

Languages and Their Speakers

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Jacaltec *Field Work in Guatemala*

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INTRODUCTION

Jacaltec is one of the twenty-five languages of the Mayan family still spoken today. Its speakers number approximately 20,000, and they live in the northwest corner of Guatemala. Guatemalan society, in general, is divided into two separate groups, the Ladinos and the Indians. The Ladinos are for the most part descendants of the Spaniards; they speak Spanish and rule the country. More than half the country's population of five million are Indians, which is the largest proportion of Indian population in all the Latin American countries. They are descendants of the Maya civilization, essentially an agricultural society. They speak Mayan languages and to some extent Spanish when in contact with Ladinos.

In this presentation, the Jacaltec language will be considered from three different viewpoints: that of a field worker, that of a general linguist, and that of the native Jacaltec speakers. The nature of field work is the topic of the first part, including a discussion of the methods involved in investigating languages through native informants. The second part is a grammatical sketch of Jacaltec. It is focused on three features of the language that may be unfamiliar to speakers of English and other European languages but that are common to many languages

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of the world, occurring in African and Asian languages as well as in other Native American languages. The three characteristics of Jacaltec are its systems of case marking, directionals, and noun classification. The third part is a discussion of what it means to be a speaker of Jacaltec and deals with the attitudes and beliefs that Jacaltec people have toward their own and other peoples' languages.

1 FIELD METHODS

1.1 Field Work

The expression "field work" refers to scientific investigations carried out at the primary source of information. It is a term that has particular prominence in studies of human behavior and the artifacts of human cultures: for an anthropologist and a sociologist it means an investigation among the populations they are studying; for an archeologist it means an investigation of archeological sites. For a linguist it means the investigation of a language directly from its native speakers.

In order to carry out this type of research, the investigator must "go to the field" to be in direct contact with the source of information. In this context, the word "field" has the general meaning of "natural setting." It designates any type of location ranging from an urban center to a desert, from lush jungle to arid mountains. For example, anthropologists can do field work in lush rural Samoa or cold inhospitable Arctic land, archeologists in a desert of the Middle East or in the heart of an Italian city, and sociologists in the overcrowded suburbs of Rio de Janeiro, the ghettos of Chicago, or the suburbs of New York City. Going to the field usually implies an expedition of some importance, settling somewhere for a stay of a few weeks to a few years, although one can do field work only a few blocks away in the same city, a few hours at a time.

Linguistic field work consists of collecting material on a language directly from the native speakers. The language itself may be written or unwritten, partly described, or still unknown. It may be a thriving language or a language close to extinction. Although the expression "field work" traditionally evokes exotic and faraway scenery, it can also be used to refer to the investigation of very familiar languages such as French or Spanish, whenever this is done through the interviewing of native speakers.

What all linguistic field work situations have in common is that the information is provided by native speakers, generally referred to as "informants." Depending upon the circumstances, informants may be young adults or very old people, literate or illiterate, monolingual or fluent in a second language also known to the linguist. As for working

conditions, they may easily be imagined as ranging from comfortable to precarious indigenous habitats.

There are some good reasons for people to go into other cultures to do field work, and in particular to study their languages. Although particular cultures and languages vary in many details, there is a unity to human behavior that field workers aim at uncovering. Finding out what all languages have in common, as well as how they can vary, will give us insight into an important aspect of human nature.

What follows is an account of the field work experience of the author, an American-trained linguist who set out to write a grammar of Jacaltec. We will retrace her steps from her preparatives before leaving for the field to her settling to work in a highland village of Guatemala where she spent over a year. The native informants with whom she worked were bilingual young adults who spoke Jacaltec and Spanish, a language in which she herself was fluent. Jacaltec, the language she investigated, had been partially described several years earlier by another linguistic field worker. As with all the other Mayan languages of the country, Jacaltec could be characterized as a thriving spoken language. Although it had been reduced to writing in recent years by missionaries, only a handful of native speakers were literate in it. In the sense that native speakers did not write it for their own purposes, it was an 'unwritten' language.

1.1.1 Preparation for the Field The goal of this field work expedition was to gather material for a descriptive grammar of Jacaltec that would be of interest both to the specialists of Mayan languages for comparative studies of Mayan languages and to general linguists for a better understanding of the nature of language.

The preparatory work before leaving for the field consists of establishing in as particular a way as possible the goals of the research and learning as much as one can about the language to be studied. One sets up hypotheses about what one can expect to find, hypotheses that will be modified and augmented as the investigation proceeds. All of one's past experience as a linguist will play a role in this process, but now one concentrates on learning in detail about the language and the family of languages to which it belongs.

Important perspective can be gained from information about other languages in the same family. To say that a set of languages belongs to the same family is to say that each was originally a single language, the way we know that French, Spanish, Portuguese, Italian, etc. were originally variants of a single Latin language. The more similar they are, the more recently one can assume that they split apart, and the more likely it is that insight into one of them will suggest something about the structure of the others.

There was more material available for the investigation of the

Jacalteco language than is often the case for field work on 'unwritten' languages. There was a grammatical sketch written by anthropologists in the twenties; a recent study of the sound system, word formation, and basic syntax written by a linguist; a didactic (teach-yourself-type) grammar written by a native speaker who had been the informant of the priest and the linguist; and texts produced by missionaries—translations of the New Testament and health pamphlets.

In view of the scant information available until recently on most of the languages of the western corner of Guatemala where Jacalteco is located, the exact relationship of Jacalteco to the neighboring languages is today still a matter of discussion. The discussion evolves around the task of determining the boundaries between independent languages and their dialects within the Kanjobalan branch of the family.

Figure 1.1 shows the position of Jacalteco within the family of Mayan languages.

Some of the better known languages are Yucatec Maya, Cakchiquel, and Quiché, for which we possess documents dating back to the early period of the Colonization in the form of treatises, vocabularies, and sermons written by missionaries. Of great importance are the three collections of the *Books of Chilam Balam* for Yucatec Maya, the *Popol Vuh* for Quiché, and the *Annals of the Cakchiquels* for Cakchiquel. These writings were compiled in the sixteenth century by native speakers who recorded the beliefs, legends, and history of their people.

Partly because of the existence of such old documentation, most of the modern literature available on Mayan languages deals with questions of historical linguistics—such as the genetic classification of the languages and the reconstruction of Proto-languages—rather than with descriptive linguistics.

1.1.2 Final Preparatives and Worries As time of departure nears, however, the most overwhelming concerns are nonlinguistic. Suddenly the investigation of the grammar of Jacalteco sounds like an easier task than it did before. Anxiety centers now on final decisions and guesses about the nature and the amount of equipment necessary and questions about the weather and living conditions. Generally there are no answers to be found for these questions in a big North American city.

It is only reasonable to anticipate moments of discomfort and distress for which there is probably no better preparation than the will to keep happy and working. In a country like Guatemala, one has to be ready to work in the dampness of the rainy season on a steady diet of black beans, tortillas and coffee, sitting all day on hard straight chairs and spending part of the night working in the solitude of a hissing gas lamp. Together with the anxiety produced by the linguistic work itself, one will also have to deal from time to time with obsessive dreams of

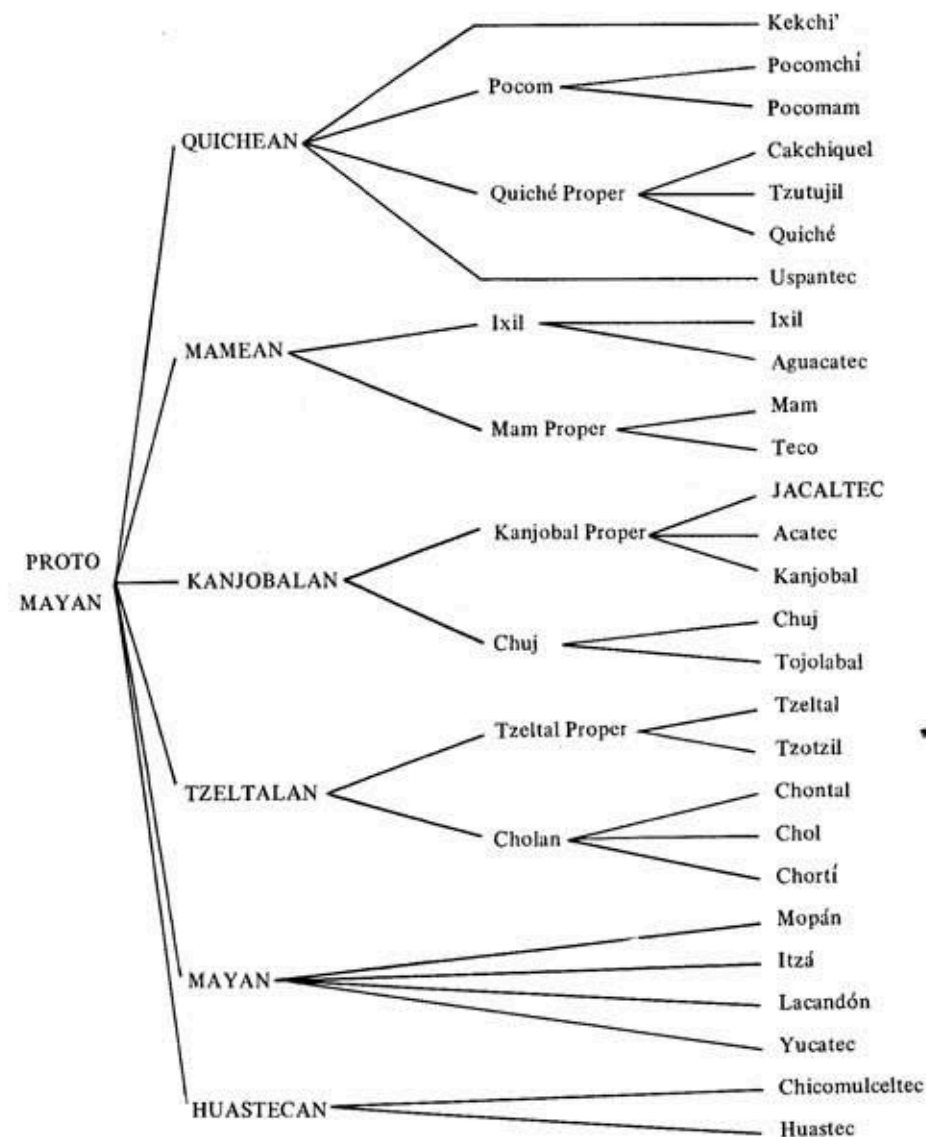


FIGURE 1.1 *The Mayan Languages*

being "back home," or taking a hot shower, or eating a huge green salad, or rambling on with a friend in one's own language.

But in field work, there is also the peace and beauty of the mountains, the slowing down to a more human pace of life, the encounters with new people, new smells, new tastes, and old forgotten values. One can also anticipate the rewarding moments to come—going to the market and

understanding the chit-chat of the women, dropping in on a Jacalteco conversation in the bus to the amazement and delight of the travelers, and maybe even, some day, making a Jacalteco pun. Going to the field often means for the field worker finding a new home and making new friends, and later, back in a North American city, feeling homesick for that home and those friends, for the noise of the rain on a tin roof, for the smell of tortillas, and for the sounds of a language that has become familiar to the ear.

1.1.3 Off to the Field Our destination is Jacaltenango, an important town in the northwest corner of the Guatemalan highlands, on the border of Mexico. After landing in Guatemala City, the first day is spent taking a bus ride to the town of Huehuetenango, at the foot of the Cuchumatanes mountains. From the city, the road winds through the highlands where the Mayan population is concentrated and crosses the lands of the Cakchiquels, the Quichés, and the Mams. The second part of the trip, from Huehuetenango to Jacaltenango, is becoming easier every year as the construction of roads continues. Over the last decade, the stretch from where the road ended to Jacaltenango has shortened from a long day's horse ride to a pleasant walk. Now in the dry season when the road is not washed out by the rains, the bus goes all the way to Jacaltenango. It takes about five hours on good runs to cover the distance from Huehuetenango to Jacaltenango, thirty miles as the crow flies. One dirt road circles west through lush coffee plantations and climbs the west slope of the mountain. The other one heads north from Huehuetenango to climb up to a moonlike plateau of inhospitable cold lands. Then suddenly, it dives down toward Jacaltenango at the edge of the flat from where the surrounding mountain ranges look like foothills. After hours of bad trail either way, one always experiences the same amazement upon reaching Jacaltenango and its white adobe buildings clustered at the edge of a formidable cliff.

The town is a very important center in the life of the Cuchumatanes mountains. Its market, hospital, and schools draw crowds from far away. The urban population is close to 5,000 and that of its *municipio* (township) nears 12,000. The population is composed mostly of Jacalteco Indians. A few Ladino families have come to work as schoolteachers, postmaster, or as other public officials; and families of Mam Indians from the cold and harsh lands of Todos Santos have settled at the edge of town.

