CHAPTER 8. MONOLINGUAL FIELDWORK

8.1. General considerations

Working monolingually can at times be like working on the hieroglyphics of lost languages – except without a Rosetta Stone.

Some researchers (Berg (), Matthewson ()) refer to the importance of a 'metalanguage' in doing linguistics research. That is, a language which is not the target language, but which both the linguist and the language teacher speak. If you have a metalanguage to draw on, many tasks will be easier and perhaps even more effective, e.g. getting translations from the language of study to the metalanguage, examining 'truth conditions' of sentences more easily, etc. Let us refer to situations in which there is a metalanguage available as 'bilingual fieldwork'. If there is no metalanguage available, we can refer to the situation as 'monolingual fieldwork'. In this chapter, I want to provide some suggestions for working monolingually, as well as some reasons that it might actually be superior to bilingual field research for a number of purposes. Just to remind the reader of my philosophy of field methodology, however, I do not believe that there is a 'best' way to do fieldwork. Many ideas and possibilities should be explored, as many methodologies as you can think of or read about should be tested. In fieldwork, the more ideas the better.

I first learned of monolingual fieldwork in 1976, when I took my first course in linguistics from Kenneth Pike, one of the preeminent linguists of the first half of the 20th century. In one of my first linguistic classes, a speaker of a language that Pike had never studied was brought in to the classroom. Pike switched to Mixtec, which the speaker of this other language did not know. Pike then proceeded to speak to the language teacher in Mixtec, showing her a number of natural objects, e.g. fruit, sticks, stones, leaves, etc. and doing things with them, such as dropping them, throwing them, breaking them, using them to hit people, etc. Within 30 minutes he had filled all the available blackboard and overhead projector space with data. He then stopped and thanked the teacher. He proceeded to tell us about the phonemic structure of the language, the grammar (basic word structure and sentence structure), and even was able to classify the language. For a new linguistics student, or even for an old hand, it was most impressive.

To much applause, the speaker left, quite impressed herself.

Since then I myself have done such 'monolingual demonstrations' many times, at the University of Pittsburgh, Presidency College in Madras, India, the University of Campinas, Brazil, the University of Manchester, United Kingdom, and other places. The two that most stand out in my mind, however, are demonstrations that I did at the annual meeting of the Linguistic Society of America, in Manhatten, and a special forum to honor the memory of Kenneth Pike at the University of Michigan. Both of the latter lasted two hours and involved two speakers of the same language in each, man and woman in each, on Kisi and Nepali, respectively, languages I knew absolutely nothing about beforehand. At the LSA meeting, over 110 professional linguists were present, many of whom had more field experience than I did (though not necessarily more monolingual field experience). In fact, there were specialists on the Kisi language in the crowd. In Michigan, there were specialists on Nepali in the audience and Pike's family was present. There is a considerable amount of pressure on you each time you do such a demonstration and many people hope that you will really get something wrong, or at least the possibility that you might adds to the entertainment value and the suspense. But these 'shows', though I consider them legitimate and very important teaching tools, using them now in most of my introductory linguistics classes, do not begin to bring the

linguist under the same amount of pressure to perform as real fieldwork in a community of speakers where they have research objectives crucial to a particular state of her/his career and crucial to the language community (perhaps) or to the relevant funding agency, etc.

Before my demonstration at the LSA meeting, I flew to Dallas, to meet with Ken Pike, not long before he died, as it turned out, and to ask him why he thought monolingual fieldwork was so important. The main reason that stood out to me from our conversations on the subject was that monolingual fieldwork and monolingual demonstrations teach us about language as a holistic experience. They involve making sense out of interdependent facts about communication, e.g. gesture, intonation, body orientation, facial expression, accent, etc. in ways that simple elicitation, discourse studies, or investigating natural corpora, all of these mediated through a metalanguage, simply could never do. Pike's view of the importance of monolingual fieldwork thus follows from his own theory of language as part of human behavior (Pike (1967)).

By being forced to figure out how language, grammar, the body, and the social environment are all integrated in communication, the grammar in a sense (regardless of theoretical perspective) becomes more 'concrete' or more intuitive and more easily learnable. There are other advantages to monolingual fieldwork that I mention directly, but this is very important reason – the 'phenomenology of language'.

