game and the language teacher is concerned about missing his or her share).

3.4.4. Third-party interpreters

In some field locations, it may not be possible to engage in either monolingual or bilingual work directly with the language teacher. In such cases, it may be necessary to employ a third-party interpreter (see also Samarin ()). Such a situation arises when the linguist and the language teacher fail to share a common language and the monolingual method is impractical for some reasons (e.g. when the time available to the linguist is too short, the teacher is one of a few survivors of a moribund language, etc.).

There are some special precautions to take in working with interpreters. First, the linguist must be clear in all instructions given. It can be safely assumed that all questions asked through an interpreter will be distorted to one degree or another. Ambiguity or vagueness in questions will create more severe problems when asked through a translator. Second, the linguist should be suspicious of the quality of the question, the translation, or both if short questions to the interpreter become very long questions or conversations between the interpreter and the language teacher. Answer in such circumstances should be viewed as highly suspect. Third, be equally suspicious of short answers by the teacher which require apparent circumlocutious translations to the linguist or whose translations are hesitant, unclear, etc. Finally, since the interpreter has a closer linguistic connection than the language teacher to the linguist and, perhaps, more formal schooling, there may be a tendency for the language teacher to perceive that they have lower status. Avoid this. Neither the linguist (!) nor the interpreter should communicate any attitude of superiority to the language teacher.

Lab sessions can involve culture shock and problems that the linguist did not foresee. For example, I was working once with a couple of Pirahã men who had contracted colds from visiting Brazilians on the TransAmazon Highway. As we were working, they would sneeze and then take the mucous and fling it away from them, often landing on my notebook paper or on me. Since the Pirahãs see absolutely nothing unhygienic about this, they could not understand my request that they not do this. 'We have colds', they remonstrated. 'This stuff comes out your nose when you have a cold. Don't you get colds, Dan?' Or another time I was working with a group that had apparently eaten something hard to digest. There were sounds and smells coming out of their nether regions that are hard to describe. As I told a friend later, they passed more gas than the Alaska pipeline. One time a female language teacher decided to flirt with me. She wasn't very subtle. She took her dress off and asked if I had ever had sex with women other than my wife. This was apparently no big deal to her, but it was, um, distracting in the midst of transcription to think of a way to say no politely. And then, of course, I offend others. I am hairy to Amazonian Indians and smell quite bad (Westerners perspire much more than Native Americans and thus do smell much worse in hot, humid climates). Be prepared to accept things with a smile that you might not have anticipated.

Monica Macaulay has written one of the best short pieces on culture shock (or culture strain) in the field that I have read. Here are some of her experiences:

"Let me describe some of the things I was dealing with:

First, I had trouble finding food. Eventually, I was able to establish a routine where I had a noon meal at a restaurant, and otherwise ate bananas and tomato sandwiches. But bananas, tomatoes and bread were all things I could only buy twice a week, on the two market days. If I didn't buy enough, and ran out of food, sometimes I could buy little packaged pastries at one of the stores, but that was about it. I lost a lot of weight.

Second, it was the rainy season, and I was at an altitude of about 9,000 feet. It was extremely cold, and I was not prepared for it. I wore layers and layers of clothes, and froze when I had to wash something. We did have electricity in the house I lived in—most houses in the village had it. But of course there was no heat, and often when it rained the lights would go out.

I almost immediately became covered in little red bites from invisible insects. No bug spray or lotion helped, and this continued for the entire time I was there...

I did manage to find consultants fairly easily, but they stood me up all the time. Of course the notion of scheduling appointments was not quite the same to the people I was dealing with as it was to me, with my Midwestern expectations of promptness and politeness. If the consultant wasn't available, the day was shot for me—it was very hard to get people to agree to work without at least a day's notice.

Then there was my work itself: the more I worked on the language, the more incompetent I felt. I had terrible fears that I was putting myself through this torture for nothing—that there would be no results to show for it when I returned home.

