# The Legacy of Mesoamerica

## History and Culture of a Native American Civilization

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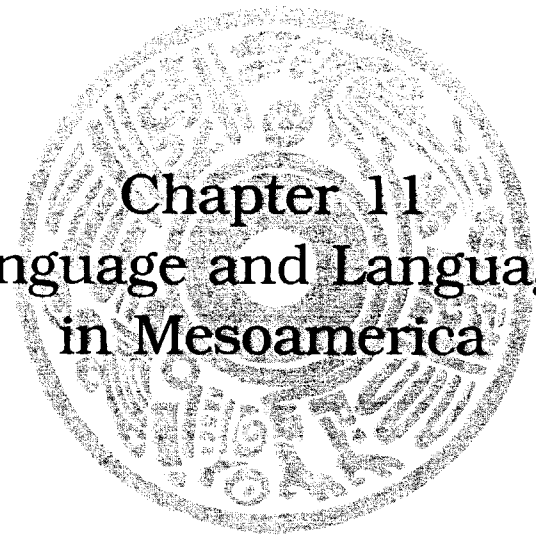


# Chapter 11
# Language and Languages in Mesoamerica

## WHAT ARE THE LANGUAGES OF MESOAMERICA?

Modern Mesoamerica is an area of great linguistic diversity. Although Spanish is the dominant language of the region, around eighty Native American languages are still spoken within its borders, and English is the official language of Belize. The study of these languages has provided a great deal of information about the cultures, histories, and relationships among Mesoamerican peoples. The native languages of Mesoamerica also share certain linguistic properties that distinguish them from languages to the north and south, and help define one part of what it is to be Mesoamerican.

The indigenous languages of Mesoamerica are listed in Figure 11.1. Any such list is to some extent subjective. Two different types of speech are considered to be the same language if speakers of one type understand speakers of the other; the two types of speech are *mutually intelligible* dialects of a single language. If speakers of the two types of speech cannot understand one another, the two are considered to be distinct languages. These are the clearcut cases.

The subjective element enters when people understand one another partially. People with different purposes make systematically different judgments. For example, missionaries may want to provide everyone with a Bible that they can read and understand; different languages or dialects can be defined by whether their speakers understand a single translation of the Bible well enough. For anthropologists, it may be more important to know the extent to which people in

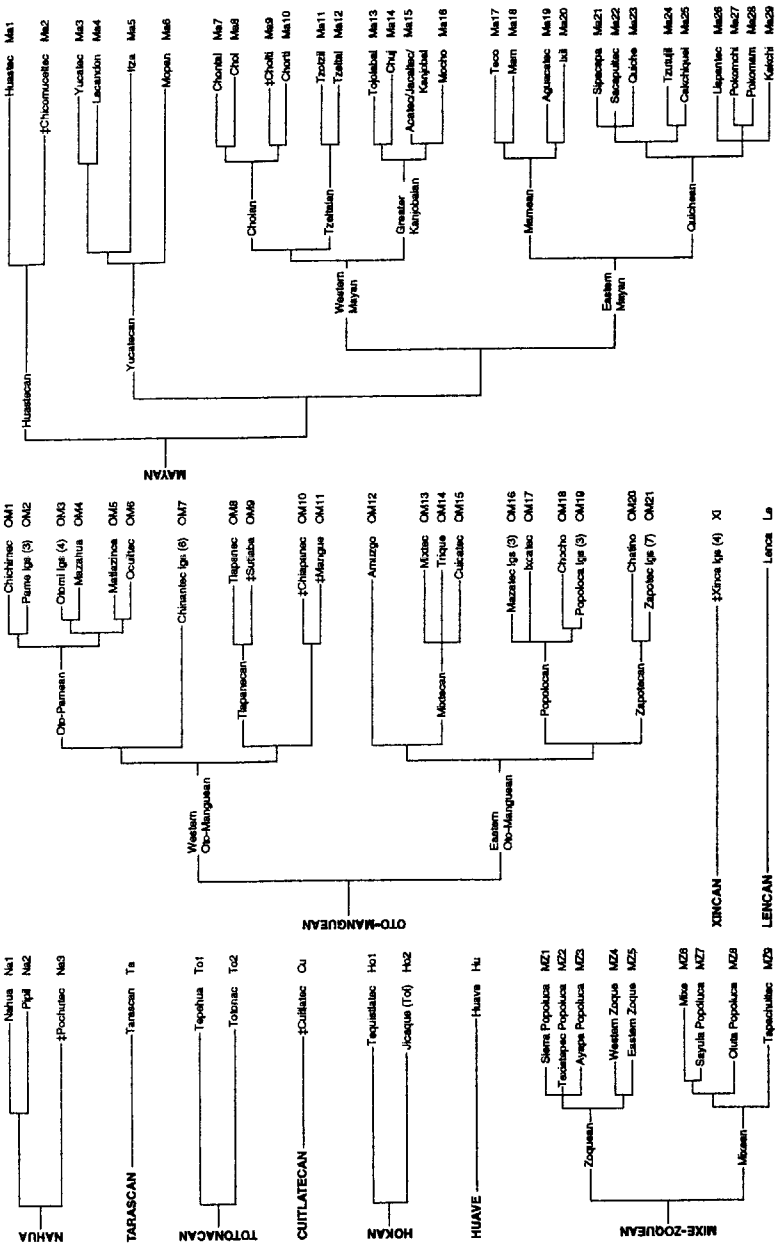



**Figure 11.1** "Family Trees" of Mesoamerican Languages. Labels by language names are keys to Figure 11.2. ‡ means "extinct".



contact—for example, in markets—can make themselves understood while using their own language. The list given in Figure 11.1 reflects this general type of perspective. The classification shown is based on the judgments of Terrence Kaufman, a North American linguist who has made a comparative study of most of the languages of Mesoamerica.

The languages given in Figure 11.1 can be *classified*, or grouped into *language families*. A language family is a historically based grouping of languages according to their degree of mutual relationship. The type of relationship involved is historical, and involves the idea of language change.

All languages are constantly changing. In time—certainly after a thousand years or so—a language changes so much that speakers of the different dialects can no longer understand each other. We say that two languages are members of the same language family if they are historically derived from dialects of the same language. The ancestor languages that gave rise to the different languages of Mesoamerica no longer exist, but we can draw conclusions about their properties by comparing the properties of the languages that are descended from them and *reconstructing* a hypothetical ancestral form of the language. Linguists refer to these reconstructed versions of ancestor languages as *protolanguages*. The extinct language that gave rise to the modern Mayan languages, for example, is called *Proto-Mayan*; the ancestor of the Zapotecan languages is *Proto-Zapotecan*; and so on.

Every Mesoamerican language is a member of one of eleven genetic units: Some are families of languages, while others (*isolates*) consist of a single language. The locations of these units and their member languages are indicated on Figure 11.2. Their sizes, in terms of the number of languages composing them, is quite varied. The Oto-Manguean family is the largest, consisting of at least forty distinct languages; the Cuitlatec, Huave, and Tarascan families have a single member each. Box 11.1 describes one language that falls on the margins of the Mesoamerican tradition.

The languages of Mesoamerica have been written in European script since shortly after the Spanish invasion, early in the sixteenth century. The first of these records were made by Franciscan priests as part of their attempt to Christianize the indigenous population of the Americas. Today, missionaries working with the Summer Institute of Linguistics continue to be very important in documenting Mesoamerican languages. An increasing amount of linguistic research, however, is carried out by nonmissionary anthropologists and linguists, who have made important contributions to understanding the structures and histories of these languages.