The official language of the country, and the language of the school, is Spanish. Spanish is spoken around the school and on the main street where most Ladino families live and is now spreading to Indian households downtown. Jacalteco is the prominent language heard as one walks through the market, the hospital, the church, and as one wanders away from the main street. As is characteristic of bilingual situations, men are

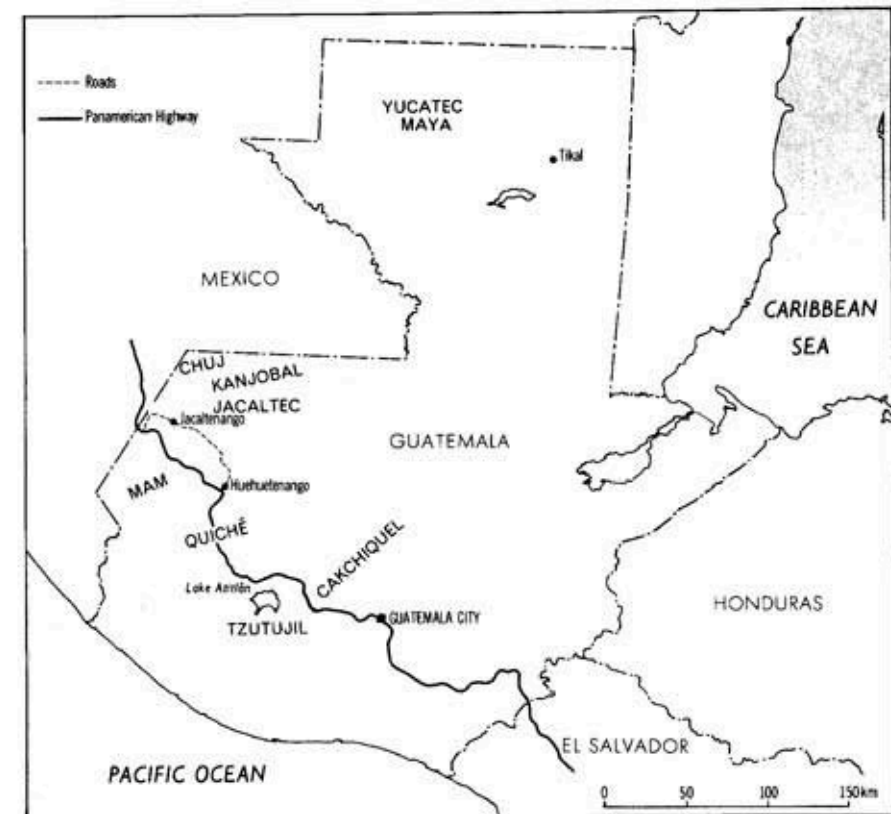


FIGURE 1.2 *The Way to Jacaltenango (with the location of some Mayan languages)*

more familiar than women with the dominant language, and the rate of bilingualism is rising through increased schooling, the use of radio, and army training.

1.1.4 Settling Down Upon arriving, the first task is to find lodging. In this particular case, the director of the school offered a room in his house—a rather big compound set on the main street and built around a courtyard. In this compound that year lived a family of eight, two Ladino schoolteachers from Huehuetenango, and the “gringa” linguist. Arrangements were made with the owner of the local “comedor” for meals to be shared with the single schoolteachers from out of town. Once desks, chairs, and filing boxes were ordered from a local carpenter, it was time to think about getting to work.

1.1.5 Hiring Informants The first essential step in the study of a language in the field is to locate and hire informants. When one is a new

arrival and does not know anyone in the town, a good place to go and ask for names of possible informants is either a mission or a Peace Corp office, if there is either of these nearby. Most of the time, both missionaries and Peace Corps volunteers have themselves attempted to learn the language of the local population. They are aware, therefore, of the skills required of an informant and can suggest literate and bilingual individuals who may have worked for them. Somehow, field workers have to move with more caution when asking local people for suggestions as to who would be a good informant. The advice and suggestions they give may often reflect personal preferences, a desire of having a relative hired, or a common belief that people with more formal education and more prestige in the town are better candidates. Unfortunate ill-advised decisions may later cause strain in the relationship between the foreign linguist and the community.

What makes a good informant? The basic prerequisite is that the informant be an intelligent person with a good linguistic intuition. This means someone who is sensitive to the workings of language and who can convey to the linguist what nuances of meaning are, someone who likes his/her language and is proud of it, and someone who enjoys discovering together with the field worker its mechanisms, laws, and exceptions. In all cultures and societies, some people are good with language while other people have little curiosity about it or feel for it. Ideally, linguistic field workers look for undiscovered or ignored native linguists—people with whom they will share their interest in language and from whom they will slowly learn the secrets and beauties of the language.

In addition to being linguistically qualified, these informants must be available for reasonable periods of time, at best several hours a day. Whenever possible, they should be bilingual, conversant in a language also known to the linguist. Formal education is not an absolute criterion when choosing informants. Although literate persons may learn how to read and write their native language faster than illiterate ones, linguists must also consider the effect of a rigid, traditional, and often dogmatic education that may turn native speakers with longer schooling into inhibited or doctrinaire informants.

In this particular case, the two main informants hired to work on Jacalteco were a woman in her late thirties and a man in his early thirties. They were complementary informants. María Trinidad Montejo (hereafter referred to as T.M.) was a seamstress with no formal education but possessing intelligence and a striking independence of mind. Unmarried and very outspoken, she was considered by the community to be a strong character. She was hired full time, at first mainly to be a language teacher and guide around the community, and later, as she acquired typing and reading skills, as a linguistic informant.

Antonio Feliciano Mendez (hereafter referred to as A.M.) had many

years of formal education and a long experience as a specialist of the Jacalteco language, being one of the main translators for the parish. He was also the informant of Christopher Day, the first linguist to work on the language. He was hired part time while working for the parish and full time when not employed elsewhere. He was very skilled at handling data.

Three men in their late twenties and early thirties were hired part time. They had all worked for either the hospital, the parish, or a Peace Corps volunteer and were literate in Jacalteco. They came a few hours each afternoon, during which time they wrote and translated texts and occasionally answered questions on the language.

All the informants were hired for pay. Another aspect of field work is having to assume a role of employer and finding out what wages are currently being paid in town. Informants hired full time were paid wages comparable to the incomes of skilled workers such as carpenters and tailors. Part-time informants were paid hourly wages comparable to those of the employees of the parish or the hospital. Because of this position of new employer in the town, a field worker always attracts the attention of the community. He/she is often not only solicited by people looking for work, but also generally considered as a potential lending institution. Being solicited, watched, and gossiped about is also a part of field work.



FIGURE 1.3 Colette Grinevald Craig and María Trinidad Montejo (T.M.) in the Main Street of Jacaltenango, November 1976

Hiring informants is hiring members of a community who have to answer to that community for their behavior. As in all small towns, gossip is rampant. In the case of Jacaltenango, one also had to deal with the gap of very different cultures—the always present confrontation of the Indian and the Ladino societies—and in these particular circumstances in which the field worker was a woman, with the status of women, both foreign and native.

T.M., the only regular female informant, was paid wages comparable to those of the male informants, an uncommon practice in the town. Interestingly, she did not want other people to know it in order to protect herself from more gossip than she already had to endure for being an independent self-supporting woman working with men. She did not want to have people asking her to lend them money, so she pretended that she was paid only half of what she was receiving. She was also afraid of robbers. This fear generated a reasonable protective behavior on her part, although it was the source of unpleasant confrontations for the gringa employer, who was accused by some of exploiting her, by others of lying, and by T.M. herself of exposing her to gossip. One man quit working because of pressure from his peers who were making fun of him for working for a woman and with a female co-worker.

Being a temporary employer also calls for some reflection in a situation where cash employment is very scarce and wages usually low. The work is temporary, field workers always leave after a few months, but the informants remain in the community. They have to adjust to the departure of the linguist on whom they have come to depend not only for income but also for a job that they might prefer over others, for company, and sometimes for close friendship. This also has to be considered when hiring and working with informants. Working for the field workers should not result in the informants' losing their regular incomes on which they will again have to depend for a living. This means giving time off to the informants whenever they need it to carry out their usual work and in general adjusting to their schedule.

Ideally, good informants should be considered and treated as potential linguists; they should be taught linguistics and encouraged to investigate their own languages, for they have the native intuition on which all good linguistic analysis must rely. However, the question of training informants to become linguists themselves is a delicate one. Before the linguist does this, he/she must think about the job market available for the native speakers and help them look for possible jobs. The traditional channels of college education and teaching are often closed to the informants whose only formal education is a few years of elementary schooling. More likely, the opportunities will be to become literacy teachers working for private institutions such as parishes or for language institutes. It is a part of the field worker's responsibility to

consider all these aspects of the impact of his/her temporary presence in the life of the informants. Making the results of the investigation available to the community should also be a part of the field worker's responsibility.

1.2 Getting to Work

The study of any language starts with the study of its sound system. The first task of the linguist in the field is to get used to hearing all the sounds and to reproduce them as accurately as possible. It is important at this initial stage to work with informants who have a clear articulation and who know how to slow down their speech and to isolate words. In the process of learning how to articulate words, the linguist listens for which details of pronunciation are important. Informants will demand the exact pronunciation of some particular phonetic features while not appearing very concerned with variation in that of another.

For example, there are two series of consonants in Jacalteco which are distinguished by the feature of *glottalization*, a popping sound effect produced by the closure of the glottis. One must pay close attention to this glottalization feature since it can make the only difference between two words as between *caj* "red" and *c'aj* "flea," or *ac* "turtle" and *ac'* "new." However, the informant will seem to alternate sometimes between the nonglottalized and the glottalized back velars *k/k'* within the same word and will accept the same variation from the linguist. The linguist studies all the sounds looking for the distinction between contrasting sounds, called *phonemes*, and noncontrasting sounds, called *allophones*. *c/c'/k'* are phonemes while *k'/k* are allophones, that is to say, two possible realizations of the phoneme *k'*.

Native speakers are conscious of the contrastive sounds of their language but they are often unaware of the noncontrastive ones. They know when a slight change of pronunciation is important because it might result in a change of meaning, while they hardly notice the changes that are not meaningful. Take as an example of this the fact that many English speakers are unaware of the aspiration that accompanies the pronunciation of an initial *p* as in *p^hen*. Aspiration is distinctive in various other languages but not in English. It helps to distinguish *p* from *b* at the beginning of words, but leaving it out does not change the meaning. Whether or not *p* is aspirated depends on the position in which that sound occurs: for example, that puff of breath is normally absent from *p* at the end of a word, as in *tap*. The *p* sound with aspiration and the *p* without it are different allophones of the same phoneme. Putting a detail like aspiration in the right places is important to sounding like a native speaker of English, but there is never a contrast, e.g., no *p^hen* vs. *pen*, or *tap^h* vs. *tap* meaning different things. This is why an English speaker is much more likely to notice someone saying *ben* in place of

p^hen, substituting one phoneme for another, than to notice someone saying *pen* with the wrong allophone for *p*.

Field workers have to listen carefully to the informants because the same sounds found in two languages might be contrastive in one but not in the other. For example, Jacaltec has two contrastive *sh* sounds, one similar to the English *sh* of *shoe* and the other pronounced with a curled-up tongue, similar to the way people with a lisp might pronounce *sh*. This second sound therefore is not unknown to the linguist, but while it is a peculiarity of some individuals in one language, it is now a very important distinctive feature of the sound system of the other. In Jacaltec it happens to mark the difference between the present and the past tense:

ʃal naj he says (*ʃ* is the same as *sh*)
xal naj he said (*x* is the retroflexed sound, like a curled-up *sh*)

Field workers who work on languages never described before start with a detailed phonetic transcription in which they reproduce exactly what they hear. Then they determine which sounds are contrastive in order to devise a simplified writing system called a *phonemic writing system*.

1.2.1 *Writing Mayan Languages* It is interesting to note that the Mayan family of languages is famous for its ancient hieroglyphic writing system, which was lost with the fall of the brilliant Maya civilization. Experts are still trying to decipher this writing in which, unlike the one discussed in the previous paragraphs, the symbols represent words and ideas rather than sounds. The next period in history when Mayan languages were reduced to writing was at the time of the conquest and colonization, when the Spanish missionaries started studying them and devised alphabets for them. These alphabets were based on the Latin one, with the addition of a few symbols that they invented to transcribe the unfamiliar glottalized sounds. They transcribed *c'* as *ç* and *k'* as *ç* for instance.

In recent times, Mayan languages have been written mostly by missionaries and linguists. There are two traditions of writing systems in use nowadays—a Guatemalan tradition based on the Spanish alphabet and a phonetic alphabet in use among North American anthropologists and linguists.

1.2.2 *Writing Jacaltec* In order to do field work on Jacaltec, it was not necessary to go through the initial stage of studying the sound system and devising an alphabet. A Spanish-based alphabet was already in use in Jacaltenango and a modern study of the sound system had been done in recent years by another field worker. The Spanish-based alphabet had

been devised by a missionary in the fifties and was known to a handful of Jacaltecs who had worked for the parish. Although the language was, technically speaking, already written, the use of writing was limited to translations of sermons done for the priest and stories collected by the linguist. There was no spontaneous use of written Jacaltec among the native speakers. Spanish was the only written language used for official and private matters.