There are various reasons why one might work monolingually. Here are some of the more important ones.

First, it could be that you *must* work monolingually. This was my case with the Pirahãs and it has been so for other field researchers. It is very rare today to find an entire people group that speaks no outside language, except for a few phrases and lexemes. But the Pirahã, for important cultural reasons (Everett (2005)) have chosen to not learn Portuguese or any other language and have insisted on remaining monolingual. Therefore, there was no choice for me. Either I conducted monolingual research or I would have been forced to move on to another group. I believe that the field of linguistics has been enriched by what it has learned about the Pirahã language over the years, however, so I am very glad that I made the decision to tough it out and work monolingually with the Pirahãs.

Another reason for working monolingually is that you may want to learn the language better than you might under normal fieldwork conditions, even though you might plan to eventually move to a metalanguage. In this sense, the monolingual method of fieldwork is just a starting point for you.

A reason that some people work monolingually is because they believe that it is superior all around to using a metalanguage, as difficult as it may be for some field researchers to believe. That is, working through texts, semantics, pragmatics, and so on, in only the language of study, is seen by some to give ultimately a better grasp of the language, culture, grammar, and people than the 'cheat' of working through a metalanguage. I do not believe this. But it can be a very well-reasoned position and it is not one to set aside lightly. Usually, it is the view of people (such as missionaries) who have much longer-term goals than the average linguist. But if you want to work intensively to understand one language and people, and are willing to commit many years to the effort, a case can be made that working monolingually is better.

If Pike was right in his own writings and lectures on the subject, a researcher might adopt the monolingual method in order to develop a deeper intuitive grasp of the language. How does monolingual research deepen intuitions about a language? Well, it does this by, as I stated at the outset, summarizing Pike, forcing the researcher to

approach the language, the grammar, and the people holistically, learning all simultaneously. It does this because when there is no metalanguage, the researcher must pay attention to every gesture, every expression, every outsider remark, every response, all nuances of the utterance as communicative and cultural event (see again Everett (2005)) in order to begin to make sense of what is said and begin to make an inroad into the understanding of this new language and culture. To put this in terms that Pike invented, but that have been quite influential, especially in the anthropological literature, the fieldworker is trying to move from an *etic* perspective to an *emic* perspective, i.e. from seeing only the surface, physical character of events and states, to understanding the meaning of what is heard and seen, as someone on the inside of the system (though, realistically, of course, one never is going to become an insider).

Yet another reason for working monolingually is to demonstrate greater respect for the people whose language/grammar you aim to study. This respect emerges as the people see that you are avoiding what may be to them 'languages of domination'. That is, the national language of the country in which they are found, usually the language of the 'conquerors', perhaps still (as with many groups I have worked with) having very negative connotations. Morever, by forcing yourself to learn the people's language and use it as the (reflexive) medium for studying itself, the field researcher demonstrates very clearly and publicly their willingness to subordinate themself to these people. One way, of course, that this is shown, is that the linguist willingly subjects her/himself to becoming a laughing stock, at least temporarily during language-learning, as a by-product of a genuine effort to learn, and thus, attribute value the people.

An additional reason for working monolingually that I will give here is one that I have argued for elsewhere (Everett (2005)) but which is admittedly very controversial, namely, that it is not always possible to translate between languages, i.e. that not all languages have the same expressive power. In other words, a metalanguage may simply fail you in two ways: (i) by not having the wherewithal to talk about concepts in the target language and (ii) by misleading the linguist into putting concepts that are in fact not understood in terms of the concepts expressed in another language and culture, which are roughly, but too roughly, equivalent or in fact very different.