One thing that I expected that I actually did not find was unwanted attention from men. I had been in enough big cities in Mexico to know what to expect along those lines, but it did not happen in Chalcatongo, at least not from the locals. They watched me, certainly, but it was more like being an animal in a zoo than a woman being ogled by men.

Unfortunately, there were a few men there from bigger cities, and they did give me some trouble. One in particular was a real problem. He would get drunk and pound on my door, and say strange things to me. At times I felt completely confined to my room—that it simply was not safe to go out. This was especially problematic since of course the bathroom was across the courtyard.

Most of the time, though, I was simply a curiosity. Occasionally there was ridicule that I was aware of, but usually they just stared at me...
... how alien I felt, and how alien they regarded me as being."

3.4.6. Serial teaching, group teaching, and individual teachers

3.4.6.1. Group sessions

In any single laboratory session, the linguist will work with at least one language teacher. But they could also work with multiple teachers simultaneously. It is often useful for the linguist to work with small groups as well as with individuals. Group sessions (3-4 language teachers) have various advantages: (i) they can allow the linguist to put the language to use right away, by checking immediately what one speaker gives with another speaker in the same session; (ii) they immediately provide the linguist with alternative phrasings and pronunciations of the data and alternative ways of telling and/or interpreting a short text; (iii) they provide speakers a chance to discuss their language (by discussing their answers and the linguist's questions), developing linguistic sophistication and awareness of the linguist's objectives, at the same time that it also helps the linguist to learn more of the language and meta-language by listening attentively to the native speakers converse.

3.4.6.2. Serial teaching in lab sessions

The Pirahãs have never developed a great deal of patience for sitting and teaching me their language. So rather than have one person sit for long sessions, I schedule different language teachers for every 20-30 minutes for the entire morning, giving myself a coffee break or two in between sessions. This breaks up my day, keeps

language teachers from getting bored, and provides many opportunities for clarifying and checking other teachers' data. Serial sessions also have another significant advantage over working long periods with a single teacher. Speakers who only work 15-20 minutes per day will not usually see the linguist as substantially in debt to them for their time and services. They can see their participation as a break, as 'fun', as a change, etc. rather than serious work. And this lightened attitude and environment can translate into better exchanges and more openness between the linguist and the teacher.

The upshot of this is that the fieldworker should remember that there are various options that should be explored for working with language teachers beyond working with a single person for long periods of time.

It is not so much what you do, but what you do *next*

This may all make the lab session look like a traumatic experience. But in fact these sessions will almost certainly be rewarding and exciting experiences. A general rule of thumb is the old advice 'It's not what you *do* that matters, it is what you do *next*.' You *will* make lots of embarrassing, side-splittingly stupid and funny mistakes. You will murder the language, utter profanities unintentionally, and do any number of other things that will embarrass you and confuse the language teacher terribly. This is all unavoidable. But what the linguist does next, what *you* do next, that is, after the embarrassing mistake, is what really matters. Laugh it off. Go back to the drawing board and start again. Do that and you will succeed. Don't do it and you will fail. Period.

3.5. Training language teachers

3.5.1. Why train teachers

Why would the linguist, whose time is already far too limited, want to take any extra time away from his or her linguistic investigations to train language teachers in any skill not directly related to the linguist's own goals? The answer is primarily that this is an ethical responsibility. Just as the linguistic research is ultimately intended to enhance the linguist's career and improve the linguist's quality of life, so the research should enhance the teacher's quality of life. This is *empowering* fieldwork and it is not an option. Linguists and anthropologists, like missionaries, have the skeleton in the early histories of their disciplines of following in the wake of and contributing to attitudes of colonialism (every fieldworker should read Said's () *Orientalism*). Passing on skills and knowledge in mutual exchange and respect should be the hallmark of modern fieldwork. The linguist takes and must give back. And money is not enough.