The Jacaltec alphabet is a combination of letters that have the same sound value as in Spanish and letters not used in Spanish that are given arbitrarily a specific Jacaltec sound value, and special marks on letters called *diacritics*.

The letters that represent the same sounds in Spanish and in Jacaltec are:

a c ch e f i j l m n o p r s t u y

The letters that are not used in Spanish and are given special value in Jacaltec are:

k w x tz tx

The diacritics added to letters are ' and " as in:

b' t' c' ch' tx' k' and *ñ* and *ʃ*

This alphabet has two advantages for the Jacaltec native speakers over the one used by linguists and anthropologists: first, it is easy to type on any typewriter and second, it is easier for people who already know the Spanish alphabet to learn. For those who become literate in Jacaltec first, it will facilitate learning the Spanish alphabet.

There are five vowels, which correspond to the Spanish vocalic system:

i u
e o
a

There are twenty-seven consonants: Table 1.1 shows their sound value. The characteristics of the Jacaltec sound system are:

1. the absence of voiced stop or fricative sounds (the traditional spellings *b' tz tz'* do not refer to voiced sounds). Jacaltec has no *b*, *d*, or *g* except in Spanish borrowing as in *seboya*: Spanish *cebolla* "onion"
2. the glottalized consonants *b' t' c' k' tz' ch' tx'*, which are typical of all

TABLE I.1 The Sound Values for Consonants in the Jacaltec Alphabet

	bi-labial	labio-dental	dental	alveolar	palatal	retroflexed	velar	back velar	glottal
stops	p		t				c		ʔ
glottalized stops	b'		t'				c'	k'	
affricates				tz	ch	tx			
glottalized affricates				tz'	ch'	tx'			
fricatives		f		s	ʃ	x		j	h
nasals	m			n			ŋ		
liquids			l	r					
glides	w						y		

the languages of the Mayan family. These sounds are recognizable by the pop-like noise that accompanies them.

- the retroflexed sounds *tx tx' x*, which are sounds made with a curled-up tongue.
- the velar nasal *ŋ*, which sounds like the single sound represented by the letters *ng* in English *song*, *wing*, etc., but can occur in Jacaltec in any position as in *ŋah* "house," *toŋe* "only," and *maŋ* "without."

EXERCISE 1

The following paragraph is a short text transcribed in the Jacaltec alphabet on the top line and in a phonetic alphabet widely used in America on the second line. Try to read it. Remember that every letter must be pronounced, that the diacritic ' means a glottalized sound like a pop, and that the *x*, *tx*, and *tx'* are retroflexed sounds. The most difficult sounds for English speakers are the glottalized ones, and especially the *k'* sound, which is difficult not only for being glottalized, but for being a back velar pronounced very far back in the mouth (still further back from where the German "ch" sound of *Bach* is pronounced).

Text

- tzet chu swatx'i no' xotx*
ʒet ču swač'i no' šoč
 how is made animal snail
 how to cook snails
- b'ab'el ʃchac'laxiloj syutz no'*
p'ap'el ščak'lašiloj syuʒ no'
 first are cut out its tail of it (animal)
 first you cut out their tails
- lahwitu' xin ʃtx'ahlaxiloj no'*
lahwitu' šin šč'ahlašiloj no'
 after that then are washed they
 after that then you wash them
- tato sxolŋe ha' ʃtxiclax no'*
tato sšolŋe ha' ščiklaš no'
 if in only water are cooked they
 if you cook them just in water
- cat yaytoj ixpix b'oj seboya sxol no'*
kat yaytox išpiš p'ox seboya sšol no'
 so then goes down tomato with onion in them
 then you throw in with them tomato and onion

- (6) *hun hunjuyŕe cha' no'*
hun hunxuyŕe ca' no
 one boiling only give they
 when they start boiling
- (7) *cat xin jinihay no' yib'añ k'a*
kat řin xinihay no' yip'añ q'a
 and then we take down them on its top fire
 we take them down from the fire

Notice how capital letters are not used in transcription in either writing system and how the punctuation at this stage is limited. Were more Jacaltec speakers to use writing for their language, they would no doubt develop a punctuation system. It is easy enough to take 'standard' punctuation such as we are used to in English and apply it to Jacaltec or any other language, but in fact there are differences between languages (even ones as close historically as English and French) that make it important for the native speakers themselves to work out the conventions for written texts.

Any language can be reduced to writing by linguists who study their sound system and devise an appropriate alphabet for it. Since letters are symbolic representations of sounds, many variations of writing systems may be used, depending on the purpose of the transcription. Two variations were shown in this sample. The Guatemalan variation was said to be the most appropriate for the native speakers of Guatemala who are familiar with Spanish. The North American variation is more appropriate in communications among linguists, particularly for linguists who are not specialists of Mayan languages, although the transfer from one system to the other requires only a small adjustment for them.

1.2.3 *T.M. Writes Jacaltec* What was meant earlier by "good informant" may be illustrated by the story of how T.M. taught herself to read and write Jacaltec. She had been skeptical of her ability to be a linguistic informant, considering her illiteracy as a serious handicap, as did the community in general. She had made it very clear that she could neither read nor write because she had never finished first grade. However, she kept close watch on how I transcribed texts that she had recorded and she started making remarks such as "I did not say [čitam]—I said [çitam]," after noticing a wrong nonretroflexed transcription *chitam* instead of *txitam*. Convinced as she was that only people who had gone to school could ever read or write, it took her a long time to accept the fact that she had discovered what reading and transcribing were about. At her age (late thirties) learning to hold a pen in her hand turned out to be the greatest obstacle. This was solved directly by her teaching herself to use the typewriter. She seemed to

know instinctively how to write Jacaltec. She understood the relation of letters to sounds and never misspelled a word. She also knew when to type a final -j, even if it had not been pronounced, similar to the way we write "see him" in standard English, even if all that was said was "see 'm." She knew when words started and when they ended. As a matter of fact, informants were always the final judges as to which particles and words were independent words and which were part of a word as suffix or clitics. This is similar to the way an English speaker will know to spell "nowhere" and "nobody" as one word but "no money" and "no way" as two.

Once T.M. could write Jacaltec, she still had to be convinced that she could also write Spanish. She was even more self-conscious about writing Spanish, which was strongly associated in her mind with schooling, education, foreign language, and literary tradition. She finally began writing Spanish, at first with predictable misspellings such as *rrojo* for *rojo* (red), *grasias* for *gracias* (thank you), and *jues* for *juez* (judge), transcribing Spanish the way she spoke it in a strictly phonemic system.

1.3 Gathering Linguistic Material

Studying the grammar of a language is a very different exercise from learning how to speak a language. One of the differences in approach is that in order to learn how to use a language, one must acquire an active knowledge of as much vocabulary as possible. Emphasis is given to the communication aspect of the language where what is important is to understand and to be understood. In the learning process, there is a fair amount of guessing, of approximation, and of putting meaningful words together without much regard for their grammatical arrangement.

On the other hand, a linguist working on a language will pay particular attention to its grammatical structure. The emphasis is then on the organization of the elements of the language more than on active communication. Very often linguists do not even attempt to become very fluent in the language they are investigating—an endeavor that would take years if not decades—but an elementary level of fluency is always desirable. This fluency, from a human point of view, is important in relating to the community and in communicating with the people who know only that one language. Generally these are the older people and the women. It is also important from a linguistic point of view to acquire some feeling for the language in order to be able to manipulate at least simple sentences when working with informants on particular grammatical points. It is common for field workers to acquire vocabularies dealing with some particular semantic domain in order to be able to construct numerous sentences on the same topic. When the field worker is a man, he is more likely to learn the vocabulary pertaining to men's activities, such as agriculture, carpentry, construction work, mythology

or politics. A female field worker is more likely to become fluent conversing about household chores and child care.

Linguists need to know enough words to have a large sample that is representative of all grammatical categories—nouns, verbs, adjectives—and within each category, words of all different semantic structure—animate and inanimate nouns, concrete and abstract nouns, transitive and intransitive verbs, etc. Together with this sample lexicon, the important tools of linguists are the grammatical words that are of a limited number in every language and of which a linguist makes a complete inventory. Such grammatical words are the tense markers, the plural markers, the prepositions, the conjunctions, the personal pronouns. With the sample of vocabulary representative of all grammatical categories and the grammatical words at hand, linguists study how they function together to produce meaningful and grammatical sentences.

1.3.1 *Collecting Texts* Working on a language with no written tradition means that there are no bookstores in which to buy reading material in the language, no teach-yourself book or tourist phrase book, no novels, no newspaper, no comic books or children's books. In this situation, the field worker is totally dependent on the informants for language material. The task of collecting written linguistic data for analysis consists of two different activities. One is to collect texts that will provide samples of written material produced spontaneously by native speakers; the other is to conduct with the informants sessions of elicitation that are similar to grammatical interviews.

The texts collected in the field are a substitute for the novels, newspapers, fiction and nonfiction books that one cannot buy in a store. These texts are usually recorded on tape. Once recorded, they need to be written down and translated, and the linguistic information they contain must be further filed in proper fashion for grammatical analysis. With modern recording equipment, tape recording is technically relatively easy. The main problems encountered are usually nontechnical, such as the pouring rain on a tin roof, or chickens, pigs, and children screaming, and neighbors and passers-by laughing or commenting. All these produce a noisy background usually difficult to eliminate or control in places where isolation and privacy are difficult to obtain. As a rule, people are less afraid of tape recorders than they are of cameras, although Jacaltecs used to refer to the tape recorder as "the machine that steals your voice." Most often, however, people are fascinated and amused by the immediate playback.

Tape recording is but the first step in the time-consuming process of collecting texts. Transcribing the recorded texts will take many times as long as the actual recording session. Twenty minutes of a story turns into hours of phrase-by-phrase playback and transcription. At some

point during the field work, all linguists must have visions in their dreams of hundreds of hours' worth of recorded tapes, all transcribed and indexed in thick volumes bound and handy on a shelf, ready to be thumbed through in search of a good example. The reality of the situation is that while time in the field is usually limited, once back from the field, time is often just as limited; one realizes that there is no use recording hours of text that will never be transcribed, translated, or filed away. Other limiting factors to be considered include both the high price and the bulk of high-quality tapes, and, where electricity is not available, of good batteries. But these realistic limitations have to be reconsidered in the special situation where the language being investigated is spoken by fewer and fewer persons—maybe by even just one or two very old people. In such cases, material consideration should not hamper the efforts to collect as many texts as possible of what will be the last samples of a language soon to be added to the long list of extinct languages.

The main purpose of tape recording is to obtain spontaneous material from informants who can speak naturally at their own speed of speech. Tape recording also allows for a varied collection of texts, which are provided by people who would not be chosen for informants either because they are very old, because they are not bilingual, or because they are too busy and unavailable for more than a casual visit and a few minutes' recording on an occasional basis.

The topics of the texts collected may vary from traditional or mythological tales retold, most often, by older people to narratives recounting remarkable events in the life of the community—weddings, fiestas, and accidents—or routine activities such as how to grow corn, make tortillas, make soap, or build a house.

Another way of collecting texts, besides recording them, is to have the informants directly write down texts of their own with a translation. This method obviously saves the field worker a great deal of time. It is a particularly advantageous method when the informant is a good writer who can manipulate written language with ease. It is important to take advantage of the personal skills of native speakers and occasional or full-time informants. Speakers have many ways of being artful at handling language—some may be good storytellers, others may be inspired writers, others may be perceptive critics. In this phase of field work, native speakers have the initiative. Informants and storytellers are asked to write or talk about topics of their choice, in the style of their choice. The objective is to obtain samples of natural language, the language as it is used among native speakers. The role of the linguist is that of an attentive observer.

1.3.2 *Text Analysis* Once the first text is collected and transcribed, the linguist analyzes it with the informant in order to gain an

overview of the grammatical categories and grammatical structures of the language. The analysis consists of establishing an exact word-by-word translation followed by an investigation of the grammatical structure and function of each word. Let us consider, for example, the Jacaltec sentence:

xb'ey heb' naj
 went Pl man
 they went

From a cursory analysis of this simple sentence, we can already learn the following about Jacaltec grammar:

1. Verbs appear in initial position.
2. *xb'ey* is a verb in the past tense. There is also a present tense which, for this verb, would give the form *ʔb'ey*.
3. *heb'* is a plural marker for humans. There is another marker for nonhumans as in *hej no' txitam* "the pigs."
4. *naj* is a classifier, a word that signals one of the many noun classes of the language. *naj* marks the male human class and means "man," although in this sentence it carries the pronoun meaning "he."