Of course, there are reasons why a field researcher might legitimately choose not to work monolingually. These include at least the following. First, time is always limited and it may be that in a particular research project there is simply not time to work monolingually, that the researcher simply must use a metalanguage to get at the data they need in the amount of time available. This is fine. But then, of course, all the other advantages of monolingual field research discussed above will be forfeited. And the fieldworker will have to avoid monolingual communities. There is nothing new at all, though, in the idea that researchers cannot do everything but can only do what they have time to do and nothing more. Another reason to avoid working monolingually is to reduce the risks that the field research will fail to turn up anything useful. This is a legitimate concern. If your objective is detailed semantic analysis then, as Matthewson (2004) makes clear, the absence of a metalanguage could adversely affect your research or, at least, require much more time for the same level of analysis. The benefits of monolingual research in this case could be 'outranked' by the disadvantages of working without a metalanguage towards certin goals, especially semantic ones. There is a risk, then, that working monolingually with these goals could result in spending a lot of time and coming away with nothing to show for it theoretically. I am skeptical that this would happen, but it is certainly a reasonable concern for someone contemplating a fieldwork methodology.

A final reason I will mention here that might lead someone to avoid monolingual field research is when the field situation could require moral, ethical, or political understanding from the outset of the field research. If you are working in an area where people are particularly suspicious of people from your home country, for example, it will likely be to your advantage to use a trade language, the national language, or some other language shared by you and the local community in order to more effectively explain your purposes and to understand the relationship that the community expects with you and the constraints that it expects you to operate under.

Choosing whether to work monolingually, therefore, is a complex decision that will have numerous implications for the fieldworker's research success, trust from the community, overall effectiveness, and, also important, enjoyment of her/his field situation. There is no really 'correct' choice to make. Each person has to make the choice that think best. The important thing is that people do field research.

Now I would like to include three anecdotes, with important lessons to teach the potential fieldworker, from linguists who have worked monolingually. The first anecdote is from my own experience.[48]

In early December 1977, when I was but a lad of 26, I flew in a Cessna 206 aircraft (which I fondly refer to as the 'pukemobile', given my problems with motion sickness) for one hour and forty-five minutes Northeast of Porto Velho, Brazil, to make my initial contact with the Pirahãs. Before I got on the missionary plane that was to fly me to the village, I was full of thoughts about whether I had indeed chosen a good way to spend this time of my life. Was I really up to the task? I had heard about the Pirahãs. In fact, SIL had asked me to work with the Pirahãs because their language had stymied two previous SIL teams and I had done very well in my linguistics training. As the plane took off and we were flying low over the Amazon jungle (so much of it has been cut down since that flight), my concerns intensified, aggravated by my growing motion sickness. What would the people think of me? What would I think of them? Would the monolingual methodology Pike urged me actually work in real life, apart from the 'shows' I had seen in classrooms? (At this time I had not done any such 'shows' myself.)

Within the first thirty minutes I was feeling queasy. By the end of the first hour, I was trying to find a happy place and not look out the window. Then suddenly, the pilot offered me a tuna sandwich with onions. I had to talk and turn off my olfactory system simultaneously. Half an hour later we were circling the Pirahã village, where the previous SIL team had, at great expense and effort, built an airstrip (at the cost of about 1,500 trees or so). Just as I was beginning to hope that we would crash, anything to relieve my misery, we touched down and came to a quick stop at the end of the airstrip. We turned around and taxied back the 450 meters or so to the village path were a large number of Pirahãs were waiting, yelling, and gesticulating. I was happy not to have thrown up on the plane, though the temptation to do so was still present. Out of the high altitude and cool air above the Amazon, my sickness was compounded by a temperature of approximately 90 degees (Fahrenheit) and humidy of about 99%. The plane stopped and the door opened. I got out. I didn't yet speak either Pirahã or Portuguese, so I was literally speechless. As the pilot and two friends of his who had flown along started to look around, I heard the pilot say that this was the weirdest place

[48] I also used these anecdotes in Everett (), from which this chapter borrows heavily and freely.