When teachers are trained and interested in the research on their language, they can become pro-active co-researchers. As they come to understand and identify with the research on their language, they can gather a good deal of the data, record it, and transcribe it. They can also translate it themselves. The linguist can then review all the data they have collected and verify it against the developing analysis and verify it in light of the developing analysis and check it with other speakers for relevance, naturalness, accuracy, etc. I found that this method worked reasonably well with the Banawá. Alan Vogel (p.c.) tells me that this works well with the Jarawara people of Brazil.

3.5.2. What kind of training?

The linguist has an obligation to at least train the teachers and others in the community in technology, mechanics, medicine, linguistics, general world knowledge,

and any other kind of knowledge that the community sees as important that the linguist is able to help them with.

I have trained Pirahãs in the operation of my motor boat. We have had lots of fun driving this National Science Foundation-purchased boat and 40 horsepower engine around the Maici river. Pirahã men have piloted us right into jungle growth on the river bank and onto beaches. But we had a blast. And now when I am in the village, I know that if I am injured or ill, the Pirahãs themselves can pilot me out. So I get a direct return on this investment of time. And the Pirahãs now have a skill. They do not have motorboats, but they enjoy showing outsiders how they can pilot mine. The Kisedje people of the Xingu regions of Brazil already know how to drive cars, pilot motor boats, and handle other types of Western equipment. However, they need computers for some of the activities of their tribal association and want their people trained to use these computers. So my project provided them with a laptop computer and training in its use. We are on regular email contact now, no matter where I am in the world. I have also trained people in giving injections of anti-venom and in the use of anti-malarial pills. I regularly take in National Geographic and other movies about other regions of the world so that they can learn about other peoples, regions, animals, etc. These discussions are enjoyable activities for all of us.

How does one go about training language teachers? This will depend tremendously on the level of familiarity of the people with the things that the linguist brings to the field, e.g. education, equipment, medicine, etc. The more familiar they are, the more likely they are to have specific objectives in training in one or more of these areas. For linguistics, the linguist should discuss his or her objectives and the methodology of linguistics. And they must always be careful to explain global and local goals. Why did they come to the community? What are they trying to learn about in today's session. Why is the linguist asking this or that question? What are they trying to learn today? Training can also be facilitated by asking the teacher for his or her advice and insights. This type of reflection helps the teacher to think like a linguist about the language. Different approaches are required by different cultural contexts.

3.6. Styles of work

Some field linguists work with language teachers eight hours a day, seven days a week, the entire time that they are in the community. Others, myself included, find that a less intensive lab schedule works better. I recommend two-four hours per day of lab sessions, including verification of data collected with multiple teachers. The remainder of the day should be used for data-processings, analysis, hypothesis formation, language practice, and planning the next session. (See also section __ on how I spend a typical day in the village.)

3.7. More on data-collection

3.7.1. Processing the data

Data that are not processed in the field, with the intensive participation of native speakers, are relatively useless. The fieldworker will waste much effort if texts and other data are collected to be processed when they return to her home institution. Lab sessions must be dedicated to transcribing, translating, and testing all material.

Part of a the data processing, the easy part, is careful annotation of the data for storage (this is a form of 'metadata', though I avoid this term here because of its largely

computational connotations, taken up briefly in 5.8.). Suggestions for annotation are given in (3.4) below (which borrows from Samarin ((1967); see also the EMELD website, http://emeld.org).

(3.4) Data annotation

a. Code: This gives the genre of the text (e.g. N(arrative), E(xpository), H(ortatory), P(rocedural).
b. Sound file number, i.e. where the text is found in the audio database.
c. Topic: What is the text about ('fishing story', 'story about jungle spirits', etc.)
d. Date: When the text was collected and when the tape was transcribed (thus there will be two dates).
e. Language teacher information: Who produced the text; who helped transcribe and translate the text; sociocultural information on language teachers (e.g. age, gender, marital status, occupation, birthplace, knowledge of other languages, religion, language of parents, societal status, etc.)
f. Team member information: Which linguists worked on the text and what was the contribution of each?
g. Place: where was the text recorded (village, city, university, etc.).
h. Any notable characteristics of the text (e.g. this ritual text includes prosodic phrasing that appears quite unusual; the language teacher uses expression ***x*** a great deal, etc.).
i. Other comments the linguist believes are relevant.
j. Each line of the text should be numbered and cross-referenced to its location in the audio database (how can a reader find it to listen to it, quickly?).