The information is generally gathered by asking the informant to translate expressions. Since most informants have never had any linguistic training, it would be pointless to ask direct questions such as: Is there a present tense? Is this a plural marking? The same information can be obtained by asking for the translation of the same noun in the singular and in the plural (how do you say man/men?) or the same verb in different tenses (how do you say they go/they went?). As one advances through the text, the cursory analysis of the first sentences is refined in the light of the new data. For example, what was first labelled present/past tenses will later be described as a contrast of incomplete and complete aspects.

The analysis of the first text is always very time consuming and that of the first sentences the slowest. But as grammatical forms and constructions start repeating themselves, less and less inquiry is necessary. By the time one reaches the end of a sizable text, one has usually gathered enough information to be able to draw a sketch of the grammar of the language with careful notes on the topics that require more scrutiny. After working on a few texts, linguists can begin to proceed swiftly through the others by only asking questions about the new forms encountered.

1.3.3 Direct Elicitation The method of collecting and analyzing texts, however, is not sufficient for the gathering of linguistic data. It must

be complemented with a methodical inquiry by linguists in a phase of what is commonly referred to as "direct elicitation." In this phase of field work, the linguist takes the initiative and asks direct questions of the informants about a specific grammatical point under investigation. The goal of such grammatical interviews is to obtain as systematic a check as possible on a specific topic, including information on both what is and what is not grammatical.

The role of the linguist is first to choose a topic and to prepare a session. The preparation consists of organizing questions to ask the informants. These questions are not random questions, but rather they are formulated on the basis of a set of assumptions and expectations. As the elicitation advances, preliminary analysis is done, and decisions are made at each step as to what should be asked next. The best preparation is to have anticipated the likely links and to be ready to follow leads when the answer to one question seems to uncover new facts worthy of exploration.

The role of the informants is to answer accurately the questions of the linguist and to take as much of an active part in the investigation as possible by volunteering comments and by pointing out to the linguist other facts that may be related to the problem being studied. Informants are asked to translate sentences from the working language into their native language, to substitute one particular element of a sentence with some other possible one in a given context, or to complete sentences.

1.3.4 A Session of Direct Elicitation One of the first sessions of direct elicitation might be on word order, for example. Word order is one of the basic characteristics of a language, and studies have shown that the place of the verb, in particular, will determine several other facts of grammar. The first task is to determine what is the unmarked word order—that is to say, the word order of a simple declarative sentence. Once the unmarked word order is established, the second task is to determine how free the constituents are to move and under what circumstances they move. We would expect to be able to say by the end of the session what the basic word order of the language is, whether it is a rigid word order or whether it is relatively free, and what meanings accompany changes in the basic word order.

A guideline of the session is prepared to ensure that no important question is left out. Running a session requires so much concentration, immediate analysis of the data being collected, and quick decisions about what to do with unexpected information that it is best to have an outline of all the questions that must be gone over. The first set of questions will check the word order of all types of simple clauses:

- (a) John is rich (stative verb) (b) John came (intransitive verb)
 (c) John saw Mary (transitive verb)

Notice how the sentences are kept very simple. There would be no point in asking the informant to translate a sentence like "my cousin John came yesterday after lunch" instead of the simple sentence "John came" if all we are considering at first is the position of the verb. Making up sentences is not always as easy as it seems; the linguist must strike a balance between a very simple sentence that isolates the point of grammar under investigation but sounds unnatural to the informant and a sentence more likely to be used by the informant, with more explicit context, but longer and more cumbersome to transcribe and use many times. One must also be careful to make up sentences that are culturally meaningful, and in Jacaltenango, to avoid sentences like "it snowed," "I ate a pork chop," "he is frustrated," etc., since snow, pork chop, and frustrations are not part of the experience of a native Jacaltec and would unnecessarily puzzle the informants.

The session begins then with the informant translating the first sentence as:

k'alom naj x̣uwan
rich man John
John is rich

and the second sentence as:

xul naj x̣uwan
came man John
John came

In both sentences, the predicate (adjectival predicate and verbal predicate) comes first. On the basis of these data, the following hypothesis of word order may be formulated: Jacaltec is a verb-initial language. However, when asked to translate the third sentence, the informant says:

naj x̣uwan x'ilni ix malin
man John saw woman Mary
John saw Mary

This time the word order subject-verb-object does not conform to the verb-initial hypothesis. There are two alternative interpretations of this third sentence; either the word order of transitive clauses is different from the word order of intransitive clauses, or the informant did not give the unmarked word order for this sentence. The latter sounds more probable for two reasons: first, because languages usually do not exhibit different word orders in their transitive and intransitive constructions and second, because the text analysis that preceded the phase of direct elicitation provided examples of transitive sentences with verbs in initial position. So the informant is asked if there is another word order for this

sentence, although not with a direct question. The linguist can either ask if there is another way of saying the same sentence, or try to make up the Jacaltec sentence and ask the informant if it is a good sentence, usually a more efficient method. However, when asked to judge the sentence *x'ilni naj x̣uwan ix malin*, which shows the verb in initial position, the informant answers a flat "no," leaving the linguist somewhat confused. Luckily the informant is very helpful and adds "but you could say *xil naj x̣uwan ix malin*" and even adds "that is how we would actually say that sentence." After a few minutes of probing with other transitive constructions and discussing with the informant the notion of natural or unmarked word order, the following analysis emerges: the word order in transitive sentences is also verb-subject-object, but the informant had given the word order that followed the word order of the Spanish sentence, thinking that it was what the linguist wanted. Furthermore the ungrammatical sentence made up by the linguist uncovered the fact that the verb takes a special marking whenever the subject of a transitive verb is preposed for emphasis. The translation given initially by the informant was an emphatic sentence, while the linguist expected the nonemphatic one:

Nonemphatic:

xil naj x̣uwan ix malin
saw man John woman Mary
V S O
John saw Mary

Emphatic:

naj x̣uwan x'ilni ix malin
man John saw-suff woman Mary
S V O
it is John who saw Mary

The session will then continue with questions about how rigid the word order is and whether or not subjects of intransitives and objects of transitives can also be preposed for emphasis. One of the key sentences containing the answer to the first question will be the ungrammatical sentence elicited by the linguist:

**xil ix malin naj x̣uwan*
saw woman Mary man John
V O S
John saw Mary

which shows that the order of subject-object is rigid in nonemphatic sentences. The answer to the second question is that subjects of intrans-

sitives or objects of transitives may be preposed for emphasis and that the verb does not take any special marking then, as in:

naj *kuwan* *xul* *ewi*
man John came yesterday
it is John who came yesterday

ix *malin* *xil* *naj* *kuwan*
woman Mary saw man John
O V S
it is Mary that John saw

1.3.5 Obtaining Reliable Data Even though direct elicitation is considered an efficient way of obtaining the desired data, this method of investigation must be handled with care. One of the prerequisites is that the linguist have a good command of the working language—the language common to linguist and informant—in order to minimize misunderstandings. In this case, the linguist was fluent in Spanish, although she had to become familiar with the Guatemalan Indian variety of the language to be able to communicate efficiently with the informants. Problems may also arise when informants are asked to respond to specific requests of linguists. As in all interview situations, the questions should not be asked in such a way as to indicate what the expected answer is, i.e., “Isn’t it right that you cannot say . . . ?” Informants may go along with whatever they think would please the linguist. The notion of what is right and what is wrong, grammatical or ungrammatical, is not reinforced in unwritten languages to the same extent that it is through formal language education, grammar textbooks, dictates of academies, and didactic grammars for standardized, official languages. Although good informants are native speakers who have a clear intuition about what is correct in a language and what does not feel right, they may also have a benevolent attitude toward foreign linguists. A linguist must learn to interpret the answers and judgments in the context of a general scale of reference used by each informant.

Using the following symbols: \checkmark for an acceptable sentence, $_?$ for a somewhat awkward but still acceptable sentence, $_??$ for a more questionable sentence, $_*$ for an ungrammatical sentence, and $_**$ for a very ungrammatical sentence that makes no sense, the two principal informants for Jacaltec had the judgment patterns sketched below for three critical sentences:

	Sentence 1	2	3
A.M.	**	*	\checkmark
T.M.	??	?	\checkmark

The scale of judgment for T.M. was:

- \checkmark “yes, it is good”
 $_?$ “I would not say it, but I guess others might” or “I have heard others say it”
 $_??$ “I have not heard it said that way, but if you wanted to say it that way, I guess you could” or “It does not make any sense to *me*, but if that is what *you* want to say, you can say it that way”

On the other hand, A.M. had a more conservative scale. He recognized sentences as either grammatical or ungrammatical, and did not identify marginal sentences, those sentences that could be said to be grammatical but, at best, were awkward.

Both informants, therefore, used parallel scales of evaluation although each expressed it in a different manner. T.M., who had no formal education, did not say that sentences were right or wrong; she based her scale on whether or not she herself used the form, always allowing for other speakers to do as they pleased. A.M., on the other hand, who had had many years of education and had spent years working on his own on a grammar of Jacaltec, was very prompt at determining whether or not a form was correct.

Linguists who rely on translation techniques in direct elicitation also have to be careful that the pattern of the sentence to be translated not merely be duplicated by informants as was shown to happen in the session of direct elicitation.

Field workers should always bear in mind that being an informant is very demanding; it can be tedious, tiring, boring, and frustrating, although hopefully it is also interesting and even exciting at times. Informants are human beings, they too have good days and bad days; in order to ensure that the data obtained are reliable, sessions of elicitation should not last too long and should be interspersed with breaks whenever the attention of the informants seems to be failing. It is a very discouraging experience to have an informant give different judgments of the same sentence on different days. Many times this happens because the informant is tired and does not understand the question or does not care one way or the other and says whatever the linguist seems to be asking for.

Finally, although informants should be encouraged to participate in the investigation, the ultimate responsibility of the analysis lies with the trained linguist. Some informants will show an excessive eagerness in finding an answer for everything, often offering explanations beyond the realm of linguistics. One must always remember that being a native speaker does not necessarily mean being a native linguist.

1.3.6 *Filing Data* Thus, after hours of covering pages of a notebook with notes, scribbles, question marks, and arrows, the time comes to neatly file all the data gathered. This paper work is another necessary, tedious and time-consuming part of field work. All the information contained in the texts and the notes from elicitation sessions must be filed in order to be more readily accessible for further analysis. Every field worker develops somewhat idiosyncratic field methods, different types of interviews, and different filing systems. All the new data should be transcribed neatly on cards, with the appropriate set of references. It is important to note which informant provided which sentences and the date on which the data were collected. As familiarity with the language and the informants' personalities increases, transcription and judgment usually become more accurate. The references also allow for quick check-back with the original notes. A misfiled card, or a card with inadequate reference, is very much like a book misplaced on a library shelf.

1.4 Methodology

There exists no standardized guide book *How to Do Field Work*, nor will there ever be. Much of the style of field methods depends on the people involved, the personalities and training of the linguists, the personalities and training of the informants. Some linguists work with informants all day long, some for only a few hours a day. They hire one informant or several informants; they do everything themselves—taping, transcribing, interviewing—or they give an active role to the informants. Some field workers do a great deal of inspired, improvised, direct elicitation; others patiently organize and prepare their interviews. Some linguists take very neat notes and do little filing afterward; others need to file all the material away soon after it is gathered for fear they will not understand their hasty scribbles if they wait too long. Informants may be literate native speakers who are interested in learning linguistics themselves, or they may be untrained, illiterate, but perceptive informants and unable, at least at the start, to take the initiative and participate actively in the work.

A working session can never be planned exactly. Some sessions will seem to get nowhere—they ramble on for hours without focus or solution to any of the questions raised—while others will be overwhelmingly rich in new and interesting material. The field workers must always be alert to pick up that mumbled comment from an informant that might lead to the answer and be able to judge on the spot the significance of an unexpected response. Some linguists lead sessions at a brisk pace and are quick at preliminary analysis; others work slowly and gather a lot of data that they analyze in between sessions.

Over an extended period of time in the field, one should expect to

live through active, productive periods of work interspersed with depressing ones when everything sits at a standstill or boils into a frightening confusion.

In any case, when it is time to leave the field after weeks, months, or years of field work, the linguist carries back texts, notes, papers, and cards that usually contain much more information on the language than he/she has been able—or had the leisure—to analyze. Gathering linguistic data is an endless process that is difficult to stop while working in the field. One often needs literally to take some distance to concentrate on analyzing what has been gathered, thus avoiding the temptation of continually opening new areas of inquiry.

2 THE JACALTEC LANGUAGE

The major characteristic of Jacaltec sentences is their word order. Jacaltec is a VSO language, that is to say a language with a verb-subject-object word order. This word order is uncommon among the languages of the world and is one of the reasons for studying Jacaltec. Another characteristic of the language is the complex structure of its verbs. Jacaltec verbs contain information about aspect and mood, subject and object, and direction of the subject or of the object. Consider, for example, the verb form *xcin hatenic'toj* "you pushed me aside" and all its components:

<i>xc-</i>	completive aspect expressing a finished action
<i>-in-</i>	object marker "me"
<i>ha-</i>	subject marker "you"
<i>-ten-</i>	verb stem "move"
<i>-ic'-</i>	directional "to the side"
<i>-toj</i>	directional "away from the agent"

The system of subject and object marking is of special interest because it represents one of the comparatively infrequent instances among the languages of the world of an ergative case-marking system. This phenomenon of ergativity will be discussed in a separate section. The system of directionals, which is a phenomenon common to many American Indian languages, will also be the topic of a section.