he ever flew into. Walking along the path to the village, overgrown with grass up to my knees and with river water up to my mid-calf, I smelled hair being singed. My head was throbbing, I was perspiring heavily, and I was thinking that in a few minutes the plane was going to leave me there. (One of the passengers who had visited the Pirahãs several times, but spoke none of the language, had offered to spend the next ten days – the length of this first, exploratory stay – with me. So I would not be completely alone.) The Pirahãs were clearly asking me things, but I was paying little attention, just thinking that this language sounded like a greater challenge than my brains were up to. The fellow singeing the hair gestured for me to come over and have a look. He squatted by a fire, in the sun, with no shade, and had a large rodent (a paca, I later learned) that he had just thrown whole onto the fire. Blood was coming out of its mouth, dripping from its protruding tongue, and the smoke from its hair was, let us say, pungent. I just managed to control my gag reflex. But now I was beginning to recover. I remembered that I had a notebook and a pen. I pulled out my notebook and pointed to the animal. He looked at it and said something. I wrote it down and said it back. He smiled and everyone else seemed pleased. So then I tried to refer to the whole process, the smoke, the fire, the animal, in an effort to get 'singeing the hair'. He said something back. This time I didn't bother to try to write it. It exceeded my short-term memory's capacity for strange syllables. I stopped there in the hot sun and picked up a stick. I got the word for stick, repeated by six or so Pirahã onlookers. Then I let the stick drop to the ground and got that phrase. And so on. Within an hour after beginning my own private monolingual demonstration, I was pretty sure that the language had only three or four vowels and a small number of consonants, some very strange sounds among the latter, and that it had two or three tones. I had also learned about twenty words. Over the next ten days, I learned a number of expressions, none of them particularly useful for normal conversation, but was coming to think that this job might actually be doable. I had promised myself not to read anything about the Pirahã language until I tried to figure some things out for myself first (this was not a good move and I strongly recommend against this – you should read everything you can on the language before ever going to the community). When I emerged from these ten days and started to read what Arlo Heinrichs and Steven Sheldon had written on the Pirahã language, I was pleased to learn that my ideas formed in those ten days were not so bizarre. This was going to take a long time, but I could do it.

When I first went to the village of the Banawa people (Arawan), my expectations for the first day were based, naturally enough, on my previous experience with the Pirahãs. But when I got off the plane, I knew things were very different. The jungle, the heat, humidity, and sounds were roughly the same. Yet men came up to me an addressed me in very good Portuguese. By the next morning, I was working with Sabatao Banawa, perhaps the best language teacher I have ever had. Though he had almost no formal schooling, he not only gave me very natural texts, but as we went through them to translate them together, his comments went something like this: 'This word means that the words here were spoken long ago, by a woman. This part of the word means that the one who is speaking is not sure. This part means that the pig was on a log, just above the ground.' And so forth. In other words, Sabatao was able to give me nearly morpheme-by-morpheme glosses. In my first three weeks among the Banawas, I felt I had learned more about their language than in my first six months with the Pirahãs. So even within a similar geographical area, field conditions can be radically different.

Let's turn to another part of the world now, for a final anecdote. This one comes from Loving (1975, 268) about her experience at the beginning of her career, working monolingually with the Awas of New Guinea.

> "*We were especially on the lookout to learn to say 'What is this?' After two weeks we were tired of pointing and we wondered if the Awas were not equally tired of seeing us point. Evidently they were not, for they continued to be gracious enough to give us new words as we continued to point. One day, we were cooking some greens around an open fire. I pointed to the food, directing my 'question' to an elderly man standing around looking into the pot. He turned to the man next to him and said '*anepomo*'. I repeated this thinking this was the name of the greens. He and several others smiled and then leaning towards me, he said '*tura*'..."*

What Loving had learned here was not what she had asked, but something much better – the precious phrase, 'What is this'. It is difficult to overemphasize how important this phrase is in learning a language. A companion phrase 'What is it/she/he doing?' is also extremely important to learn and Loving's anecdote provides a useful clue as to how both phrases could be learned in a monolingual field situation.

OK. We have seen some stories of how other people initiated their monolingual field research. Now it is time to move on to consider the methodology in more detail.

8.2. The *gavagai* residue

It is crucial from the outset here to remember that Postal's Maxims outrank any method. Moreover, it is important to recognize that all suggested methods for scientific research are heuristic procedures, not algorithms. Unlike baking a cake, following a set of methodological suggestions in science will not always give the same results. There are too many variables. The best that one can hope for is that the methods will be very useful. But the *art of fieldwork* (see Walcott ()) results from the fact that it is the individual fieldworker's resourcefulness, resilience, and creativity that will also be more responsible for success than any set of automated procedures. With these caveats, I turn to outline a method that has worked for me in my own monolingual field research.