In addition to the documentation in Spanish-based orthography and in linguists' representations, some of the languages have prehispanic documentation in hieroglyphic records. The greatest number of hieroglyphic texts come from the lowland Mayan area. The texts appear to be in two different Mayan languages—Yucatecan in the north, and Cholan in the south. Hieroglyphic inscriptions thought to be of Zapotec have also been found concentrated in the Valley of Oax-

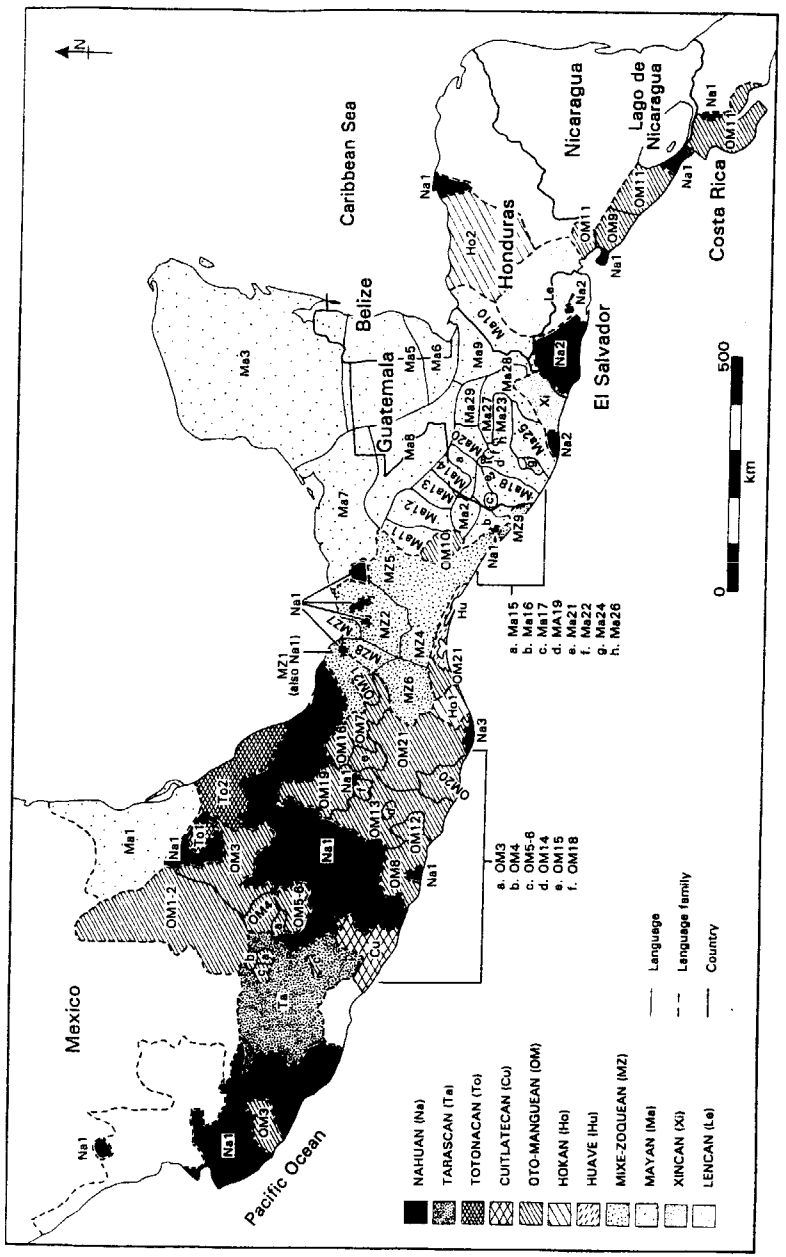



**Figure 11.2** Distribution of Mesoamerican Languages.



***Box 11.1*** *Garífuna—a Language with a Complex History*

One of the most unusual languages spoken in Mesoamerica is the language known as Garífuna, or Black Carib. This language belongs to the Arawakan language family of South America, but it is currently spoken along the Caribbean coast of Belize, Guatemala, and Honduras.

Before the arrival of Europeans in the Caribbean, languages belonging to two different families, Carib and Arawak, were spoken on the Caribbean Islands. The Arawakan people seem to have been residents of these islands for a longer period of time, but many Arawakan populations had been conquered by Carib-speaking people.

This was the case on the island of St. Vincent, in the Lesser Antilles. An older Arawakan population had been largely overrun by Carib-speaking people. As a result of the Carib conquest, many or most Arawakan men were killed, but many Arawakan women survived and married Carib men. Linguists believe that for a period of time there were distinct men's and women's languages on the island. The women's Arawakan language (now called Garífuna) was the one that survived, but the people speaking it continued to be called Caribs.

Also on St. Vincent were a small number of European colonists and a large number of African slaves. Substantial numbers of escaped slaves mixed with the native population of the island, and there was a high rate of intermarriage between the two groups. As a result, most of the speakers of Garífuna have both African and Native American ancestry, and for this reason they are also known as the Black Caribs.

After revolts against the British on St. Vincent, the British government made the decision to deport all the remaining Black Carib people from St. Vincent in 1797. There were 5,080 people shipped from St. Vincent to the island of Roatán, off the coast of Honduras. The modern Garífuna people are the descendants of those who were deported from St. Vincent, and there are now about 30,000 speakers of this language.

As a result of the unusual history of these people, a South American language spoken by people of mixed African and Native American ancestry, Garífuna, has become part of the language diversity that characterizes the Mesoamerican region today.

aca at Monte Albán and other sites associated with the Classic period. Apart from some calendrical portions, these inscriptions are largely undeciphered, but most consist mainly of brief captions containing personal names and dates. A third set of hieroglyphic texts has recently been deciphered. The texts were discovered in the region of the ancient Olmecs, and the language of the inscriptions has been labelled epi-Olmec. The language of these texts is a form of Zoquean that turns out to be older than Proto-Zoquean (the ancestor of the Zoquean languages), but younger than Proto-Mixe-Zoquean.

## WHAT ARE MESOAMERICAN LANGUAGES LIKE?

While most people have a fair understanding of what Spanish is like, the structure of the indigenous Mesoamerican languages is substantially different from either English or Spanish. Different native languages of the region also differ substantially from one another. However, the many interactions between speakers of different Mesoamerican languages has had an influence on the structures of the languages involved; to this extent, it makes sense to refer to a "typical Mesoamer-

ican language." In addition, many of the features shared by Mesoamerican languages are not shared with languages just across the northern or southern borders of Mesoamerica. These features are discussed in this section.

Many other features of Mesoamerican languages are specific to individual language families, and did not spread widely. Some of these features occur frequently enough to merit discussion, providing a picture of the individuality of the languages and cultures of the region.

It is in the areas of *syntax*, the rules governing the order and use of words, and *semantics*, the typical relations among meanings of different words or grammatical constructions, that Mesoamerican languages have converged most heavily. The systems of sounds that are used in the languages (*phonology*) and the rules governing the formation of words (*morphology*) are typically rather similar in languages of a single family, but each family is rather different.

### Phonology

The languages of Mesoamerica tend to have consonants and vowels that are not radically different from those found in familiar languages like English or Spanish. There are some exceptions, however.

There are cases of vowels unlike those found in most Western European languages. Many languages, for example, have a high central vowel /ɨ/, which is somewhat like the *e* in the English *roses*. Some Chinantecan languages have unusual vowels like /ɛ̈/ and /ï/, which are rare in the world's languages. They are made with the tongue in the position for /o/ and /u/, but with the lips spread, rather than rounded. Such vowels are typical of languages like Vietnamese. (Linguists enclose symbols between slashes to represent those sounds that constitute *phonemes* in a given language, i.e., sounds that contrast with one another, in the sense that words in that language may differ only by the substitution of one phoneme for another. For example, /p/ and /b/ are different phonemes in English, because several pairs of words like *pit* and *bit* differ by substituting /p/ and /b/ for each other.)

Distinctions are also made on the basis of the length of a vowel or whether it is followed by a glottal stop (a sound like the one that begins each syllable in the English expression "*uh-oh*"). Length and glottalization may occur on vowels in many families—Oto-Manguean, Totonacan, Mixe-Zoquean, and Mayan. Some Oto-Manguean languages make even more unusual distinctions in vowel type. There are varieties of Zapotec that distinguish vowels according to whether they are pronounced with a creaky voice or not.

Other languages make distinctive use of tone, like that found in Chinese. In these languages, the pitch or tone with which a word is pronounced makes as much of a difference in meaning as do the consonants and vowels in English. The most elaborate tone systems are found in the Oto-Manguean languages, where in some cases it appears that tone has arisen as consonants were lost. Whistled speech (see Box 11.2) exploits tonal clues to word meaning.



***Box 11.2** Whistled Speech in Oaxaca*

Several of the native languages in the highlands of Oaxaca may take on an unusual form—they may be whistled as well as spoken! Cowan (1948) describes the following exchange, which took place in a Mazatec village:

> One day Chumi was standing idly in the doorway of our hut. Irene Flores was working around the hut. No one, it seemed, was paying any attention to the quiet, random whistlings of the boy so nonchalantly leaning against the doorpost. All of a sudden, however, Irene whirled and launched out in a terrific scolding in spoken Mazateco. The whistling had not been as aimless and innocuous as it appeared. The mischievous boy had actually been whistling very meaningful things to the girl, until she could stand the teasing no more.