Following the complex verb form in a sentence are the noun phrases. Jacaltec noun phrases have two characteristics. First, nouns are accompanied by a noun classifier; this interesting system of noun classification will be the last topic of this presentation of the Jacaltec language. Second, as is usual in verb initial languages, demonstrative articles, adjectives, and relative clauses follow the noun. Notice the

presence of a noun classifier and the position of the adjective and of the demonstrative in the following example:

<i>no'</i>	<i>txitam</i>	<i>b'ak'ich</i>	<i>tu'</i>
Classifier	Noun	Adjective	Demonstrative
animal	pig	fat	that
	that fat pig		

2.1 Jacaltec as an Ergative Language

Languages typically have a way to signal the function of their noun phrases so that it is understood which one is the subject and which one is the object in a sentence. The most common ways are to assign subjects (S) and objects (O) to a particular position in the sentence, as in English:

<i>John</i>	<i>saw</i>	<i>Mary</i>
S	V	O
<i>Mary</i>	<i>saw</i>	<i>John</i>
S	V	O

and/or to mark the nominals themselves with a particular case, nominative for the subject and accusative for the object, as in German. (For the description of a language that has case marking on a similar pattern, which is to say with a distinct marker for subjects and a different one for objects, see the chapter in this volume on Japanese by Kyoko Inoue; for another, see the chapter on Russian by Bernard Comrie in the companion volume.)

<i>der Mann</i>	<i>sah</i>	<i>den Jungen</i>
S-Nom		O-Acc
The man saw the boy		
<i>der Junge</i>	<i>sah</i>	<i>den Mann</i>
S-Nom		O-Acc
The boy saw the man		

In English, only the personal pronouns are marked for case:

<i>I</i>	<i>see</i>	<i>him</i>	<i>I</i>	<i>laugh</i>
S-Nom		O-Acc	S-Nom	
<i>he</i>	<i>sees</i>	<i>me</i>	<i>he</i>	<i>laughs</i>
S-Nom		O-Acc	S-Nom	

In Jacaltec the functions of subject and object are marked both by word order and by case markers, although the case markers are inserted in

the verb form instead of being on the nominals. Observe the subject and object case markers in the verb and the order of subject and object in the following examples ("Ø" in these examples stands for "zero" object markers, ones with no audible representation):

<i>x-Ø-s-mak</i>	<i>naj</i>	<i>ix</i>
Asp-O-S-hit	he	her
	he hit her	
<i>x-Ø-s-mak</i>	<i>ix</i>	<i>naj</i>
Asp-O-S-hit	she	him
	she hit him	

Since the personal pronouns in first and second person are not used in normal speech except for special emphasis, the case markers in the verb are often the only indication of who is the subject and who is the object:

<i>ch-in</i>	<i>ha-colo</i>
Asp-O	S-help
	you help me
<i>ch-ach</i>	<i>hin-maka</i>
Asp-O	S-hit
	I hit you

Not only does Jacaltec mark both subject and object on the verb, but it also marks them in a particular way illustrated in the examples below:

- (a) *ch-ach wayi*
Asp-you sleep
you sleep
- (b) *ch-oñ munlayi*
Asp-we work
we work
- (c) *ch-oñ ha-maka*
Asp-us you-hit
you hit us
- (d) *ch-ach cu-maka*
Asp-you we-hit
we hit you

In examples (a) and (b), the subjects of the intransitive verbs—those verbs that do not take objects—are:

(h)ach "you" and (h)oñ "we"

The notation *(h)ach/(h)oañ* means that the full form of the case markers is *hach* and *hoañ* but that the initial *h* is lost when the case marker is suffixed to the aspect marker. In examples (c) and (d), the subjects of the transitive verbs—those verbs that take an object—are:

ha "you" and *cu* "we"

Therefore, in Jacalteco not all subjects take the same case marker. One has to distinguish subjects of transitives from subjects of intransitives and assign them a different case. Furthermore, the case marker of the object of a transitive verb is the same as the one of the subject of an intransitive. Note how the object markers of examples (c) and (d) are the same as the subject markers of examples (a) and (b):

(h)ach : "you" and *(h)oañ* : "us"

Jacalteco is said to have an *ergative* case-marking system, a system in which subjects of transitive verbs are assigned a case called *ergative*, while subjects of intransitives as well as objects of transitives are assigned a different case called *absolutive*.

As is usual in ergative languages, the absolutive is also used to mark subjects when there is a passive construction:

xc-oañ mak'laxi
Asp-we be hit
we were hit

xc-ach collaxi
Asp-you be helped
you were helped

and it is used to mark the subject of a stative predicate, in which case it appears behind the predicate:

sonlom hach
marimba you
phaxa you are a marimba player

meb'a hoañ
poor we
we are poor

The ergative case is also used as the possessive marker:

ha mam cu mi'
your father our mother

Ergative languages are not as common as nominative languages. Among the languages of the world that have been identified as ergative are Basque, Eskimo, Caucasian languages, the Mayan languages, and almost all the languages of Australia. (See the chapter in this volume by John Haviland on Guugu Yimidjirr; for another instance of ergative case marking, see the chapter on the Hua language of Papua New Guinea by John Haiman in the companion volume.) There is a certain amount of variation among these languages in the details of their case-marking systems (whether only nouns are marked ergatively and not the pronouns, whether the case markers are on the nouns or the verbs, etc.), but they all share the pattern of case assignment diagrammed below. In the following example, the nominals that have the same marker are in italics and the one that has a distinct marker is boxed:

Nominative System

Ergative System

The boy broke the pot

The boy broke *the pot*

The pot broke

The pot broke

EXERCISE 2

How would you say the following sentences in English if English happened to be an ergative language?

- (a) he hit me _____ hit _____
and I cried. and _____ cried.
- (b) I pushed him _____ pushed _____
and he fell. and _____ fell.

The foregoing sketch of the ergativity of Jacalteco is an example of descriptive linguistics that is meant to show how a system functions without losing the reader in the intricacies of the real speech situation. However, a field worker analyzing Jacalteco would have to deal with a whole array of additional facts. For example, there are two sets of ergative markers, one used with consonant initial stems and another with vowel initial stems, and the existence of these two sets alone could cause an unwarned field worker a moment of confusion. Furthermore, in this specific situation, one has to contend with the often inaudible nature of the case markers. For instance, as we have seen, the third-person absolutive marker is a "zero" marker (written \emptyset), which means that there is no audible morpheme for it, while the third-person ergative marker

used with vowel initial stems is dropped when the object is a third person. All this means that a form like:

x-Ø-y-il ix naj
 Asp-A3-E3-see she him
 she saw him

is said:

xil ix naj

Finally, the first-person absolutive and the first-person ergative used with consonant initial stems are homophonous, both sounding (*h*)in. All these factors combined make it difficult at times for the field worker learning Jacaltec to identify the case markers and later to write about them, when it is best to use only selected forms that do not obscure the demonstration of the mechanism of the Mayan ergative case-marking system.

2.2 Directionals

Another characteristic of the Jacaltec language is its use of directional particles on verbs to express with precision movement of persons and objects. This characteristic is shared by many languages of the Mayan family. Similar directional particles are used in many languages of the world. In English they correspond to the verbal particles *out*, *in*, *off*, etc. as in *to go out*, *to come in*, *to walk up*, *to climb down*, etc. (see Table 1.2).

The first two directionals express motion away from or toward the speaker or the agent. They are the most common directionals, found in the last position in the verb when other directionals and suffixes are present.

The next four directions (3–6) represent the four cardinal directions of the old Mayan civilization. *-(o)c* corresponds to the direction of the east. The verb *oci* “to enter” is the verb used to say that the sun comes up, *-(o)c* indicates therefore the direction of sunrise. *-(e/i)l* corresponds to the direction of the west, the verb *eli* “to exit” being used to say that the sun sets. *-(e/i)l* is therefore the direction of sunset. The four directionals are recognizable in the four adverbial expressions:

<i>cehtu'</i>	(<i>ah</i>)	upward
<i>ceytu'</i>	(<i>ay</i>)	downward
<i>cectu'</i>	(<i>oc</i>)	eastward
<i>celtu'</i>	(<i>el</i>)	westward

TABLE 1.2 *Inventory of Jacaltec Directionals*

The directional particles are the reduced forms of intransitive verbs.		
(1) <i>-toj</i>		“away from” from <i>toyi</i> “to go”
(2) <i>-tij</i>		“toward” from <i>tita</i> “to come”
(3) <i>-(a)h</i>		“up” from <i>ahoj</i> “to ascend”
(4) <i>-(a)y</i>		“down” from <i>ayoj</i> “to descend”
(5) <i>-(o)c</i>		“in” from <i>oci</i> “to enter”
(6) <i>-(e/i)l</i>		“out” from <i>eli</i> “to exit”
(7) <i>-(e/i)c'</i>		“passing, through” from <i>ec'i</i> “to pass, go”
(8) <i>-pax</i>		“back, again” from <i>paxi</i> “to return”
(9) <i>-can</i>		“remaining, still” from <i>cani</i> “to remain”
(10) <i>-cah</i>		“up, suddenly” (the expected verb <i>cahi</i> was not found in the language)

The directional *-(e/i)c'* (7) is the first directional that does not imply a point of origin or an end point, but rather a motion to the side, or through a particular point. Since it functions like the above directionals, directionals 3 through 7 inclusive will be referred to as the *cardinal directionals*.

The last three directionals (8–10) form a semantic group somewhat apart from the others. The first one, *-pax*, means to have gone somewhere and have returned “here.” It corresponds semantically to the combination of *-toj* “away” and *-tij* “toward here.” *-can* (9) expresses the absence of movement, meaning “remaining,” “to go somewhere to stay,” or “to be left behind.” *-cah* (10), the least used of the directionals, indicates an upward direction, the motion of something thrown up in the air that is expected to fall back down. It is semantically related to the word *satcah* “sky,” and does not specify point of origin or end point. These last three directionals are frequently used with secondary meanings: *-pax* “also, too,” *-can* “once and for all,” and *-cah* “suddenly.”

2.2.1 *Intransitive Verbs of Motion* Intransitive verbs of motion are generally composed of two directionals. The first one refers to the direction taken by the agent, i.e., the person or the object being spoken about. It is one of the four cardinal directionals (3–6). The second

directional specifies whether the movement is away or toward the speaker:

x-Ø-ah-toj naj swi' te' ðah
 Asp-he-up-away he top the house
 he climbed on top of the house (away from where I stand)

x-Ø-ah-tij ix yul ha' ha'
 Asp-she-up-here she in the water
 she came out of the water (here, where I stand)

2.2.2 Getting Around Jacaltenango Jacaltenango is built on a narrow ledge down from the other Jacalteco town of Concepción. Across the gorge where the Río Azul (Blue River) runs is the Jacalteco village of San Marcos (see Figure 1.4). If John (*naj ðuwan*) were going down to the river from Jacaltenango, Mary (*ix malin*) would say of him:

ch-Ø-ay-toj naj ðuwan
 Asp-he-down-away man John
 John is going down there

while if he were going from Jacaltenango to San Marcos, Antonio (*ya' antun*) would say of him:

ch-Ø-ec'-tij naj ðuwan
 Asp-he-aside-here man John
 John is coming across

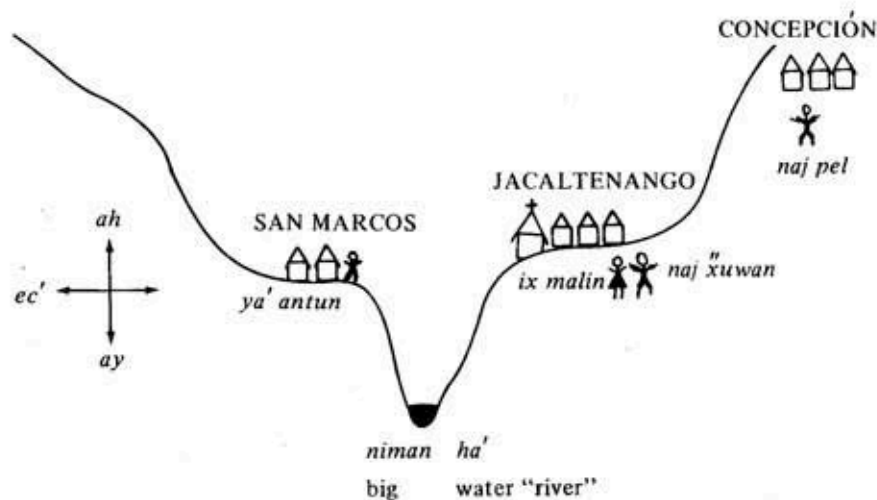


FIGURE 1.4 *Jacaltenango and Its Environs*

It is not difficult to understand how Jacalteco directionals function; it is more difficult, however, to acquire a sense of the imperative precision of the language in this domain without trying to “think in Jacalteco.” This is the purpose of the following exercise.