Since this method involves beginning with simple words and working your way 'up' the grammar, progress assumes that you are actually understanding what they people are telling you. That is, it assumes there is a reasonable semantic match between the linguist's translation and the teacher's intended meanings. First, begin with individual words. Speakers will, in every language and culture I have ever heard about, almost immediately recognize when you indicate an object that you want the name of the object and they will give it to you. On the other hand, monolingual field research is always haunted by the spectre of Quine's (1960) 'indeterminacy of translation' problem, brought out most clearly in his famous *gavagai* example. The fact that this issue does not seem to be a tremendous problem in actual field experience is confidence-inspiring, yet it should still be sobering to fieldworkers, because it does arise. Moreover, the problem is such that it can arise without anyone noticing at first.

Summarizing loosely, here is the famous *gavagai* problem and how it emerges from Quine's philosophy. This problem is extremely relevant to fieldwork, because speakers may not always give the answers expected. How does the field linguist recover from bad information? Is it even possible to do so?

In *Word and Object* (1960) and *Ontological Relativism* (1977), Quine considers, for its philosophical lessons, a hypothetical problem for field linguists attempting to translate a hitherto unstudied language that the linguist does not speak. Here is how the problem goes:

One asks the question of a native speaker, by gesture or by metalanguage, 'What is that?', pointing, say, at a rabbit or some other object, and the native speaker utters *gavagai*. How can the linguist match the utterance of *gavagai* to a specific meaning? Does it mean 'rabbit'? Does it mean 'rabbit fur'? Does it mean 'token of a platonic rabbit type'? And so forth. Even if the native speaker were to mean 'rabbit', the linguist might never encounter a crucial counterexample to doubt their translation (unless they look hard, which they only would do if they had reason to doubt their initial translation which, as we have just seen, they would not have). How could you tell if you have the right meaning? Quine answers that in principle you could not know and therefore there is an 'indeterminacy of translation' problem. To some degree, this problem is a real and sobering one for the fieldworker. And it is never completely solvable. However, there is a bright side to the issue.

First, the *gavagai* problem never happens in exactly this way in fieldwork. Native speakers, however naive linguistically, will almost always give you the name of an object as a whole, e.g. 'rabbit', 'tree', etc. and will not intend by their answers parts or salient features of objects.[49] Of course, Quine would counter that you cannot ascertain the exact meaning of an elicited word, in principle. But the fieldworker's reply is that in the course of grammar writing and analysis of the language wrong interpretations 'come out in the wash', especially following the methodology of this book. That is, the issue might be important for philosophers, but it has perhaps no significant impact on fieldwork.

On the other hand, in a monolingual field situation one can never be sure, initially at least, that one has gotten the answer that one thinks they have gotten. Some 'false' answers can be easily discovered, e.g. when one points at a tree and the speaker, focusing on what is pointing, rather than what is being pointed at, says 'finger', instead of 'tree'. Other meanings are not so easy to determine in any case, e.g. verbal mood, aspect, etc.

Overall, of course, it is almost certain that no matter how long a fieldworker conducts research on a given language, there will be many words where the meaning the linguist has recorded is not quite right. And the same goes for many grammatical constructions. Some of these will, as I said, be resolved in the course of the grammar writing. Other errors will be recognized and resolved as the linguist learns to speak the language better. On the other hand, some mistranslations will never be recognized. There will always be a 'gavagai residue' in fieldwork between any two languages.[50]

It is simply vital for the linguist working monolingually (and, to a lesser degree, linguists working with a metalanguage) to always remember Quine's lesson, namely,

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[49] What does this tell us about human nature? Well, as Searle (to appear) notes, Homo sapiens share a strong, evolutionary attention to objects. I doubt that anyone could function well thinking of 'rabbit essences' when they saw a rabbit in most circumstances, instead of just 'rabbit', since only the latter is edible.

[50] QUOTE Grace on indeterminacy of translation.

that you might not be getting what you think you are getting. For this reason, Postal's Maxims and careful reasoning, checking, and re-checking become ever more important.

Let's consider some suggestions for monolingual fieldwork that might enable you to avoid or at least not be completely misled by the gavagai problem. The procedure below is very simply. Clearly the resourcefulness of the linguist is the main ingredient.