Whistled speech has been observed in the Zapotec, Chinantec, and Mazatec languages. In all these languages, whistled speech relies on tonal contrasts in the language. In general, the pattern of the whistles follows the pattern of the tones in the spoken language, and is in effect a direct translation of it.

For example, in the following exchange in that language, 1 shows a high tone, 4 shows a low tone, and 2 and 3 show intermediate tones:

A. Hña$^{1}$ khoa$^{2}$ ai$^{4}$-ni$^{3}$? "Where are you coming from?"
B. Ni$^{3}$ʔya$^{2}$ khoa$^{2}$ ai$^{4}$-nia$^{3}$. "I'm coming from Huautla."

The whistled version of this exchange is:

A. 1 2 4 3?
B. 3 2 2 4 3.

Notice that the pitch of each whistle is determined by the tone of the corresponding syllable in the spoken version of the exchange. Whistled speech is one of the features that makes Mesoamerica especially interesting as a language area.

The consonants of Mesoamerican languages also sometimes show contrasts that are unfamiliar in European languages. Some Mayan languages include the consonant /q/, which sounds somewhat like /k/, but is articulated further back in the mouth.

Another common consonant in Mesoamerican languages is the *glottal stop*, mentioned above. In Classical Nahuatl texts it is spelled "h," but often it was not spelled at all in the Spanish-based orthographies adopted in the early Colonial period. Today it is usually spelled by an apostrophe or 7, or by the linguistic symbols ʔ.

Other consonants are far more restricted. Nahua and Totonac have a phoneme (sound unit) usually written "tl" by nonlinguists. This sound is made with the tip of the tongue firmly against the base of the upper front teeth, as for a [t]; but when moving to the next sound, air is released at both sides of the tongue while the tip of the tongue remains against the teeth. This sound is distinct from both [t] and [l]. (Linguists enclose symbols between square brackets

to give *phonetic* information, the actual pronunciation of sounds in the language, whether those phonetic units constitute separate phonemes or variant pronunciations of a single phoneme. For example [pʰ] represents the pronunciation of English /p/ in the word *pit*, with a strong *aspiration* or release of air; you can feel the release if you place your fingers to your lips while pronouncing this word, but not after the *un*aspirated [p] of *spit*.)

It is also common to find that consonants are modified in certain ways when they are *pronounced*. *Palatalization* involves the addition of a y-like sound to the consonant; for example, tʸ and kʸ. Palatalized consonants are commonly found in Oto-Manguean, Zoquean, and less commonly in Mayan languages. *Glottalization* involves the addition of a glottal stop to the consonant; for example, t′ and k′. Glottalization is found in Mayan, Tepehua, Xincan, and along the southern border of Mesoamerica in Jicaque. *Aspiration* is characterized by the addition of an h-like sound to the consonant; for example, tʰ and kʰ. Aspiration is a contrastive feature of Tarascan (and Jicaque). *Prenasalization* involves the addition of nasality to the beginning of the consonant; for example, ᵐb and ⁿd. Some Oto-Manguean languages contain prenasalized consonants. Although the descriptions of these processes may make them sound like clusters of sounds, the languages in question treat them as single units for purposes such as grouping sounds into syllables.

All of these features of pronunciation are part of the systematic pattern of the languages in which they occur, in that all or most consonants exhibiting these features have a counterpart not exhibiting it, and vice versa. Thus, every Mayan glottalized consonant corresponds to a plain (unglottalized) consonant; for example, /t′/ vs. /t/, /k′/ vs. /k/, and so on. Palatalization and prenasalization work similarly in languages that have these features. Occasionally, however, the unmodified series of consonants has more members than the modified series; for example, Tarascan has /p/ vs. /pʰ/ and /t/ vs. /tʰ/, but there is no /kʰ/ corresponding to /k/. This is a common pattern not only in Mesoamerica but throughout the world.

One feature that is common in European languages, but rare in the languages of Mesoamerica, is a contrast between consonants based on voicing. *Voicing* refers to the vibration of the vocal cords while producing a consonant, and English has many contrasts based on voicing; for example, /b/ is voiced, while /p/ is voiceless; /d/ is voiced, while /t/ is voiceless; and /g/ is voiced, while /k/ is voiceless. In most Mesoamerican languages, there is no contrast between these pairs of sounds; [p] and [b] are treated as variant pronunciations of the same basic sound.

### Morphology

In Mesoamerican languages, the order of elements in a word is strictly defined. Words are made up of a root element plus some number of affixes (that is, prefixes, suffixes, and infixes) that must appear in a definite order. The orders of elements within a word will, of course, vary from language to language, but there are fixed rules of order for any particular language.



**Table 11.1** Verbs with Affixes in Three Mesoamerican Languages

| | |
|---|---|
| Zapotec: | Gu-re-lilaaz-detu-ni? |
| | question-habitual-*believe-you(pl)-it* |
| | *"Do you believe it?"* |
| Nahuatl: | Ō-ti-c-āltih-ca-h |
| | past-we-him-bathe-had-plural |
| | "We had bathed him." |
| Tzotzil: | Stak′ ch-a-j-kolta. |
| | can incompletive-you-I-help |
| | "I can help you." |

A verb, for example, is usually made up of a verbal root plus affixes that indicate the tense-aspect of the verb, and the person and number of the subject (and object, if there is one). Table 11.1 shows verbs with affixes in three Mesoamerican languages.

Pronominal affixes on nouns and verbs exhibit a number of different patterns. In general, they are based on the category of *person*, defined in terms of the participants in a speech event. A first person affix refers to the speaker *(I)*; second person refers to the addressee *(you)*; and third person refers to a third party who is neither speaker nor addressee *(he, she, it)*.

Some languages have pronouns for combinations of these categories of participant. In several Mesoamerican languages, there are differences between two kinds of first person plural pronoun *(we)*. The inclusive first person plural means "we (including you)," and the exlusive first person plural means "we (not including you)." Sometimes third person pronouns distinguish between humans and nonhumans, as in several Oto-Manguean languages. Differences among pronouns based on respect are also found in Nahuatl and Oto-Manguean. However, third person pronouns are rarely distinguished by gender; that is, "he" and "she" (and often "it") are all indicated by the same pronominal affix or pronoun.

One unusual pattern of pronoun use is widespread enough in Mesoamerica to merit mention. This pattern is one that linguists refer to as *ergative*. In English, the same pronouns are used for both transitive subjects (*He saw him*) and intransitive subjects (*He ran*). An ergative system is one that treats transitive and intransitive subjects differently, grouping the intransitive subject together with the object. If English were an ergative language, we would still have sentences like *He saw him*, but the object pronoun would be used in intransitive sentences like *Him ran*. Mayan and Mixe-Zoquean languages show this sort of ergative pattern in their pronominal affixes.

### Syntax

In most Mesoamerican language families, transitive sentences are constructed with their words in a different order than in English or Spanish. Transitive sentences place the verb (V) before the subject (S) and object (O); that is, they

exhibit either VOS or VSO order, rather than the SVO order of English and Spanish. Intransitive sentences place the verb before the subject; that is, they exhibit VS order, rather than the SV order of English and Spanish.

In Table 11.2, Zapotec and Nahuatl show VSO orders, and Tzotzil shows VOS. A few languages, such as Huave, Tarascan, and Tequistlatecan, have SVO as the dominant order, but there do not seem to be any languages that have SOV as their primary word order. This is a distinctive feature of the region, since most languages on the northern and southern borders of Mesoamerica do have SOV order.

The universal occurrence of VO order is one of the features pointing to intensive interaction in this region over a long period of time. We can see the influence of other Mesoamerican languages on Nahuatl, which is the southernmost branch of a larger family of languages (Uto-Aztecan). The other members of that larger family outside Mesoamerica generally have SOV as their basic word order, and this probably was the original word order in Nahuatl as well. It appears that Nahuatl word order changed after Nahuatl speakers entered the Mesoamerican world.

Similarly, linguists believe that the Mixe-Zoquean languages once had SOV order, although they are all now verb-initial. This conclusion is now confirmed by hieroglyphic texts in Zoquean, which show this older word order. As of A.D. 162, transitive sentences were all SOV. However, intransitive sentences were either SV or VS, and this may be evidence of an early phase in word order change. The Zoquean languages must have changed to verb-initial order during or after the period of transition between the Formative and Classic periods of the epi-Olmec states (see Chapter 2).