EXERCISE 3

(Refer to people and places in Figure 1.4)

- (a) the speaker is in Jacaltenango, what is the most likely destination of the traveler/subject in each of these cases?

chaytij naj pel
chahtoj naj ðuwan

- (b) the speaker is in Jacaltenango, who could the traveler/subject be?

chec'tij _____
chahtoj _____

- (c) where is the speaker?

chaytij naj ðuwan
chaytij ya' antun

2.2.3 Transitive Constructions While in intransitive verb forms the cardinal directionals (*a*)*h*(*a*)*y*(*o*)*c*(*e*)*l*(*e*)*i**c'* “up/down/in/out/to the side” express the movement of the actor/subject, in transitive verb forms they refer to the movement of the object/patient:

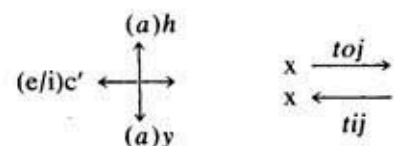
xc-ach hin-ten-ic'-toj
 Asp-you I-push-aside-away
 I pushed you aside (*you moved aside*)

While in intransitive forms the referential directionals *toj/tij* “toward/away from” express the direction of the movement with respect to the position of the speaker, in transitive forms they refer to the position of the actor/subject:

xc-ach hin-ten-ic'-toj
 Asp-you I-push-aside-away
 I pushed you aside (*away from me*)

EXERCISE 4

Fill in the spaces with the appropriate directionals, remembering that:



Use the full form of the directionals (ah/ay) after a consonant, and the short form (h/y) after a vowel:

- (a) you threw the garbage down the cliff

xabej-_____ k'alem sat pajam
 you threw garbage on cliff

- (b) I threw the ball on top of the house

xwa-_____ pelota swi' te' ñah
 I sent ball top the house

2.2.4 *Jacaltec Prepositions* A discussion of the expression of movement and directionality in Jacaltec would not be complete without a remark about the nature of Jacaltec prepositions. Unlike English prepositions, Jacaltec prepositions express only the point of contact between two objects and do not express movement or directionality. To illustrate this point, compare the elements expressing directionality in the Jacaltec and English sentences below:

- (a) *xcin haten-ic-toj yul carro*
 you moved me-in-away in truck
 you *pushed* me *into* the truck

- (b) *xcin haten-il-tij yul carro*
 you moved me-out-toward in truck
 you *pulled* me *out of* the truck

- (c) *xcin haten-ay-tij yul carro*
 you moved me-down-toward in truck
 you *pulled* me *down from* the truck

The inventory of words expressing directionality in these three examples is shown below:

Jacaltec

Directionals

ic/ill/ay
tij/toj

English

Directional particles

in/out/down

Verbs

push/pull

Prepositions

to/of/from

The striking feature of this inventory is the diffuseness of the English system, which uses directional particles, verbs, and prepositions to express directionality, as compared with the concentration of all the directional meaning in the directionals in Jacaltec. The static nature of the Jacaltec prepositions, which indicate the point of contact before or after the action, is further shown in the pairs of examples below:

xwacoj k'ap camixê yul te' caña
 I put the shirt inside the chest
 I put the shirt *in* the chest

xwiloj k'ap camixê yul te' caña
 I took out the shirt inside the chest
 I took the shirt *out of* the chest

xwahtoj tx'otx' xih yib'añ k'a
 I put up away the pot on fire
 I put the pot *on* the fire

xwaytij tx'otx' xih yib'añ k'a
 I put down toward the pot on fire
 I took the pot *off* the fire

The systematic use of directionals and the conciseness of the system are the two main features that characterize the expression of directionality in Jacaltec. From the point of view of a field worker, it means difficulty in picking out the short directionals in complex verb forms and difficulty in remembering to use them, which prompts the informants to reject sentences because they sound unnatural to native Jacaltec speakers.

2.3 Noun Classifiers

It is common for natural languages to organize their nouns in different classes. In European languages it takes the form of gender assignment. All nouns are assigned a gender; some languages have two

genders, like French and Spanish, others three, like German. These genders are partly assigned on semantic grounds. For example, in Romance languages the gender of all animate nouns is determined by sex—masculine for males and feminine for females:

	French	Spanish	
M	<i>un enfant</i>	<i>un niño</i>	a male child
F	<i>une enfant</i>	<i>una niña</i>	a female child
M	<i>un chat</i>	<i>un gato</i>	a tomcat
F	<i>une chatte</i>	<i>una gata</i>	a she-cat

All inanimate nouns, however, have arbitrary genders which have to be learned and memorized by all speakers:

	French	Spanish	
M	<i>le sel</i>	F <i>la sal</i>	salt
F	<i>une fourchette</i>	M <i>un tenedor</i>	a fork
M	<i>un ongle</i>	F <i>una uña</i>	a fingernail

The Jacaltec noun classifier system resembles a gender system in that it assigns nouns to different classes; however, it differs from a gender system in several ways. First, it assigns nouns to classes strictly on semantic grounds, which means that it is possible to predict from its meaning to which class a noun belongs. Second, while languages have two or three genders, the noun classifier system counts with twenty-five classes. A third difference is that not all nouns are classified. The system applies only to concrete nouns and provides an organization of the material world that ignores abstract nouns, with a few exceptions. Thus words with concrete meanings such as "man," "horse," "flower," and "rock" will be preceded by noun classifiers, but not words with abstract meanings such as "story," "night," "truth," or "strength." Finally, while genders typically trigger an agreement phenomenon with articles and adjectives, what we call noun classifiers ordinarily do not.

Noun classes are expressed by a noun classifier placed in front of the noun. Most of the noun classifiers are derived from nouns themselves. For examples, the classifier for woman is *ix*, and the word for woman is also *ix*. Thus the equivalent of "the woman" is *ix ix*. A classified noun is always accompanied by its noun classifier. The combination of noun classifier + noun corresponds to the combination definite article + noun of English, although the noun classifier cannot be said to be a definite article since it is still present with the indefinite article:

	Classifier	Noun	
	<i>no'</i>	<i>txitam</i>	
	animal	pig	the pig
Indefinite Article	Classifier	Noun	
	<i>hune'</i>	<i>no'</i>	<i>txitam</i>
	a	animal	pig a pig

The noun classifiers fulfill a very active role in the grammar of Jacaltec, since they provide pronoun forms for the nouns they classify:

xul naj pel yaj mach xcan naj
 came man Peter but not stayed man
 Peter came but *he* did not stay

swatx'e ix malin ixim wah?
 made woman Mary corn tortillas?

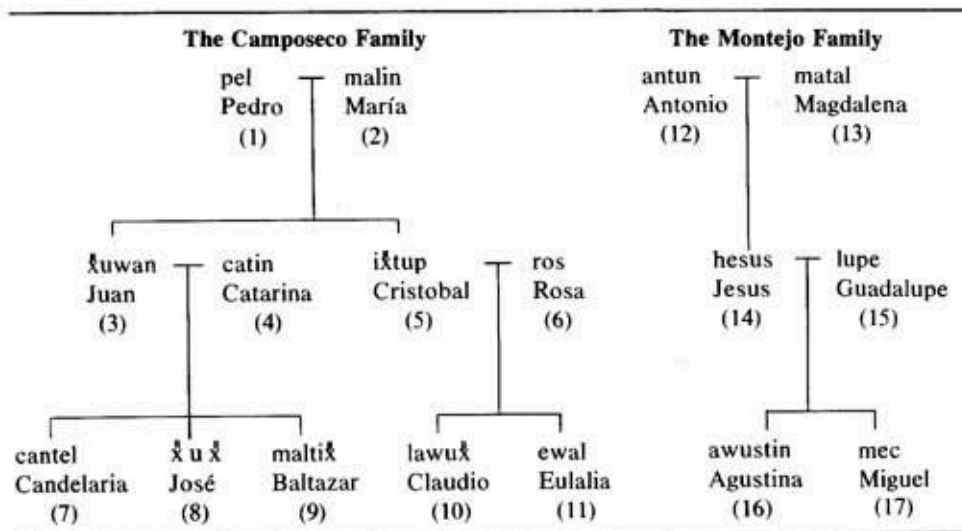
ho' swatx'e ix ixim
 yes made woman corn
 did Mary make the tortillas? yes, *she* made *them*

2.3.1 *Noun Classifiers for Persons* Noun classifiers for persons are assigned on the basis of three variables: sex, relative age, and kinship. Persons, including humans and deities, are classified in the following manner:

<i>cumam</i>	he (deity)
<i>cumi'</i>	she (deity)
<i>ya'</i>	he/she (older generation)
<i>unin</i>	he/she (infant)
<i>ho'</i>	he (equal age, kin)
<i>xo'</i>	she (equal age, kin)
<i>naj</i>	he (equal age, non-kin)
<i>ix</i>	she (equal age, non-kin)

Most of these classifiers are specific to one sex, with the exception of *ya'* for an older person and *unin* for an infant. *ya'* refers to a person who is older than the speaker and commands respect, such as parents, godparents, and authorities. *ho'* and *xo'* refer to male and female siblings and cousins. *naj* and *ix* refer to men and women no older than, and unrelated to, the speaker. The classifiers reflect the particular relationship of age and kinship that holds between the speaker and the person referred to. This will be illustrated by the example of the Camposeco and the Montejo families (see Table 1.3).

TABLE 1.3 The Camposeco and Montejo Families



José (8) will refer to his sister as *xo'* *cantel* (7), to his female cousin as *xo'* *ewal* (11), and to their friend as *ix* *awustin* (16). He will talk about his brother as *ho'* *maltiξ* (9) and his male cousin as *ho'* *lawuξ* (10) but about Agustina's brother as *naj* *mec* (17). José (8) will also refer respectfully to his parents as *ya' hin mam* "my father" (3) and *ya' hin mi'* "my mother" (4), to his uncle as *ya' hin mam iξtup*—literally "my father Cristobal" (5)—and to his aunt as *ya' hin mi' ros*—literally "my mother Rosa" (6). He will also respectfully call Agustina's father *ya' hesus* (14).

Rosa (6) will be referred to by her parents (1–2) and her husband (5) as *xo' ros*, by her children (10–11) as *ya' hin mi'*, by her neighbor Guadalupe (15) as *ix ros*, and by her neighbor's children (16–17) as *ya' ros*.

EXERCISE 5

(a) How does Cristobal (5) refer to

- his brother (3)? _____ *ξuwan*
 his neighbor (14)? _____ *hesus*
 his neighbor (12)? _____ *antun*

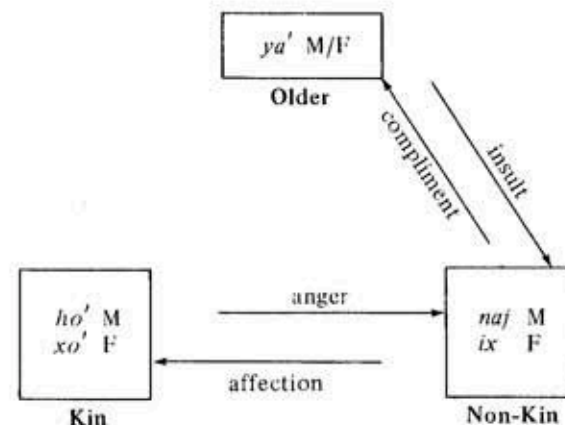
(b) How is Guadalupe (15) referred to

- by her father (12)? _____ *lupe*
 by her neighbor Rosa (6)? _____ *lupe*
 by her neighbor Eulalia (11)? _____ *lupe*

2.3.2 *Insults and Compliments* In special circumstances, to express strong feelings of dislike or anger, of close friendship or admiration, another set of rules of usage determines the choice of classifier. Classifiers normally used for kin also carry with them the expression of closeness, respect, and admiration, while classifiers for non-kin are sensed as more distant, potentially expressing negative feelings. The classifiers *xo'* and *ho'* are therefore used for non-kin (instead of *naj* and *ix*) to mark special affection or a feeling of admiration. Conversely, the distant classifiers *naj* and *ix* normally used with non-kin are used for kin with whom one feels particularly angry and unhappy. Similarly, when the classifier *naj* or *ix* is used for an older person, instead of the expected *ya'*, it carries with it the weight of an insult. One may not insult in that way one's own parents and grandparents, however. The very strong code of respect for one's family does not allow such expression.