I usually begin my monolingual elicitation, whether in a monolingual community or during a demonstration, with objects from nature. So pick up a leaf, stick, rock, or some such to begin with. Get what you think its name is by pointing at it and saying what it is in your language. Don't just grunt. Use your language freely. This is natural. Then repeat back what you were given for correction. Now say the word again as you let the rock, whatever, drop to the ground. Write down (don't use a taperecorder yet. Just you and your ears and paper) what you get. Now say it back again. Now pick up another object of the same type and roughly same size and color. Show two fingers while letting both drop. Imitate. Write this down. Did the form of the verb change? Can you recognize any differences in the form of the nouns or noun phrase? You likely now have a form for plural or dual. Now pick up two other objects (same type, size, color) and repeat the process from the beginning. Now do it all over again with three, then four objects. You should be getting numerals and grammatical number, articles, etc. Always build up slowly, so that you can feel in control of what you are getting. Look at how much you are learning! And this is all with just a few natural objects and a single verb.

Now work with colors, sizes, and conjunctions (which you can get by mixing the object types, e.g. 'a rock and a stick fell to the ground'). After exploring these aspects of noun phrases for a bit, you can try some transitive verbs. Begin perhaps by having your language teacher hit you. You can do this by taking his hand (if appropriate) and hitting it lightly on your shoulder. Then you pretend to hit him. Work with this for a while until you feel fairly secure that you are getting a transitive construction. Now take a biggish stick. Hit yourself with this. Now pretend to hit your language teacher with it. Now have him hit you with it. Now have him it someone else. For every single action, get a description by your language teacher. Repeat after him and make sure that you watch reactions. It is very easy to confuse 'I' and 'you' in these circumstances. But as you repeat as you perform the action, if you describe what you are doing with the wrong pronoun, you will almost certainly be corrected. But if you don't repeat and make sure you are following, you could easily confuse the pronouns and confuse yourself for a while.

You are prepared, if you haven't already gotten this, to get the paradigm for pronouns (at least those corresponding to interlocutors in your environment). You can get at this or add to your knowledge by now switching to intransitive verbs, e.g. 'jump', 'stand up', 'walk away', 'crouch down', 'sit down', and so on.

These ideas should be enough for you to start your monolingual fieldwork well! And it is so much fun! You are learning things no one maybe ever has. And it is all your brain and creativity and the friendship you are building with your language teachers that is responsible for this! Organize your future sessions. Each day you will be building, making huge steps in your understanding. Work simultaneously on vocabulary memorization and greater fluency. Your comprehension, as is usual, will exceed your ability to produce. But it will all come, slowly but eventually and surely. Just takes a lot of hard work. But no secret to that.

From these data, that you should be collecting for two-three hours per day, you will begin your phonetic, phonological, morphological, semantic, and syntactic

analyses. After perhaps 12 weeks of hard work of this type, and accompanying language-learning, you should be in a position to begin collection of simple texts, following the methodology of chapter ____.

Finally, let's review the implications of the fact that working in a monolingual situation there is no 'metalanguage' (Matthewson (2004)) to use. So how does one come to understand verbal or other meanings? One thing is certain – you cannot tease apart or even discover the full range of verb meanings (including affixal meanings), e.g. tense, aspect, valence, aktionsart, argument structure, case, etc. simply going through texts. In a monolingual situation you cannot get translations for texts, for one thing. The best you can hope for are paraphrases. But since analysis of verbs requires subtle and accurate distinctions of verb meanings, you must come up with a method to help you do this.

Here are some suggestions:

First, act out scenarios. Let's say you're following a guide, e.g. the Lingua Descriptive Questionnaire, and you want to try to distinguish directional actions or to see whether such distinctions are made on the verb in the language. Try this. Assemble a few objects from the local environment, e.g. sticks, rocks, leaves, bones, tools, necklaces, etc., things that are all in regular use and seen as normal objects that one would handle within the community. Next, begin work initially with individual teachers, moving later to work with multiple teachers (see ___). It is important to use culturally relevant objects and tasks at the beginning of the research to build on people's confidence in their knowledge of their culture (there is so much opportunity for uncertainty on all sides in any case).