3.7.2. Transcription

As a rule of thumb, never estimate less than a 4:1 ratio between transcription and recordings. That is, for each hour of recording, it will take the linguist at least three hours to transcribe the data, if they are already very familar with the language and its sounds. If you are just beginning in a new language with unfamiliar sounds, the ratio is more likely to be 5:1 or 6:1, or even more, until you get used to transcribing this particular language.

I usually proceed as follows. First, I transcribe the text (or other data) on my own. Then I read my transcription to a native speaker. With a different color of ink, I write in that speaker's correction of my transcription, as I pronounced it. Where doubts and confusion arise, I play the original recording of the text and ask the teacher to tell me what was said and what it means. I use my own pronunciation initially because it is the best and most immedate check of my ability to pronounce and transcribe the language. The native speaker will almost always easily understand the original text, since it is by another native speaker. But I want to see if *I* have it right. I indicate whether I think any correction is of the actual phonetics or whether it is a 'prescriptive' correction, i.e. that it reflects what the second speaker believes that the first speaker *should* have said if speaking correctly (it is very common for speakers to make fun of one another and to think that the other's use or knowledge of the language is inferior to their own – common to anyone who has much experience around universities).

I then continue with this same language teacher to get a translation of the text as a whole, the individual lines or sentences of the text, and, to the degree possible, individual words and morphemes. Following this section, I study the text and translation, making notes of doubts I still have and structures that are unusual in

content, form, linguistic complexity, or cultural information. I often repeat this entire process with one or two other language teachers. Finally, I often go through the entire text, when it is particularly complex, with the original giver of the text.

In cases of unresolved doubt on the sounds (segments or prosodies) of the text, I look at wave forms and spectrograms. In cases of continuing doubts on meaning, I may continue to investigate with other language teachers or I may simply set the text aside for a while (perhaps even years).

I recommend too that indelible ink (waterproof at a minimum) be used for all transcriptions and that corrections be done only by strikethrough, never completely obscuring the corrected data, because that could, on subsequent reflection or investigation turn out to be the more accurate transcription after all.

3.7.3. Fieldwork without language teachers

David Gil (email, 14-October-2005) gave me an interesting answer to a question I put to him on working with language teachers:

> 'To be honest, for the last decade or so I've actually done very little informant work myself. Reasons are, I find other sources of evidence generally more reliable, and using other such sources more fun and more rewarding. In fact, I would go so far as to say that I haven't done any informant work at all in many years on any of the issues that REALLY interest me; the little that I have done sporadically is mostly to check things for other people, or for very mechanical things like collecting word lists... As a result, my main source of evidence is naturalistic speech (via either eavesdropping or recording and then transcribing longer stretches), with various types of experiments as an alternative.'

Eavesdropping can indeed often be a useful resource, even when the linguist is not in a situation similar to Gil's. One can often find what they need by spending unstructured time with native speakers and engaging in directed, selective eavesdropping. That is, the linguist can have a specific question in mind and listen for it to come up (obvious examples would be greetings and leavetakings, verb forms, pragmatic conventions, phonological features of natural speech as opposed to elicited speech, etc.). The linguist can also use eavesdropping for probing, i.e. looking for new structures that they have not encountered before (or doesn't remember encountering). But it is important then that the linguist always have pen and paper or, where practical, a small taperecorder, to hand at all times to jot things down. It is of no use to try to remember at the end of the day useful sentences overhead earlier.

3.7.4. Coaxing texts out of speakers

Here are some of my thoughts on ideas on collecting texts. It is not always easy to get a speaker to give you a natural text. I recommend Longacre () as a general overview of discourse analysis. The reader is also referred to ___ for more on discourse analysis.