Although verb-initial orders are the most common or basic orders, it is usual for alternative orders to be possible. It is typical in verb-initial languages for the subject to be moved to the front of the sentence when it is being emphasized. In many languages, any ordering of subject, verb, and object is possible, each order emphasizing a different notion. In addition, some Mesoamerican languages do not use the verb at the beginning of the sentence. This is most often a later development within a family that does place the verb first, and is usually found in languages nearest the northern or southern borders of the region. On the

**Table 11.2** Word Order in Three Mesoamerican Languages

| | |
|---|---|
| Zapotec: | Gu-dîxh nigí'u biñiin.<br>completive-pay man boy<br>"The man paid the boy." |
| Nahuatl: | Qu-itta in cihuā-tl in cal-li.<br>it-see the woman-abs the house-abs<br>"The woman sees the house." |
| Tzotzil: | 7i-s-pet lok'el 7antz ti t'ul-e.<br>cp-it-carry away woman the rabbit-clitic<br>"The rabbit carried away the woman." |



southern border, for example, Chortí Mayan is said to prefer SVO order, but the dominant and original pattern in Mayan languages is VOS. Chichimec, on the northern edge, is an SOV language, but the dominant and original pattern in Oto-Manguean languages is VSO (or VOS).

Other features of the grammar of Mesoamerican languages we summarize more briefly (see Table 11.3). When nouns (for example, "arm") are possessed, as in "the man's arm," the typical pattern in Mesoamerican languages is to say "his arm the man" or, less commonly, "the man his arm." The Nahuatl example in Table 11.3 shows this pattern.

Locational notions conveyed by prepositions in English (for example, "on the hill") are conveyed by *relational nouns* in Mesoamerican languages: possessed, (for example, "the hill, its top"), as in Mayan and Nahuatl, or as the head of a compound noun (for example, "the hill top"), as in Mixe-Zoquean and Oto-Manguean. Numerals have a *vigesimal*, or base-20 structure; rather than counting in powers of ten (10s, 100s, 1000s), as we normally do, Mesoamericans count in units that are powers of 20 (20s, 400s, 8000s). Thus a number like fifty-five is expressed as "two twenties plus fifteen."

### Other Typical Characteristics

Also widespread are idiomatic expressions that occur throughout the Mesoamerican languages through the process of *loan translation*. This is a process in which an idiomatic expression—for example, the use of "mouth of house" to mean "door"—is translated word for word into other languages and used with the same idiomatic meaning. In addition, some loan translations consist of the use of a word with one meaning for another meaning related to the first metaphorically, if at all. Several such loan translations are found in Mesoamerica, but are rare

**Table 11.3** Other Grammatical Features of Zapotec and Nahuatl

| | |
|---|---|
| Zapotec: | Nuu toy nigí'u leen yuliz-a.<br>there is a man belly house-my<br>"There is a man in my house." |
| | gal-bi-tsuu<br>twenty-with-ten<br>'thirty' |
| Nahuatl: | i-cihuā-uh Pedro<br>his-wife-poss Peter<br>'Peter's wife' |
| | cāl-ihtic cf. ihtīd, 'belly'<br>house-inside<br>'inside the house' |
| | ōm-pōhualli on-caxtōlli<br>two-twenty and-fifteen<br>'fifty-five' |

***Box 11.3*** *Loan Translation*

The influence of Spanish is sometimes disguised by the typical Mesoamerican practice of loan translation, discussed above. Spanish base-10 numeration led to the introduction of words for "thousand" in several native languages that lacked it because they used base-20 systems (naming 20s, 400s, and 8000s). Doris Bartholomew has noted that the Spanish word *mil* ("thousand") was adopted in Nahuatl, but this was also the root of the native Nahua word *milpa*, meaning "cornfield." This Nahua pairing was widely adopted, as a number of indigenous languages came to use their own word for "cornfield" as a numeral for "thousand."

beyond its language borders; for example, "mother of hand" = "thumb", "child of hand" = "finger"; "edge" = "mouth"; "god excrement" or "sun excrement" = "gold" or "silver"; "water mountain" = "town"; "deer snake" = "boa constrictor"; "awake" = "alive" (see Box 11.3).

All of these characteristics typify all Mesoamerican language families, and all are uncharacteristic of the languages at the borders of the prehispanic Mesoamerican region. They are ways of speaking and thinking that are part of what defines Mesoamerica as a cultural unity. Other characteristics that are widespread in Mesoamerica are found also in languages in adjacent areas; they characterize but do not distinguish Mesoamerica as a linguistic region. For example, kinship terms and body parts are normally possessed, and when they are not possessed a special prefix or suffix is added. Words for locations are typically the same as or derived from words for body parts; for example, "head" is used for "top," "foot" for "base," "stomach" for "in." Semantic equivalences typical of the region, but also found outside it, include the use of the same word for "hand" and "arm"; that is, the concepts are not distinct.

Still other characteristics are widely shared among Mesoamerican languages, and rare or absent across its borders, but are missing in only one language family. In such cases, Mayan is most often the family in which the characteristic is missing; this family lies at the southern border of the ancient Mesoamerican world.

## LANGUAGE VARIATION AND CHANGE

### Dialects of Native Languages

Almost all indigenous languages in Mesoamerica occur in more than one form. In some areas, linguistic diversity is so great that every town has its own dialect or even its own language. This is the case, for example, in much of the Guatemalan highlands. Chicomuceltec was spoken only in and around the town of Chicomucelo; Mochó was spoken in Motozintla and Tuzantán, each having its own dialect; and, in general, each distinct town in the Cakchiquel region has a distinct form of Cakchiquel. The situation is similar for many of the Oto-Manguean languages, especially in Oaxaca. In other areas, linguistic diversity is quite low. The Yucatec language, for example, covers a large part of the Yucatán Peninsula.



Dialect differences are social as well as linguistic facts. When distinct forms of a language are found in different areas, people from one area may have difficulty understanding people from other areas. But this difficulty is not equally great for all participants; more often than not, tests of mutual intelligibility of dialects indicate that speakers of, say, dialect A understand speakers of dialect B more than speakers of dialect B understand speakers of dialect A. Where does this asymmetry come from? It often appears to reflect the density of communication (see Box 11.4).

Communication is pursued most with those one understands the best, all other things being equal. This structuring of communication has two effects. Linguistically, changes in poorly understood dialects are less likely to be noticed and adopted than changes in well-understood dialects, and so the least similar dialects become increasingly dissimilar. Socially, decreasing communication among communities reinforces social distance between them. This is a major trend in dialect evolution; it is the source of the origin of new languages from old, and of the development of language families out of parent languages. When this happens, the effect of the communication bottleneck is that the most closely related languages tend to be located next to one another; the geographic pattern of location is consistent with the degree of relationship among languages unless one or more of the social groups migrates from its ancestral location.

All the changes just discussed have the effect of increasing social and linguistic distance. Some changes, however, have the effect of *integrating* social groups and *decreasing* the distance between dialects. These are changes that take place when speakers of one language or dialect copy the vocabulary or speech patterns of speakers of another. Those doing the copying are speakers of the *borrowing language*; those being copied are speakers of the *source language*. Eventually, some of the copying being done will be internal copying by some speakers of the borrowing language of the patterns acquired by other speakers of that language, which were ultimately acquired by copying the source language.

The differentiation between languages or dialects, and between social groups, occurs probably most often as a result of changes occurring within separate

***Box 11.4*** *How Languages Diverge and Converge*

It has been found in Cakchiquel Mayan that speakers of dialects in major centers have more difficulty in understanding the Cakchiquel of smaller settlements around them than the latter do in understanding the Cakchiquel spoken in the center. People in the center host the regional market to which people from the surrounding areas come, and they also constitute a larger population than the speakers of dialects from surrounding settlements. As a result, speakers from the settlements interact far more with speakers from the center, relative to their interactions with other Cakchiquel speakers, than do the speakers from the center with any particular group of provincial speakers. Density of interaction, then, accounts for the asymmetry.

speech communities that are not interacting intensively. In some cases, however, continuing interaction helps to drive the differentiation between dialects. Leanne Hinton has shown this for the Mixtec spoken at Chalcatongo and at San Miguel, the next town along the main local highway. There is a social differentiation between the Mixtecs of San Miguel and surrounding hamlets, who are committed to and involved in traditional, local culture, and the Mixtecs of Chalcatongo, who are modernizing and ladinoizing via participation in wider economic networks. The dialects of San Miguel and Chalcatongo turn out to be most similar in the more distant parts of these communities; near the border between the municipios, the differences in the dialects are exaggerated. These Mixtec-speaking communities are using language differences to display social commitments and to call attention to social differences between them. The greater the extent of interaction among members of these groups, the greater the usefulness of devices such as the symbolism of dialect difference for reinforcing group identity and distinctness.