EXERCISE 6

Keeping in mind the dynamics of the classifier system illustrated below, fill in the appropriate noun classifiers in the monologue of the angry Candelaria (7):



"Do you know what my unbearably stupid cousin _____ ewal (11) did? She is only ten and always starting nasty gossips! She told my friend _____ awustin (16) that I had met with her fiancé Lucas. It is not true. I really like _____ awustin (16) like a sister and I would not do that to her. I can tell that _____ ewal (11) is just going to become like the old

witch of _____ Casimira who is so old and has such a poisonous tongue!"

This field worker learned to appreciate the nuances of treatment conveyed by the choice of classifiers. In general she was called *ix Nicolasa*; the children and the adults who wanted to express deference for her education—or her money—called her *ya' Nicolasa*; and a few people, on occasion, would call her *xo' Nicolasa*, always with a clear overtone of affection.

2.3.3 *The Supernatural and the Human Condition* The pantheon of Jacaltec deities includes the following:

<i>cumam dios</i>	God
<i>cumam tz'ayic</i>	sun
<i>cumam c'uh</i>	lightning
<i>cumam sarampio</i>	measles
<i>cumam hik'ob'</i>	whooping cough
<i>cumi' virgen maria</i>	Virgin Mary
<i>cumi' x'ahaw</i>	moon
<i>cumi' ixim</i>	corn

Naj is used as the classifier of human contingency, and it is found with the following words:

<i>naj cak'e</i>	wind
<i>naj witz</i>	mountain
<i>naj ya'b'il</i>	disease
<i>naj howal</i>	fight, war
<i>naj b'isc'ulal</i>	sadness
<i>naj tx'ixwilal</i>	fear
<i>naj meb'a'il</i>	poverty

Deification applies to phenomena which either bring death (measles, whooping cough) or symbolize life (corn). The familiar gods of Mayan mythology are the sun, the moon, and lightning. The human classifier *naj* applies to all events and feelings of human condition (war, disease, sadness, happiness, poverty), and to semigods with which one is more familiar and feels closer, like the spirit of the mountain and that of the wind.

2.3.4 *Noun Classifiers for Objects of the Physical World* The physical world is divided into the following categories:

<i>atz'am</i>	(from <i>atz'am</i> "salt") <i>atz'am atz'am</i> "salt"
<i>ch'en</i>	(from <i>ch'en</i> "rock") stone, rock, glass, metal, and objects made of same material <i>ch'en yojech</i> "cooking stone," <i>ch'en melyu</i> "money"
<i>ha'</i>	(from <i>ha'</i> "water") water <i>ha' hab'</i> "rain," <i>ha' pam</i> "lake"
<i>ixim</i>	(from <i>ixim</i> "corn") corn, wheat and all products made of corn and wheat <i>ixim awal</i> "cornfield," <i>ixim wah</i> "tortilla"
<i>k'ap</i>	(from <i>k'ape</i> "cloth, material") cloth <i>k'ap chañe</i> "corte, skirt of the Jacaltec women" <i>k'ap weñe</i> "pants for men"
<i>k'a'</i>	(from <i>k'a</i> "fire") <i>k'a k'a</i> "fire"
<i>metx</i>	for dog only <i>metx tx'i'</i> "dog"
<i>no'</i>	(from <i>nok'</i> "animal") for all animals except dogs, and products made of animal material <i>no' mis</i> "cat," <i>no' txitam</i> "pig"
<i>te'</i>	(from <i>te'</i> "plant") for all plants except corn, and all products from plant material except rope, thread, and cloth <i>te' hub'al</i> "black beans," <i>te' tx'at</i> "bed"
<i>tx'al</i>	(from <i>tx'al</i> "thread") thread, woven material made of thread <i>tx'al sintae</i> "hair band," <i>tx'al faja</i> "sash"
<i>tx'añ</i>	(from <i>tx'añ</i> "rope") fiber rope, objects made of rope <i>tx'añ txim</i> "cargo net," <i>tx'añ lasu</i> "rope"
<i>tx'otx'</i>	(from <i>tx'otx'</i> "ground, land, earth") ground, dirt, made of dirt or clay <i>tx'otx' xih</i> "earth pot," <i>tx'otx' loc'</i> "adobe"

Each noun class contains a specific type of object as well as objects derived from them. For example, wooden objects fall into the plant class such as *te' tx'at* "bed," *te' ñah* "house" (from the time houses were made of cane and thatch roof); metallic objects fall into the stone/metal/glass class such as *ch'en melyu* "money," *ch'en limeta* "glass bottle," and *ch'en machit* "machete"; and animal products fall

into the animal class such as *no' ceso* "cheese," *no' xapun* "soap" (made with animal fat and ashes and used to wash hair).

The classifiers therefore always point to the primary substance out of which a product is made, as illustrated by the list of the drinks available in Jacaltenango:

<i>ha' ha'</i>	"water," which is not recommended for drinking
<i>no' lech</i>	"milk," less and less available for the children of Jacaltenango as the population grows and more building grounds are needed—at the expense of cow pastures
<i>te' uc'e</i>	"aquavit," alcohol made from sugar cane on which people get drunk to celebrate happy events and forget their miseries
<i>te' cape</i>	"coffee," the main drink of Guatemala which is always served sweetened with raw sugar and flavored with cinnamon
<i>ixim ulul</i>	"atol," thick drink made of corn, also seasoned with sugar and cinnamon

Since the classification of nouns in Jacalteco is semantic and predictable, a learner can assign nouns to their class provided he/she knows what the primary substance of the object is.

EXERCISE 7

Think of what the objects are made and assign them to the appropriate class among the following: *no'* animal, *te'* plant, *ch'en* stone/glass/metal.

_____	<i>carro</i>	car
_____	<i>chib'e</i>	meat
_____	<i>oñ</i>	avocado
_____	<i>campana</i>	bell (church-)
_____	<i>hum</i>	book
_____	<i>chamarra</i>	woolen blanket
_____	<i>son</i>	marimba
_____	<i>ome</i>	earrings
_____	<i>xañab'</i>	sandals
_____	<i>meña</i>	table

One can even find in the language a few pairs of nouns distinguished by their different classifiers:

<i>te' cuchara</i>	wood spoon	vs.	<i>ch'en cuchara</i>	metallic spoon
<i>te' xila</i>	chair	vs.	<i>no' xila</i>	saddle
<i>te' ak'b'al</i>	flower	vs.	<i>no' ak'b'al</i>	candle

Therefore, Jacaltecos view a horse saddle as an animal-matter (i.e., leather) chair, and a candle as an animal-matter (i.e., pig fat) flower stem.

2.3.5 The Classification of the Jacalteco World Several comments may be made from the inspection of the noun classifiers on the state of religious beliefs and scientific knowledge of the old Mayan civilization at the time during which this system of noun classification arose. As already mentioned, the elements that take god-like and human-like classifiers point to the powers that governed the old Mayan world. They were the sun, the moon, lightning, the life-supporting corn, and the deadly diseases such as measles and whooping cough. They were also the more human spirits that inhabited the world such as the wind and the mountain and the milestones of human life.

The three noun classifiers that are used with only one noun may also isolate important cultural objects of the life of the old Mayas. The dog, for example, is isolated from all other animals and given its own classifier. Dogs are the best companions of the men in the fields; every Jacalteco goes to the cornfield carrying his machete and followed by his dog.

Salt is classified by itself, rather than being assigned to the rock category, maybe to indicate its religious significance. During the days before the harvest when food becomes very scarce, it is not uncommon for poor families to survive for weeks on a miserable diet of a few meager tortillas, if any at all, greens collected in the mountains, and salt. People of Jacaltenango say that in the poor village of San Marcos across the gorge, some people survive on salt alone when there is no more food to be had.

The third classifier that is used only for one noun is that of fire, but this may be simply due to the fact that products made from fire do not exist. Notice how the word for lightning is not classified with the classifier for fire. As was said above, lightning is treated like a deity, with the classifier assigned to gods.

Although the ancient Jacaltecos identified the two natural elements of water and fire, they did not identify the third one, the air. While water and fire were assigned a classifier, air, not recognized as a substance in itself, was not. The noun that is used to refer to static air is the same as the one used for the wind—*cak'e*. *cak'e* is used with the classifier of human contingency *naj* when it refers to the spirit of the wind. Such use

reflects the belief that the wind is a spirit that causes many diseases; Jacaltec mothers always entirely cover their babies to protect them from the spirit of the wind, which gives headaches and earaches. But when the word *cak'e* is used to refer to the natural element air/wind, it remains unclassified.

The other substances left unclassified in Jacaltec include smoke, cloud, and dust, which were not assigned to the expected categories of fire, water, or earth/dirt. Similarly, the stars and the sky do not fall into any category. These unclassified nouns are:

<i>cak'e</i>	air/wind
<i>satcañ</i>	sky
<i>tx'umel</i>	star
<i>ñub'</i>	smoke
<i>asun</i>	cloud
<i>pojoj</i>	dust

The classification of natural elements of the world is therefore very incomplete in Jacaltec, particularly for the faraway phenomena. When some of those elements were classified, it was into the categories of gods or spirits as for the sun god (*cumam tz'ayic*), the lightning god (*cumam cuh*), the male spirit of the wind (*naj cak'e*), and the female spirit of the moon (*ix x'ahaw*)—which is sometimes treated as a goddess (*cumi' x'ahaw*). As the imprint of man on nature becomes more marked, the classifiers become more specific. Next to the unclassified or deified natural elements that escape human control are some natural phenomena that are classified simply by their appearance. For example, both ice and hail are classified as hard substances in the stone category: *ch'en chew* "ice" (literally, stone cold), *ch'en sajb'at* "hail" (literally, stone hail). This happens in spite of the fact that Jacaltec can observe that both melt into water.

As the people gain control over the world that surrounds them and start using its products, the classifiers come to identify objects not by their appearance but by their matter. For example, all products derived from animals are assigned to the animal category. These products include some that do not undergo any processing like *no' lech* "milk," *no' hos* "egg," or *no' chib'e* "meat" and some that are manufactured such as *no' xañab'* "sandals," *no' ñila* "saddle" made from the skins, *no' chamarra* "woolen blankets" made from the wool, *no' ñapun* "soap," and *no' ak'b'al* "candle" made from animal fat.

The domination of man over the vegetable world is apparent in the sudden proliferation of classifiers referring to materials derived from plants. There are five classifiers for the plant world. The corn *ixim* is set aside from other plants with its undeniable cultural and religious im-

portance. The classifier *te'* designates all other plants and classifies all objects made of wood, such as pieces of furniture, doors, and windows. Three classifiers identify materials that require a more elaborate manufacturing process. They are *tx'añ* for rope and rope products, *tx'al* for thread and thread products, and *k'ap* for fabric and clothes.

Therefore, the language is explicit about the fact that to make a table, one needs a tree:

(1) *te' te'* tree → (1') *te' mexa* table

that to make a net bag, one needs first to have made rope, which is made from the agave plant:

(1) *te' ch'ech* agave → (2) *tx'añ tx'añ* rope →
(2') *txañ txim* net bag

and that to make a shirt, one needs fabric, which is made from thread, which is made from the cotton plant, with the resulting chain of classifiers:

(1) *te' tenok* cotton → (2) *tx'al tx'al* thread →
(3) *k'ap k'ape* cloth → (3') *k'ap camiñe* shirt

2.3.6 *A Frozen System of Classification* The noun classifier system of Jacaltec is anthropologically interesting. It seems to reflect aspects of the culture of the old Mayas—their view and understanding of the world. The system used to be a productive part of the language, open to change and addition. It shows signs of its adaptability at the time of the conquest and early colonization. A study of how Spanish loanwords were incorporated in the noun classifier system of Jacaltec reveals that the system is now more and more limited and less productive, adapting less and less to the technology of the modern world.

At first, loanwords underwent extensive phonological adaptation. Spanish sounds and combinations of sounds that did not exist in Jacaltec were replaced:

Spanish	Jacaltec	
<i>puerta</i>	<i>pulta</i>	door
<i>banco</i>	<i>pancu</i>	bench
<i>padre</i>	<i>pale</i>	father (priest)

Later on, loanwords were borrowed with no adaptation, and new sounds were introduced in the speech of Jacaltecs:

<i>vaso</i>	<i>baso</i>	glass
<i>carro</i>	<i>carro</i>	car
<i>avion</i>	<i>abyon</i>	airplane

Whenever possible the loanwords were assigned to their natural classes:

<i>te' pulta</i>	wood door
<i>ya' pale</i>	respected father
<i>tx'otx' xalu</i>	earth jug (from Spanish <i>jarro</i> "jug")

Some classes were extended to accommodate loanwords. This was the case for the corn class, which was expanded to incorporate the imported wheat:

<i>ixim trigo</i>	corn wheat (from Spanish <i>trigo</i> "wheat")
<i>ixim pan</i>	corn (wheat) bread (from Spanish <i>pan</i> "bread")

Wheat is used mostly to make sweet rolls, which are served with coffee at fiestas and receptions and is also consumed by the Ladino population.