Alan Vogel, who has worked for many years on the Jarawara language, recommends the following:
"One thing I do is always carry a list in my pocket of stories I want to record. When I am talking to people, and I hear a reference to some experience or story that sounds worth recording, I make a note to myself to record the story later, jotting down the

person's name and something about the subject matter. And I ask the person if he would be willing to record the story another day. Then later, when we both have time, I record it. This is a good way of avoiding the problem of sitting down with someone and asking them to tell you a story, and they don't tell a good story, because you don't know what stories they know (or maybe they are not a good story teller)."

NARRATIVES: Some speakers will not want to give informal narratives. They will want to provide the linguist with formalized/stylized texts of cultural significance, i.e. recognized oral literature. Such material is of course wonderful and the linguist certainly must collect a good deal of it. However, the linguist also needs informal narratives of the type 'What I did for my summer vacation', 'How my fishing trip went today', 'What I told my son to do to avoid jaguars', 'How my little girl made her dress', etc. Different speakers will have different abilities and preferences for different kinds of narrative texts. There is no magic answer. One simply has to experiment with different methods and speakers. But one should begin with the simple stories and work up to traditional stories, which are longer, often use archaic language, and are much more difficult to analyze. Moreover, in many communities only certain elders are allowed to provide, translate, or otherwise work on traditional stories with the linguist.

PROCEDURAL: This kind of discourse is easier to collect, because it involves a speaker telling the linguist how to make something, following a specific order of activities, e.g. a recipe, how to make a bow and arrow, etc. These were the first texts I ever collected among the Pirahãs. And they are among the easiest to understand, since you can pick out individual parts of the process and figure out fairly easily how the overall structure of the text works. It is an excellent genre for collecting imperatives, temporal connectives, and other natural features of recipes, etc.

EXPOSITORY: These are explanations, ideally of culturally important information. So a language teacher might explain how a man becomes a shaman, what the village headman was talking about last night in the text you could not understand, etc. Again, these are usually not too difficult to collect. They have characteristic aspects, tenses, and other features which set them off.

HORTATORY: These texts are often quite difficult to get in elicitation, though they are usually much easier in eavesdropping (and for this reason the effective eavesdropper should always be armed with a recorder and good microphone, ready to be activated at a second's notice).[21]

CONVERSATIONS: Conversations are at once the most important genre of text to collect (because they contain natural, everyday use of the grammar) and the most difficult. To set two or three speakers down together and then say to them 'Converse', is not conducive to natural discourse. But conversations can be recorded. In July 2004, for example, I was able to record a natural, long (30 minutes), and linguistically rich conversation from two Banawá men, Sabatao and Bido. They each wore headsets with high-quality unidirectional microphones and were recorded onto separate channels on a digital taperecorder. The conversation was then transcribed, glossed, and filed. It is the best data I have ever collected from the Banawá.

[21] Of course, one must never record anyone without their permission. So the community should be asked if it is OK for the linguist to record things spontaneously. Assuming it grants permission, then for any recording made in eavesdropping conditions, the linguist must then get the specific and explicit permission of all those recorded for that recording to be kept, processed, and used in linguistic analysis.

At the same time, it proved much harder to collect a similarly natural conversation from the Pirahãs, whom I know much better. I tried various strategies after it became clear that just asking two people to converse was not going to give useful results. I have just set with people in their huts, with the recorder running, often getting natural conversation. However, since they are obviously not wearing headsets in such circumstances, the sound quality of such recordings is far inferior. Nevertheless, it is good enough for prosodic and morphological analyses in most cases.

3.8. Digitization of data and the internet

Before travelling to the field, the field researcher and all members of her team (which may include no one else but the lone fieldworker) should be trained in the field-collection of audio, video and pictorial primary data and determine the form of the notes and metadata to be associated with the collected data in the data base, e.g. Name, Tribe, Dialect; Gender; Age; etc. Any less-experienced members of the field team should also practice data-collection and field-analysis prior to the fieldwork seasons. Once in the field, members of the team should follow their pre-agreed upon plan to collect, transcribe, and conduct preliminary analysis of captured data. Again, unprocessed data is almost always useless away from the field situation. It is also vital that the team ensure that all collected data are secured and backed up to alternate media, e.g. DVDs and copied onto each team member's computer in the field (i.e. each team member's laptop should contain a full copy of the entire team's data). Returning to the home institution the data should be further backed-up, preferably using institution-wide resources that enjoy a long-term commitment of the institution's resources and administration.