The process of convergence through borrowing can be illustrated by Kekchí, a Mayan language spoken in the highlands of Guatemala. Kekchí has been spreading since the Spanish invasion and probably before. The town of Cobán is the leading economic center, and its dialect is the most highly valued by Kekchí speakers generally; that is, it is the *prestige dialect.* As a result, younger speakers of other Kekchí dialects are copying some of the changes that are taking place or that have already taken place in Cobán. For example, /w/ is pronounced as [kw] in Cobán, ultimately under the influence of Spanish; this change is also being generalized, with /y/ being raised in the same way and pronounced as [ty]. These changes are so recent that younger and older speakers of Cobán Kekchí pronounce /w/ and /y/ differently, even as the change is spreading to other communities. Other, older changes are well entrenched throughout Cobán, and are widespread in Kekchí; for example, speakers of almost all Kekchí dialects have shortened their original long vowels.

These changes in Kekchí are typical of patterns of language change not only in Mesoamerica but throughout the world. One community having a socially favored position is a center of innovations that are adopted by its neighbors. These neighbors typically lag somewhat behind the innovating center. Changed forms at first exist in variation with the original forms, but eventually replace them.

Such changes may be recognized and copied not only by speakers of different dialects but even by speakers of different languages. Relatively casual contact is enough for the borrowing of vocabulary, especially for items or concepts that are newly introduced to the borrowing group. Changes in pronunciation or grammar—that is, in the structure of a language—always involve intensive interaction among speakers of the source and borrowing languages.

In ancient times, the same processes are assumed to have been at work. When linguists detect the effects of these processes, they thereby provide evidence for the existence of interaction among speakers of the languages involved, for the intensity and duration of that interaction, and for the nature of that interaction. Historical reconstruction from the imprint of culture on language is discussed later in this chapter.



Since arrival of the Europeans in Mesoamerica, native languages have suffered greatly in terms of numbers of speakers and social status. Many languages have become extinct, and very few of the millions of speakers of indigenous languages in Mesoamerica have been literate in native languages. This results from several factors. Education and scholarship in the countries of Mexico and Central America have been conducted almost entirely in European languages, preventing speakers of the native languages from achieving literacy in these languages. Further, full access to education has historically been limited to a small percentage of the indigenous people of Mesoamerica.

However, in the last few decades, there has been an upsurge of interest in and attention to the native languages of the area. In Guatemala there are several million speakers of Mayan languages, and owing to the combined efforts of native speakers and linguists, efforts are now under way to provide bilingual education in Spanish and in local Mayan languages (Cakchiquel, Kekchí, Quiché, Mam, and others). Such efforts require the production of textbooks and reading materials in Mayan languages, and the goals of the project are to increase literacy in both Spanish and native languages. Box 11.5 provides an example of how the Zapotec language is being promoted in modern Mexico.

***Box 11.5*** *Using the Zapotec Language Today*

The Zapotec language has also emerged as an important literary and political force in Oaxaca, Mexico. In Juchitán, Oaxaca, many local political figures make campaign speeches in Zapotec, and the use of the Zapotec language has become a symbol of Juchitán's resistance to Mexico's ruling government. Residents of Juchitán also produce a Zapotec language periodical, *Guchachi' Reza* ('Sliced Iguana'), which is a bearer of the growing Zapotec language literacy in Oaxaca. The following poem by Gabriel López Chiñas exemplifies modern pride in the Zapotec language:

They say that Zapotec is going,
no one will speak it now,
it's dead they say, it's dying,
the Zapotec language.

The Zapotec language
the devil take it away,
now the sophisticated Zapotecs
speak Spanish only.

Ah, Zapotec, Zapotec!
those who put you down
forget how much their mothers
loved you with a passion!

Ah, Zapotec, Zapotec!
language that gives me life,
I know you'll die away
on the hour of the death of the sun.

*Gabriel López Chiñas*

From Gabriel López Chiñas, *El zapoteco* López, Chiñas, Gabriel 1983 El zapoteco. In *La flor de la palabra*, edited by Victor de la Cruz, pp.68–69. Mexico City: Premia Editora. English translation by Nathaniel Tarn, in *Zapotec Struggles: Histories, Politics, and Representations from Juchitán, Oaxaca*, edited by Howard Campbell, Leigh Binford, Miguel Bartolomé, and Alicia Barabas, p. 211. Washington, D. C.: Smithsonian Institution, 1993.

**The Impact of Spanish on Native Languages**

Most of the language families in Mesoamerica were documented in some form from very early in the sixteenth century. Based on these and later records, we know that some languages once spoken in the region are no longer spoken today. We also know that people rarely give up their own language willingly. What are the languages that have been lost, and why did they die out?

The main direct cause of language loss is a process called *language shift*. The speakers of one language begin using another language in place of it. Typically such speakers are at first bilingual in their native language and a second language whose use is economically or socially advantageous. Over the last few centuries, this second language has usually been Spanish, although sometimes it is an expanding native language such as Kekchí Maya.

The use of native languages is typically associated with traditional practices and institutions, while the use of Spanish is associated with the penetration of mestizo or ladino practices and institutions, including especially regional and national economic systems. Survival or advancement in the local economy via participation in wider economic systems is often facilitated by the use of Spanish. Partly this is because Spanish aids communication among speakers of different indigenous languages, since bilingualism in Spanish is widespread across all languages of Mesoamerica. Partly it is because native languages are usually stigmatized by ladinos, as nonstandard dialects of English are stigmatized among white-collar workers in the United States. In addition, native language use has often been discouraged by national policies. Schools often promote the use of Spanish and avoid the use of indigenous languages. Recently in Guatemala and El Salvador, people have sometimes been regarded as insurgents, and targeted for kidnapping and murder, simply because they spoke Mayan languages.

In such situations, the choice of which language to use often depends upon the nature of the speech situation, and who is involved in it. The native language may be spoken primarily within the family or among close friends, while Spanish is preferred in interactions with more distant acquaintances, or with strangers. But when the native language is seen as a hindrance to social and economic advancement, parents may speak only Spanish to their children.

Once children no longer learn the native language of their people, it is moribund. There are several native languages that few if any children learn. Texistepec Popoluca, for example, is spoken only by people in their fifties or older; there are only two dozen or so fluent speakers of Oluta Popoluca. Other languages are learned by children only after they learn Spanish, as a second language. This is usual in the case of Chontal Mayan.



In some cases, languages die out as the populations that speak them are destroyed. Often, languages are highly localized, spoken in a single village or valley. It might be thought that the speakers of these languages were often killed off in warfare, but this happened rarely if ever in prehispanic Mesoamerica. Rather, the populations usually disappeared as separate entities because they were displaced or dispersed, and came to live among much larger groups that eventually absorbed them.

These language choices influence native people's sense of their own identity. Very frequently in Mesoamerica, a person's ethnic identity and language are identified: To *be* Lacandón is to *speak* Lacandón. The process of language replacement, in this setting, means selecting a different ethnic identity and different social commitments by the very act of language choice. Even the choice of language to use at a particular moment in a particular social setting is complicated by the particular communicative requirements of the situation and the social statement that language choice makes.

Nonetheless, the potential for breakdown of ethnic identity can be overemphasized. The relation between language and ethnicity may have been closer in the past, before Spanish began to replace native languages in large portions of most native groups. Today, however, language, culture, and ethnic identity cannot be equated. With the replacement of native languages by the processes described above, the native language may come to be spoken by a minority of members of the once-associated cultural and ethnic groups, with Spanish now the dominant language. Conversely, members of different ethnic groups may speak the same language.

Although Spanish is far from replacing many of the indigenous languages, all of these languages have been affected by Spanish in their vocabulary and phonology, and probably in their syntax as well. Some have borrowed a great deal of Spanish vocabulary, especially for items and ideas introduced since the conquest. Other languages have resisted the incorporation of Spanish vocabulary, and create new words from native roots and affixes. For example, "horse" was usually designated by a native word for "animal," or for a large animal such as a deer or mountain cow (whereas, in North America, it was typical to adopt the word for "dog," the prime domestic animal). "Chicken" was referred to by the word for "turkey," while "turkey" came to be named with this word plus a modifier or affix. "Rifle" was named with compound nouns such as "shooting stick" or "fire stick" (for additional examples, see Box 11.6). Today, the Mayan Academy is replacing some Spanish loans by such Mayan-based vocabulary.