So take, say, a necklace, some beads, and the string (or whatever) used to make necklaces. Place the necklace on yourself. Get the description of what you did. *Record and film all of this*. Place the necklace on your language teacher, on a child, on a man, on a woman, etc. That is, as you have time and opportunity in this session, try to act out paradigms. (Always be careful to obey cultural constraints.)

Place the necklace on the ground. Place it on a table. Hang it from the roof. Drop it. Throw it. Toss it up and catch it. Take the beads and place one on the string. String several in succession. Let one bead fall off the string to the ground. Let another fall off onto a table or chair. Let all of them fall of on the table, chair, ground, etc. simultaneously. Get various (3-6) speakers to describe each one of your attempts.

Filming and recording all of this will give you good data, help you find directionals, numbers, positions, aspect, valency, transitivity, etc. And this is just a trivial example. Tremendous amounts of high-quality data can be collected in this way. But you need a plan. There are various questionnaires and aids to fieldworkers (see the LDQ in appendix ___ or visit the website for the Max Planck Institute for Evolutionary Anthropolgy: http://lingweb.eva.mpg.de/fieldtools/tools.htm).

You can also use films, of the type prepared by the Max Planck Institute for Psycholinguistics in Nijmegan. Using films, rather than acting things out, has both advantages and severe disadvantages. The advantages include the fact that film can do things you cannot (like make a bowl of beans suddenly appear on a table where there was nothing before).

There are, however, a number of disadvantages to using films instead of acting out scenes for elicitation. These are largely cultural. First, some language teachers may have a difficult time following two-dimensional electronic images. Second, they may not recognize the gender of the person on the film (many peoples consider long hair a sign of feminity or flat-chestedness a sign of masculinity, to cite two problems I have

encountered) and this is surprisingly distracting. Finally, many of the activities make little sense to some language teachers watching the films. Therefore, though I certainly recommend that films be used in elicitation, as well as other media, where applicable, they must be used very judiciously.

Say it back to several speakers.

Many times I have received crucial corrections on my third or fourth repetition to different native speakers. Inexperienced linguistic teachers often find it hard to know what the linguist is after (so does the linguist at times!) and find it even harder at times to correct the linguist (who is, after all, paying their salary in many cases and should have the 'right' to say whatever they want, or at least this is the impression I get sometimes). So checking the data with speakers other than the one who provided the original data is crucial to processing the data. Get these other speakers to paraphrase what the previous speaker said, as well as saying it back identically. This way, you have pronunciations of the same data by different speakers, as well as various alternative syntactic expressions of the same or similar (usually, but not always) content. If you can work via a metalanguage, ask each speaker for a translation. But in all cases, make sure you get paraphrases of difficult to understand data. Almost always, translations and paraphrases will vary from the original's meaning in subtle, yet significant and revealing ways.

If you overhear something and speak no language in common with the speech community, describe the context in a few lines next to the transcription (e.g. time of day, who was speaking, what they were doing, what you think they were saying, etc.). Then test your understading by trying to use the expression, as you understand it, when and where you think it would be appropriate to do so. Almost certainly you will discover that your initial guess was wrong (and if it wasn't, congratulations, but you might not know one way or the other at this stage anyway) and people will laugh at you. (I am laughing at you now just thinking about the mistakes you are going to make. Ha Ha.)

Generating Paradigms

A word about paradigms: lists or theoretical constructs? Wari' (Everett 2005)

The next thing you must do is to take the expressions you want to study and generate paradigms from them. Let's take our **squeat** example from the outset of the morphology chapter. What does it mean? Well, to get at this we write its context as uttered by someone, say, as they rise to leave, about 12ish, and as they walk towards the cafeteria. I ask someone else to paraphrase it and they say 'he's hungry and he thinks you are too'. Then I ask someone to say the phrase slowly and they something like **Let's go eat**. I ask someone else to repeat this and they also say **Let's go eat** or, perhaps, **Let us go eat**. Now I can try to build some paradigms from this expression. To do this, I divide the utterance into positions or 'slots' and try to put other words I have learned in each of these slots. An example of what someone studying English for the first might do is given in ():

(8.1) a. Let us go eat.
b. Try us go eat.
c. Make us go eat.
d. Help us go eat.

e. See us go eat.
f. Believe us go eat.
g. Run us go eat.