In today's world, it is important that the fieldresearcher attempt to make her research results (at some stage of development, not necessarily including raw data) web-accessible, assuming that the speech community agrees. The planning process for this should include at least the following: (i) a list of desiderata for a preliminary website (e.g. data-retrieval, video-audio coordination on the website); (ii) a plan for the participation of a web-programmer in the site's design; (iii) a discussion for answers to questions like the following: (a) how can data be optimally accessible to linguists and other users via the Internet; (b) how the underlying data-base is best structured and constructed; (c) how will web-based users interact with the site; (d) what is the efficacy of different kinds of material to be made available for retrieval from the web data base; (e) how best to link video, audio, and labelled files to the orthographic and phonetic transcriptions of the texts collected. etc.

Finally, in designing the final site, the fieldresearcher/team should take a 'story-board' approach to experiment with design ideas, also inviting other university staff, colleagues, and students to participate. Presentations and discussions should be used to discover usability errors or conceptual design flaws before the latter implementation stages. At each stage of development of ideas on web-preservation expected outcomes should be clear to the field team.

These planning stages will then be followed by actual site construction. During this phase the research team, in conjunction with the web-programmer, will: (a) construct the underlying database; (b) populate the database from analysed field data; (c) construct the website front-end working from the agreed story-board; (d) program the agreed methodologies for the extraction and viewing of the underlying data; (e) conduct usability trials on the prototype system with interested parties (e.g. linguists experienced in web design and/or field linguistics); (f) consult with a wide-range of

experienced experts to ensure best-practice and comply with emerging international standards in web-archiving of field data, e.g. the Open Languages Archive Community (OLAC); Electronic Metastructure for Electronic Languages Data (EMELD); Oxford Text Archive (OTA) and others.

It is always useful for field researchers to handle and process the data multiple times to better control it. But fieldnotes in longhand also provide for creating symbols not available on computers initially, and can be done when not near one's computer, as often arises in field situations). All data should be copied to a separate server, e.g. the server of the linguist's home department. DVD copies are also made and then ideally would be made available to the appropriate institutions of the country of research, e.g. for Brazil, the Museu Nacional in Rio de Janeiro. At the home institution, initial field transcriptions are expanded to include as much of the phonetic nuances as possible, up to the point that members of the team agree that they have reached the 'point of diminishing returns' relevant to the project. Sound files are also analyzed in more detail, again using an advanced acoustic measurement program. Video files should be studied and discussed, e.g. as to how hand gestures, facial expressions, and other features (might) correlate with grammatical and cultural features of the texts being told. Tagging of texts, audio files, and video files will include any special/additional information agreed upon by the team.

Attention must also be given to then assessing the final product and ensuring that it continues to serve the agreed-upon purposes of the particular language project, e.g. (i) transcriptions of written texts downloadable for each text, both separately and along with their supporting audio (and/or) files. Readers might also have the options of downloading with the transcriptions other information, e.g. ToBI labellings (i.e. any combination of files, including downloading only audio or video files); (ii) each individual sentence of a transcribed text should ideally be downloadable individually, along with its supporting sound file and various annotations/labellings; (iii) some thought should be given to a general constraint to serve all interested parties with Internet access, including many in the third world with slow, dial-up connections. Therefore, during the pilot-webpage development phase, the fieldresearcher should be seeking feedback from all users to design a future site that can facilitate use by both high-end and low-end technology users. These are of course just a few ideas and their implementation and nature will vary dramatically from project to project.

Webpages shuld use platforms, software, and equipment backed by long-term institutional commitments.