In the section on the phonology of Mesoamerican languages, we point out that the sound systems of these languages differ from that of Spanish. When Spanish words are adopted, indigenous languages often *nativize* them; that is, they adapt the pronunciation of the Spanish form to the native pattern. Tzotzil *pale* and Oluta Popoluca *pane* are examples, taken over from Spanish *padre*, 'priest'.

***Box 11.6*** *The Influence of Spanish on Counting*

Numerals are a part of the basic vocabulary of a language, and they are rarely borrowed. This tends to be especially true of the lower numerals, which have more common use in everyday talk than do larger numerals. Some indigenous Mesoamerican languages have replaced their larger numerals by Spanish terms. The point at which native numerals end and Spanish numerals begin varies from language to language.

The Mayan languages illustrate the range of variation. There are five modern Cholan-Tzeltalan languages. The native numerals consisted of basic roots from 1 to 12; for 13 to 19, the numerals are composed of the words for "ten" plus the remaining number. For example, **7ox-lajun* ("thirteen") comes from the roots **7ox* ("three") and **lajun* ("ten"). There were basic words for higher numerals that were powers of 20—at least for 20, 400, and 8000—since, like other Mesoamerican languages, these languages were vigesimal (or base-20). Other numerals were formed, additively or multiplicatively, from smaller numerals.

The Tzeltalan languages, both Tzeltal and Tzotzil, preserve all basic number words. In contrast, all Cholan languages have lost terms for higher numerals. Chol preserves words for 20, 400, and 8000; Chontal only the word for 20; Chortí has lost all of its words for powers of 20. All three have adopted Spanish words for the numerals 13 to 19. In Chol, the unanalyzable numerals for 1 to 12 are all maintained. Chontal adopted Spanish terms for numerals 5 and up; in addition, it has *7un* rather than the expected *jun* for "one," presumably an accommodation to Spanish *uno*, and it has innovated a form *7unk'a7* (from "one hand") for "five." Similarly, some speakers of Chortí adopted Spanish terms for numerals over 5, though others preserve native terms up to 9.

Native vocabulary is often embedded into larger semantic and grammatical structures of a language. Numerals, for example, modify nouns. In addition, special morphemes often attach to numerals. In Cholan-Tzeltalan languages, *numeral classifiers* are attached to numerals in counting. For example, *7ox-tuhl* means "three (animate things)," *7ox-tz'iht* means "three (long thin things)," and *7ox-pis* means "three (measured things)." Classifiers like *-tuhl* and *-tz'iht* were required with all numerals in prehispanic times.

Borrowed vocabulary often does not fit in native structures. In the case of numerals, for example, it is often found that borrowed Spanish nouns are modified by Spanish numerals, even when native numerals exist. A particularly widespread example of this lack of fit is that native affixes may not be attached to borrowed words. In the Cholan-Tzeltalan languages, the native classifiers are never used along with a borrowed numeral.

This happens not only to individual Spanish sounds but also to sequences of them; for example, *cuentas* (= /kwentas/) ("counters, rosary beads") was adopted as *wentax* in several languages.

However, as often happens elsewhere in the world, indigenous languages sometimes adopt Spanish words with their Spanish pronunciation, or a close approximation to it. The result is that some words in the language have *loan phonemes* and phoneme sequences (like consonant clusters) that occur only in Spanish loans into the language. When speakers use words with non-native sounds or sound patterns, this marks the usage as a "hispanism"; this may orient people's attitudes toward the topic addressed through the use of the hispanic rather than a nativized usage. Hispanic pronunciation is normally found only with extensive bilingualism in Spanish and the native language.



## WRITING IN ANCIENT MESOAMERICA

Ancient Mesoamerican societies were evidently unique in the New World in that most had some form of writing. Writing existed among speakers of lowland Mayan languages in southeastern Mexico, Guatemala, and Belize; among Zoquean speakers in southern Veracruz and probably in Chiapas; among Zapotec speakers in the Valley of Oaxaca; among Mixtec speakers in Oaxaca; and among Nahuatl speakers in the Valley of Mexico. Texts are also found in other areas of Mesoamerica—at Kaminaljuyú and Izapa in Guatemala, at El Tajín in Veracruz, and at Xochicalco in Morelos, for example—but the languages associated with these scripts have yet to be determined. The content of these hieroglyphic texts is discussed in Chapter 2. In this chapter we sketch some principles of Mesoamerican writing as they relate to language.

### How Languages Were Represented

All Mesoamerican scripts made use of *logograms*, signs that represented whole words or roots. This could be through direct depiction (for example, a picture of a knot for the Zapotec day name Knot), depiction of an associated concept (for example, the rain god's face for the Aztec day name Rain), or by abstract signs. This may be the source of all other types of representation found earlier in Mesoamerican iconographic systems.

All well-understood Mesoamerican scripts also used *rebus* representation: Two words pronounced the same, or almost the same, could be spelled by the same sign, though that sign depicted the idea behind only one of the words. In ancient lowland Mayan languages, for example, *tu:n* (earlier *to:n*) meant "year-ending." Another word pronounced *tu:n* referred to long wooden musical instruments, such as trumpets and split log drums. Although the similarity in pronunciation was only coincidental, the first word was sometimes spelled, like the second, using a sign that depicted a split log drum.

These principles may suffice to account for all prehispanic Aztec and Mixtec spellings. These spellings, which served within complex systems of narrative pictographic iconography ("picture writing"), named the gods, people, and places whose depictions they accompanied, as well as the dates in the ritual calendar of the events that were shown. Quite serviceable for conveying such information, rebus and logographic spelling was quite ambiguous from the point of view of linguistic transcription, with many grammatical affixes and words left unrepresented (see Box 11.7).

Fully *textual* systems were more explicit in representing such grammatical elements, typically with *phonetic* signs that represented not words or roots, but simple syllables consisting of a consonant, a vowel, and sometimes another consonant. These signs were heavily used in Mayan and epi-Olmec writing. Whether they were used in the Zapotec writing of Monte Albán is an open question. In any

case, for the purpose of decipherment, it is methodologically important to presume at first that basic grammatical morphemes are explicitly represented.

There is an inherent structural mismatch between a spoken language whose syllables can end in consonants and a phonetic spelling using symbols for a consonant followed by a vowel (*CV* signs): Whenever a word contains a consonant that is not followed by a vowel, either a vowel will be spelled that is not actually to be pronounced (like that of the sign ***pi*** in epi-Olmec ***7i-ki-pi-wu***, spelling Zoquean ***7i-kip-wu***, "they fought them"), or a consonant will not be spelled that *is* to be pronounced (like *j* in *wehj-pa*, "he shouts," spelled ***we-pa***). Weak consonants (*j, w, y,* and *7*) were especially susceptible to loss: When an extra vowel was inserted, it usually matched the preceding vowel. Rather firm rules or practices characterize the phonetic spellings of epi-Olmec writing; practices in Mayan writing seem to have been more complex and flexible.

One rather common variety of spelling combined both logographic and syllabic principles through the use of a logogram with a *phonetic complement.* In effect, the logogram spelled the word, and the syllabic sign—the phonetic component—indicated part of the pronunciation of that word. For example, the epi-Olmec word for "ten" was *mak*; that for "sky" was *tzap.* In the name of the Venus god Ten Sky, the syllabic sign ***ma*** was placed before the numeral ***10,*** indicating that the word for "ten" begins with the syllable *ma.* Phonetic complements can also spell final consonants, using the same practices as in fully phonetic spellings discussed in the previous paragraph. For example, the sign ***pa*** follows the sign SKY on one occasion, agreeing with the final consonant of *tzap* ("sky"), and with the extra vowel selected to agree with that of *tzap* (see Box 11.8).

***Box 11.7*** *Ethnocentrism and Writing Systems*

Symbol systems that indicate some words or parts of words but do not indicate other words or grammatical suffixes are sometimes referred to as "mnemonic devices" or jogs to the memory. Others characterize such systems as failed or poor attempts to convey their languages, remarking on how surprising it is that the inadequacies could persist for centuries without being corrected by, for example, making fuller use of phonetic representation. These perspectives mistake the organization and purpose of this kind of symbolic representation, denigrating it as a defective version of our own system or of other systems that are more explicit or complete in what they represent about a language.