(8.2) a. Let me go eat.
b. Let you go eat.
c. Let him go eat.
d. Let them go eat. etc.

(8.3) a. Let us do eat.
b. Let us try eat.
c. Let us make eat.
d. Let us can eat.
e. Let us want eat.
f. Let us be eat. etc.

(8.4) a. Let us go run.
b. Let us go fish.
c. Let us go please.
d. Let us go work. etc.

Next, I work through all of these, asking whether each is acceptable/pretty/crooked/etc. and how they compare to one another, i.e. which would the native speaker think that they are most likely to use. Never be satisfied with an answer that simply says a form is 'good'. Get the native speaker to say it themselves. If they will not, then the form is almost certainly not 'good'. If they do, do they say it with natural speed and intonation and a solid sense that they understand it?

We can now ask what the linguist is supposed to learn from these paradigms? First, they learn that the verbs that can go in the first slot are limited. **Try** and **believe**, for example, are not allowed. Why not? What makes these verbs different from **let**, **make**, and the others? Let's say you hypothesize that **try** and **believe** are excluded because they are interpreted as second-person imperatives by native speakers. How could you test this hypothesis? That is, what data would you need to refute it, do you have such data, and is it refuted?

The point, of course, is not whether this initial hypothesis is right or wrong. All your initial hypotheses will likely be off to one degree or another. The point is that by developing these paradigms, you generate grammaticality differences and different hypotheses about the grammatical structure of the language, a way of implementing Postal's Maxims.

The development of paradigms must be restricted so that the initial data used to generate them come from *natural texts*, not elicitation. Using elicited data, which itself can be artificial, can *propagate artificiality* throughout the examples.

Next, test each paradigm with several speakers. If you see little or no disagreement in judgements between speakers, then you can move much more quickly to the next paradigm. If you do encounter disagreements (say, for example, that some speakers allow **try** and **believe** in the sample paradigms above) then ask them about this, howbeit *in*directly, never directly. For example, what does the controversial example mean to the speakers who claim that it is acceptable to them? Can they be

gotten to say it with intelligibility? What does the same example mean to those who reject it?

Now let's assume that you have worked your way through a paradigm and that you now believe that ou have a reasonable understanding of what a morpheme means. What next? One example of what to do next comes from the beautiful study by Ivan Lowe (), in which he shows how to 'track' the morpheme through texts, as reported above.

Can the morpheme be isolated? In fairly mechanical terms, does the same sequence of segments occur in different positions in the utterance? Can it occur with other segments, e.g. in answer to a question? Does this sequence correlate with a constant meaning in the utterances in which it occurs? Consider in this regard another example, from English:

(8.5) They were running but stopped suddenly.
(8.6) When I am done eating, I'll talk to you.
(8.7) I would rather be playing my guitar.
(8.8) Q: Are you done?
A: *No, I am **ing**.

Does it appear in some parts of texts more than other parts (e.g. introduction vs. conclusion; denoument vs. setting vs. build up, main theme 'line' vs subsidiary information lines, etc.)?

Deliberately show people things from your baggage that you do not think that they will have had previous experience with. If they allow it, you should have a video camera, preferably, or an audio recorder (keep it running as you unpack, settle, etc, and keep it pointed at the people speaking). Listen as you unpack, try to imitate, go back over your tapes later and try to figure out what was being said. Test your hypotheses by trying out phrases, based on your understanding of what they mean, with the people. Do you see or hear question-like behavior? Look for things like hand-gestures, eyebrow-raising, intonational changes, and question-like actions that might provide clues. Do any of these seem to be focused on potentially novel items among your possessions? In particular, you after things like 'What is that?', 'What is he doing?', etc. These are vitally useful phrases for your research, for getting along with the people, for negotiating your way through the community and the language. These are not usually easily to get by direct elicitation, yet they are uttered spontaneously in exactly the kind of situation your initial arrival in the community will create. Pay attention. Linguistically, such phrases are vital even if the linguist otherwise plans to work bilingually (i.e. using a trade language for lab work).