The rock class was also expanded to include metal and glass objects:

<i>ch'en machit</i>	metal machete
<i>ch'en baso</i>	glass/metal cup
<i>ch'en carro</i>	metal car

Notice how this part of the industry did not develop into a complex classificatory system comparable to the one observed for the weaving industry.

The most recent loanwords are not classified. The system of noun classifiers is becoming a frozen system that is not following the evolution of the lexical part of the language. There is no further extension of category and no invention of new classifiers to deal with the wave of new loanwords that reflect the advances of modern technology. Words like *cerveza* (beer), *Pepsi-Cola* and *Coca-Cola* are now commonly used, but without classifiers for lack of appropriate classifier and lack of identification of their ingredients. Most striking is the invasion on the market of plastic objects all of which remain unclassified. Although the words *plástico* and *naylo* have been borrowed, they are not being used as classifiers for the plastic goods of very common use and great popularity in Jacaltec households nowadays:

<i>no' sapato</i>	leather shoes	vs.	<i>sapato</i>	plastic shoes
<i>ch'en baso</i>	metallic cup	vs.	<i>baso</i>	plastic cup
<i>tx'otx' xalu</i>	earth jug	vs.	<i>xalu</i>	plastic jug

In order to specify that an object is made of plastic, the compound (noun + *plástico*) may be used, as in *baso plástico* "a cup made of plastic," although the use of the word without classifier is understood to mean that the cup is plastic and not metallic. These new loanwords increase the number of nouns that remain unclassified in Jacaltec, which include nonconcrete words (word, story, song), nouns indicating location rather than concrete building (church, marketplace, town hall, school), time expressions (hour, month, year), and body parts.

The three features of the Jacaltec language presented in this section offered some examples of the variation encountered across the languages of the world in three different domains of grammar. Among the languages that use case marking to signal the functions of subject and object, the majority function on a nominative/accusative system while Jacaltec represented an interesting example of the less common ergative system. Although all the languages have the means to express notions of directionality, in some languages—such as most of the American Indian languages—the expression of directionality constitutes an essential part of the verb complex, as was shown with the Jacaltec system.

Finally, while nouns are classified in many languages into either genders or noun classes, in Jacaltec they are organized into an elaborate system that provides interesting insights into the world as the Jacaltec speakers view it.

3 THE LINGUISTIC HORIZONS OF JACALTEC SPEAKERS

As people acquire a language and learn how to use it, they also acquire attitudes and beliefs toward that language and toward other people's languages. These attitudes and beliefs are generally shared by the members of the linguistic community and form an integral part of the culture. It sometimes takes months for the field worker to discover, through local incidents, comments from informants, confrontations, and puzzled looks, what these attitudes and beliefs are for a given community.

3.1 Spanish and Jacaltec

Jacaltec is spoken exclusively by Indians, although in the past this was not always the case. Until not long ago, the isolated Spanish-speaking Ladino families used to acquire some speaking knowledge of

the local languages. They did it out of necessity; they were the school-teachers and officials of one sort or another, and they needed to communicate with a population that did not speak Spanish. Nowadays only in the most isolated villages would Ladino children still learn the local Mayan languages.

Spanish is the official language of the country and the language of prestige. In recent years it has been steadily spreading among the Indian population, to the extent that men go to serve in the army, and listen to the Spanish radio, and the children attend school. In their eagerness to help their children find a place in the dominant culture, some Indian parents of Jacaltenango may also decide to speak only Spanish to them, even if they themselves are not fluent in it.

Considered from a Ladino point of view, Jacaltec and the other Mayan languages are but "dialects"—a word associated with primitive ways, lack of education, superstitious beliefs, and poverty. Many believe these dialects to be breaking down, inadequate for education, and without grammar. Ladinos expressed such feelings by being half-amazed and half-scornful of a foreigner coming to study the grammar of Jacaltec. They thought that there was no grammar to be studied and were critical of the attention given to a language that they believe will and should be replaced in most situations by Spanish.

The attitude of Jacaltec speakers toward their native language is in part influenced by the pervasive attitude of the Ladinos. Most Jacaltec speakers agree with Ladinos in regarding Spanish as the language of prestige and social betterment, a notion heavily reinforced through schooling. So the Jacaltec speakers also were very curious and puzzled about the intrusion of a foreign linguist who presumed to tell them that their language indeed has a grammar, as do all languages, and that it was well worth studying. Some were apologetic, saying their language had broken down, accusing themselves of not learning it and respecting it as had their parents and ancestors. Although this is what they say to a foreigner and what they have come to say in the presence of Ladinos, it does not mean that Jacaltec speakers among themselves do not feel love and respect for their language as it is spoken today. Through centuries of white colonization and domination they have come to keep to themselves the pride they feel for their language and their culture. It was months before they shared their feelings about their language with the foreign field worker. By then, they expressed more and more openly their profound attachment to it and their strong identification with it.

In the town of Jacaltenango itself, the linguistic situation is steadily moving toward generalized bilingualism. A pattern that assigns a different role and function to each language is beginning to emerge. Spanish is the formal language of education and of dealings with public officials, while Jacaltec is the home language, that of private conversation. It is the language of mothers, the language of courtship, the

language of idle talk and heated argument, and that of animated conversation of those sitting by the doorstep in the moonlight. Popular comedies are performed in Jacaltec at fiestas, and young Jacaltecs—inspired by Mexican movies—have begun to compose Jacaltec songs. Both the comedies and songs tell of the life of the Jacaltecs and are sources of obvious delight and pleasure for the people.

3.2 T.M.'s Feelings Toward Her Language

The bilingual informants were all very proud speakers of Jacaltec. They felt more at ease and more expressive in Jacaltec than in Spanish. They all experienced a deep satisfaction and enjoyment at being given the chance to work with, write in, and analyze their native language. T.M. was the most passionate about it. But as many other Jacaltecs, she had fallen prey to the widespread belief that Jacaltec was a second-class language. She gave as proof of this that it was not a written language and that it had no grammar.

T.M. had the notion that language was a very personal means of expression and that there were no right and wrong ways to use it—just personal differences. At first she resisted the idea of learning to write and read it, being convinced that it took special skills that could only be acquired by children through years of formal schooling. Once she began writing, she went through a period during which she would write and translate only her own texts and would refuse to transcribe and translate texts recorded by other people. She would argue that she could not do it because she would probably betray them, since she would not be able to guarantee that what she had heard and understood would be that which they had really meant to say.

This attitude corresponded to the way she judged sentences during sessions of direct elicitation. Her judgments reflected the same distinction between the secure instinctive knowledge she had of her own speech and her perception of other peoples' speech as their property—the expression of their free will for which she had an interpretation, but not necessarily the meaning that the speaker had intended. Her hesitations and scruples in dealing with more than her own speech and her attitude toward language in general stemmed from both the status of her language as an unwritten language and her lack of formal education. With a writing tradition, languages acquire standardization. Norms are set by recognized authorities; they are printed in books and taught in schools. The dialect of a certain group of speakers or a certain location is taken as the standard form, and this standard form is then shared, mostly through writing, by the speakers of all variants of the language. It is mostly through formal education that speakers acquire the feeling they all share the "same" language, in spite of noted differences of speech. But T.M.'s attitude toward language emphasized the reality of

the variation found in unwritten languages, languages that exist only through the speech of individuals.

3.3 Jacaltec Dialects and the Surrounding Mayan Languages

There is no standard form of Jacaltec or of any Mayan language. This means that there are as many variations of the language as there are settlements of Jacaltec speakers, although the Jacaltec language exhibits little dialectal variation compared to other Mayan languages. Such variation is found in all speech communities of the world; however, it is not reflected in the written language, as noted earlier. And as in all the communities of the world, the variations—of accent, intonation, vocabulary, or grammar—are not all perceived as just linguistic variations. In Jacaltenango, as well as anywhere else, certain reactions, feelings, and prejudices are attached to them.

Jacaltec speakers from Jacaltenango consider that the dialect of Concepción is provincial, even though it is spoken by the second largest settlement of Jacaltec speakers. They also make fun of the dialect of San Marcos, the village across the gorge. The accent and speech of San Marcos are considered laughable, and they impersonate peasants in jokes—in the same way that Americans tell Polish or other ethnic jokes.

In addition to their fellow Jacaltec speakers, Jacaltecs have frequent dealings with speakers of two closely related languages—Acateco from the village of San Miguel Acatán, beyond San Marcos, and Kanjobal from the towns of Solomá and Santa Eulalia, a further distance away over the mountains. These three languages form a chain of dialects with unclear boundaries in which Acateco stands halfway between Jacaltec and Kanjobal. This means that Acateco shares as many features with Jacaltec as it does with Kanjobal. For example, it has the same negation word as Kanjobal but the same aspect markers as Jacaltec.

Although linguistically the Jacaltec language has more in common with Acateco than with Kanjobal, the Jacaltecs feel a much closer affinity with the Kanjobal speakers. They say that they understand Kanjobal, while they pretend to be unable to communicate with Acatecos, and it is not uncommon to hear scornful remarks from Jacaltecs as Migueleños go by on their way to or from the market.

The last language with which Jacaltecs are in close contact is Mam, a language from a different branch of the Mayan family of language. Mam speakers from the town of Todos Santos have come down from their inhospitable land to settle at the edge of town where they work for the Jacaltecs. They are socially discriminated against and constitute the poorest segment of the population. Jacaltecs make fun of their singing intonation and often behave very rudely toward them. It is, of course,

the burden of these Todosanteros to learn Jacaltec and/or Spanish in order to communicate.

3.4 The Linguistic World of Jacaltecs

Positive (+), negative (-), and neutral (=) attitudes toward the languages and dialects that compose the linguistic world of the Jacaltecs are summarized in Table 1.4. The linguistic world of the Jacaltecs is, therefore, a patchwork of different dialects and languages toward which they have extremely varying attitudes. There is the prestigious Spanish, the despised Mam, the unintelligible Acateco, the preferred Kanjobal, and within the Jacaltec community itself, the provincial Concepcionero and the peasant Marqueño.

TABLE 1.4 *Attitudes Toward Other Languages and Dialects*

Spanish	+
Dialects of Jacaltec:	
Jacaltenango	+
Concepción	=
San Marcos	-
Other languages of the Kanjobalan branch:	
Acatec	-
Kanjobal	+
Chuj	=
Languages of other branch of the family:	
Mam	-

EXERCISE 8

Describe your own linguistic world and analyze your feelings and attitude toward the languages with which you are or have been in contact. Describe the attitude of the general public toward those languages.

3.5 T.M. and the Tzutujils

Although it might seem easy to think of all the Indians of Guatemala as Mayan, such a unifying concept does not correspond to the reality of a Jacaltec speaker who identifies himself or herself as "Jacaltec" and has little notion of the existence of a Mayan community. Even within their Jacaltec world, people perceive their differences more than their

similarities. While linguists talk of the Mayan family of languages and label them as Jacaltec, Kanjobal, Mam, Quiché, or Cakchiquel, these languages are all referred to as *lengua* "tongue, or language" in Spanish and in each language with the common word for "tongue."

Jacaltecs say *w-ab'xub'al* "my language" or *j-ab'xub'al* "our language" to mean Jacaltec and *y-ab'xub'al najlix* "his/her language" for somebody else's language, but they have no specific names for Mayan languages.

This situation had never bothered T.M. until she went on a trip to Lake Atitlán where people speak Tzutujil, a language of still another branch of the Mayan family, as distinct from Jacaltec as Mam. There, in the market, the women were very intrigued by her, her native costume marking her clearly as a stranger. They tried to talk to her in Tzutujil, and she could not understand them. She tried Jacaltec, and they could not understand her. She came home one day looking very disturbed and asked what those women were speaking, what it was called, and what her language was called so that she could tell them. And she learned that outsiders call her language "Jacaltec" after the name of the linguistic center of the language, her town of Jacaltenango.

SOLUTIONS TO EXERCISES

2. (a) he hit me and *me* cried
(b) I pushed him and *him* fell
3. (a) Jacaltenango, Concepción
(b) *ya' antun/ix malin or naj x̣uwan*
(c) the speaker is down by the river
4. (a) *xabej-ay-toj* (down away)
(b) *xwa-h-toj* (up away)
5. (a) 3: *ho' x̣uwan*
14: *naj hesus*
12: *ya' antun*
(b) 12: *xo' lupe* by her father
6: *ix lupe* by her contemporary neighbor
11: *ya' lupe* by her younger neighbor
6. *ix ewal* (instead of *xo'*)
xo' awustin (instead of *ix*)
ix ewal
ix Casimira (instead of *ya'*)

- | | |
|-----------------------|---------------------|
| 7. <i>ch'en carro</i> | <i>no' chamarra</i> |
| <i>no' chib'e</i> | <i>te' son</i> |
| <i>te' oñ</i> | <i>ch'en ome</i> |
| <i>ch'en campana</i> | <i>no' xañab'</i> |
| <i>te' hum</i> | <i>te' meña</i> |

SUGGESTIONS FOR FURTHER READING

On Linguistics Field Methods

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