It seems unlikely that the Aztec and Mixtec systems were ever meant to represent spoken utterances. What is referred to as "writing" in these representational systems was a means of identifying gods, people, places, and dates. Language was a resource for this task: The roots in place names, for example, were enough to identify a place for someone who knew those names. Ambiguities in these systems do not make them any more defective than does ambiguity in word meaning; in context, we understand which meaning of a word makes the most sense, and the ancient Mixtecs and Aztecs could do the same with their system of representation. In other words, these people made effective *use* of language to help them convey important information; precise replication of the stream of speech was not their goal.



***Box 11.8*** *Deciphering Epi-Olmec*

Decipherment is a process of accounting for the patterns of sign use in a writing system. In phonetic writing, this usually means accounting for individual signs as corresponding to particular sounds, and for sequences of signs as corresponding to sequences of sounds. If the language is known, the grammatical structure and vocabulary of that language become substantial clues that can be used to decipher the script. These were major clues in the recent decipherment of a hieroglyphic script of ancient southern Veracruz by John Justeson and Terrence Kaufman.

For geographic and historical reasons, most researchers recognized that the script probably represented an ancient Mixe-Zoquean language. Verbs in these languages began with one of a small number of prefixes and suffixes, most of which are syllables. In fact, the most common verb prefix and the most common noun prefix were both pronounced *7i-*; the most common verb suffix was *-wu*. This made it easy to recognize the signs that represented these syllables. This, in turn, made it possible to begin an analysis of the text: to identify its nouns and verbs, which led to the identification of additional noun and verb affixes, which led to yet further refinement of the analysis.

Vocabulary could also be identified. Using calendrical statements, it was possible to identify the meanings of several words in the text, including "day," "star," "ten," and "sky." The word for "day," for example, was spelled with two signs. One was postulated as representing the syllable *ja*, the next as *ma.* This *ma* reading is confirmed because the sign that spells *ma* begins the spelling of "star" (*matza7*) and "ten" (*mak*), both of which start with *ma.*

Given a number of these phonetic readings, and a number of grammatical identifications, a rather complete grammatical description of epi-Olmec texts has been worked out. This resulted in the recognition of many features specific to Mixe-Zoquean grammar, which confirmed the Mixe-Zoquean family model. For example, epi-Olmec texts use SOV word order, which can be reconstructed only in Mixe-Zoquean among all the languages of Mesoamerica. These texts also use European-style "nominative-accusative" pronoun patterns in subordinate clauses, but ergative patterns in main clauses. Such independent tests confirm the decipherment and the Zoquean identification of the texts.

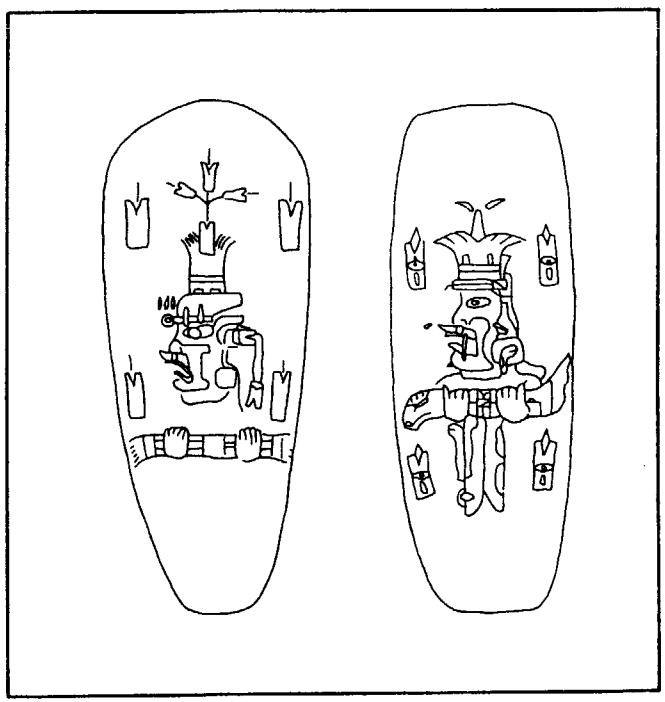
## How Writing Evolved

The origin of writing was a process that transformed a symbolic system in which language played no crucial role to one in which language was a significant resource for interpreting symbolic statements. The precursor system cannot have used much phonetic representation, since that kind of convention does make crucial use of language. Just what system or systems may have contributed directly to the emergence of writing in Mesoamerica cannot be said with assurance. However, one early symbol system does appear to have been much like writing, using similar nonphonetic representational conventions, but without relating directly to language. This is the Olmec-style iconography on many incised celts, dating to the Early and/or Middle Formative periods.

Most incised celts in the Olmec style depict humans wearing elaborate headgear and gesturing or holding various objects that seem to indicate their social status or such offices as ruler or warrior (Figure 11.3, left). In some cases, however, most of the detail used to represent the figure was eliminated, and only

those that convey specific categories of information remain (Figure 11.3, right). For example, instead of depicting a person gesturing, the head is represented (indicating a person) with a headdress (indicating rank or office); the gesture is represented separately, as a disembodied hand or arm in the appropriate posture. Thus, iconic elements were being taken out of the usual figural context of pictorial representation, functioning as symbols for social categories, events, and probably other types of information as well. Some of these symbols seem relatively abstract, as is often true of status symbols, while others seem to be depictions of something directly related to the concept—for example, weapons may indicate warrior status or battles. Thus, a subset of celt iconography uses separate symbols for the kinds of concepts that are represented by the nonphonetic conventions of later Mesoamerican writing, yet their source in standard celt iconography is apparent. The iconography of ceremonial celts is therefore a plausible precursor of writing in Mesoamerica.

**Figure 11.3** Arroyo Pesquero Celts. After Peter David Joralemon, "The Olmec Dragon: A Study in Pre-Columbian Iconography," in *Origins of Religious Art and Iconography in Preclassic Mesoamerica*, ed. H. B. Nicholson. Los Angeles, CA: UCLA Latin American Center Publications and Ethnic Arts Council of Los Angeles, 1976, p. 41, fig. 8 e and f.





It might be thought that the earliest writing probably resembled the Mixtec and Aztec systems, which have the most limited forms of representation of language. However, these systems seem to have actually developed ultimately from the Zapotec system, originally a more textual tradition. They contain no traces of syllabic or other phonetic spelling, except for rebus, and it is possible that the scripts from which they emerged also lacked such spelling. As noted above, syllabic spelling has yet to be definitively established in Zapotec texts. It may be that the difficulty in deciphering these early texts lies precisely in a lack of simple phonetic spelling, but the problem is only now being addressed with the necessary linguistic framework for analysis.

As a result of the limited knowledge not only of the Zapotec script, but of all Middle Formative writing, the nature of the earliest Mesoamerican writing systems—those from which the better-known systems emerged—is largely a matter of conjecture. It is generally thought that syllabic spelling emerged out of an earlier system or systems with rebus representation but without a substantial amount of nonrebus syllabic spelling. By the end of the Late Formative period, when readable Mayan and epi-Olmec texts are found, syllabic spelling is firmly a part of both hieroglyphic systems.

We cannot tell whether the epi-Olmec writing system evolved in any significant way; only two texts survive with enough writing to analyze and they are dated within five years of one another. In the case of Mayan writing, some syllabic spelling is found in the earliest datable texts. However, the amount of syllabic spelling gradually increased during the 600 to 700 years in which dated inscriptions are found. So, apparently, did the explicitness with which grammatical affixes were represented. There is a tendency to add phonetic complements first to those logograms that are ambiguous, thereby determining just which word is intended. For example, the sign for the day "Thunder" (in lowland Mayan, *chawuk* or *kawak*) was also used for both *tun* ("year ending") and *ha7b'* ("year"); the word *tun* could be secured as the interpretation by indicating that it ends in *n*, which was done by placing the sign ***ni*** after it. There is also a tendency for fully syllabic spellings of a given word to occur later than logographic spellings with phonetic complements; for example, Mayan *tun* was occasionally spelled ***tu-n(i)*** in the Late Classic period. So, to some extent, fully syllabic spelling seems to be a generalization from the earlier, partially syllabic and partially logographic spellings. In spite of definite trends in this direction, the story of the development of Mayan writing is much more complex than this. Some words have no known logographic spellings, and the earliest instances of such words are spelled syllabically.

## LANGUAGE AND HISTORY

Linguists are able to determine a number of facts about the culture and history of Mesoamerica from the imprint that history has left on their languages. When

people interact and influence one another's cultures, their languages are among the domains that are affected. When this happens, it is often possible to detect the influence, to determine its linguistic and cultural sources, and to reconstruct the nature of the interaction that brought it about. This is possible because different types of social interaction lead to different types of linguistic change.

### Reconstructing Culture from Vocabulary

It is possible for linguists to determine the history of the languages of Mesoamerica by comparing the present state of those languages. There are two basic approaches involved in such comparisons—reconstruction and classification. Linguists can reconstruct ancestral vocabulary and grammatical patterns by comparing the differently changed forms of these ancestral words and patterns as they survive in the modern, descendant languages. These reconstructions constitute a hypothetical description of the ancestral language. As mentioned above, such ancestral languages are known as proto-languages. The forms that are reconstructed for proto-languages are preceded by the asterisk symbol (*) to make explicit the fact that the forms are reconstructed rather than being attested in written records. Today, a large number of proto-Cholan and proto-Yucatecan (Mayan) reconstructions have been verified in Mayan hieroglyphic texts, and Zoquean and Mixe-Zoquean reconstructions in epi-Olmec texts.

Cultural inferences can be drawn from reconstructed vocabularies. For example, if it is possible to reconstruct a large set of terms related to maize cultivation—corncob, cornfield, cornhusk, to double over corn, sweet corn, tortilla, etc.—then we can be quite sure that speakers of the ancestral language were maize agriculturalists. On the other hand, if the descendant languages use forms for such items that do not descend from the same words, then it is less likely that they practiced maize cultivation. As it happens, such vocabulary has been reconstructed for all Mesoamerican language families, so we suppose that ancestral Mayans Mixe-Zoqueans, and Oto-Mangueans all practiced maize cultivation. In contrast, words for a variety of pottery vessels, for cooking and storage, are reconstructible for proto-Mayan and proto-Mixe-Zoquean, but not for proto-Oto-Manguean, and the same is true of words for the hearthstones that support cooking vessels over a fire. We infer from this that ancestral Oto-Mangueans probably did not have pottery vessels and did not boil their food. This makes sense archaeologically: pottery, including boiling pots, is only found thousands of years *after* maize agriculture began in the Oto-Manguean area, the earliest locus of maize cultivation in Mesoamerica.

### Language Classification and Migration

Language classification is also a crucial key to culture history. As discussed in the section on dialects, language differences that develop among dialects result in a geographic distribution of languages that places the most closely related languages adjacent to one another—geography recapitulates phylogeny. Exceptions to this pattern result from the movement of groups from their ancestral location. Thus, classification helps us to recognize which groups have moved, and where they came from. In fact, the geographic distribution of Mesoamerican languages generally agrees quite closely with the genetic relations among these languages, so such migration has evidently been relatively rare in this part of the world.



Nonetheless, many obvious cases of the movement of peoples are known. Some linguists believe that Tequistlatecan is a member of the Hokan family, which is widespread in northern North America but rare elsewhere. The Tequistlatecan family includes Tequistlatec in Oaxaca and Jicaque in Honduras. Speakers of these languages must have migrated into Mesoamerica from the north.

Similarly, three Oto-Manguean languages—Sutiaba, Chiapanec, and Mangue—are outside the area in which the other thirty or so Oto-Manguean languages are compactly located. Chiapanec and Mangue form a genetic grouping within Oto-Manguean. Presumably, they moved as a group, stopping first in Chiapas; those who remained became the Chiapanecs, while those who continued on to Nicaragua became the Mangues (see Chapter 3). They must have left from the vicinity of the Tlapanecs, linguistically their closest relatives. In fact, the Mangues were called "Chorotega" (= /chololteka/), and Terrence Kaufman proposes that they were the Early Classic inhabitants of Cholula. The closest linguistic relative of Sutiaba is the Tlapanec language.

Nahuatl is a branch of the Uto-Aztecan family, the only one to enter the region of the Mesoamerican world. Its presence is the result of intrusion into the region, and it has been noted above that several characteristics of Nahuatl have been acquired through contact with other Mesoamerican languages. In fact, Nahuatl has spread into pockets throughout Mesoamerica, interrupted by ancient language groupings of long standing; this pattern also reflects a recent radiation of Nahuatl people.

For Mixe-Zoquean, the situation is complicated. The Mixean languages are split into two areas by Zoquean, and the Zoquean languages are split into two areas by Mixean. The simplest geographic account that is consistent with the identification of the epi-Olmec sites in southern Veracruz with Zoquean is to suppose that Mixean was originally south of Zoquean; most of Mixean moved westward and northward as Chiapanec-Mangue moved into Chiapas and Zoquean expanded southward into Chiapas and Oaxaca. It is possible, then, that the northernmost Olmec settlements were Zoquean and that the southernmost were Mixean; alternatively, Mixean may have been south of the Olmec heartland (see Chapter 2).

### Language Contact

It was noted in earlier sections that language contact provides evidence for social interaction. One of the most obvious ways is through the diffusion of vocabulary.

Names of animals and plants have often been borrowed by people entering an ecological zone from people already living there. For example, the Totonac language includes many loan words from Huastec for plants and animals native to the area in which the Totonacs now live. This suggests that the Totonacs entered the region in which they now live at a time when it was occupied by Huastecs, who were displaced by Totonacs. Archaeologically, evidence for the intrusion of new people into the area is found around A.D. 1100. Accordingly, Kaufman proposes that the people of Tajín were Huastecs—that is, people who spoke the Huastec language.

Culturally important contacts are indicated by the borrowing of vocabulary for cultural complexes. For example, several of the names and numerals used in naming days in the ritual calendar of the Oaxaca Mixe are Zoquean words, although the Mixe language has the corresponding names and numerals for use in general, noncalendrical vocabulary. This indicates that the Oaxaca Mixe calendar was strongly influenced by Zoquean speakers, which further indicates a leading role for Zoqueans in some aspects of the ritual life of the Mixe. Mixe-Zoquean names for several important cultigens are found throughout a large number of Mesoamerican languages; these and other important loans have been taken as evidence that the Olmecs spoke Mixe-Zoquean.

As noted above in the discussion of language change (see Box 11.4), one language sometimes changes grammatically by copying the grammatical structures of another. Quite intense levels of interaction must be inferred when this happens. These changes may occur when the source group switches rapidly to the language of a small target group—normally when the small group was a militarily successful elite. The source group uses its own grammatical patterns while acquiring imperfect control of the target language. Alternatively, grammatical copying occurs when two groups are in long-term, intense contact, probably the more common situation in Mesoamerica.

Such grammatical borrowing happened many times and in many places in Mesoamerica. In the discussion of syntax, we mentioned the change of Mixe-Zoquean languages from SOV to verb-initial. It seems likely that this change resulted from the word order of other Mesoamerican languages. The word order change could have happened in one of two ways: (1) Zoquean-speaking epi-Olmec people could have been bilingual with their neighbors speaking other languages, with the epi-Olmecs in a subordinate role relative to these neighbors; or (2) a substantial portion of the epi-Olmec population could have consisted of people who had employed another language as their native tongue, but shifted to Zoquean speech because of cultural domination by Zoqueans. Zapotecs in Oaxaca, Mixes in the Guatemalan highlands, and Mayans were probably in a position to provide such influence.

Similar cases exist for other language groups. Within Mayan, Cholan appears to have had a heavy influence on the vocabulary of Yucatecan, while Yucatecan has influenced the grammar and phonology of Cholan. In Oto-Manguean, the spread of sound changes among different Mixtec languages indicates that the Mixtecs of Tilantongo exerted substantial influence on neighboring kingdoms.



### Glottochronology

Another tool often used in linguistic studies is glottochronology. By assuming that basic vocabulary is lost at a relatively constant rate, the time elapsed since two languages had a common ancestor can be determined, provided that it is known that they are in fact related and provided that the basic vocabulary list has been reconstructed. The assumption that vocabulary is lost at a constant rate appears to be at best an approximation, but glottochronology can provide at least a rough estimate for when two or more languages were one. In the cases of migration just discussed, this gives an estimate for when the people speaking these languages migrated.

Glottochronology has been tested against hieroglyphic data in the case of Mayan and Mixe-Zoquean; given that the underlying assumptions of the method are not universally accepted, it is remarkable how exactly the glottochronological dates fit the hieroglyphic evidence. In Mesoamerica, it appears that glottochronology provides a rather reliable guide for cultural chronologies.

## CONCLUSION

The languages we have described above are crucially tied to our understanding of the Mesoamerican cultural tradition.

When we attempt to understand the history of this region, the common properties of Mesoamerican languages attest to the long periods of interactions among different Mesoamerican peoples, and the hieroglyphic texts provide us with irreplaceable insights into ancient political systems. Glottochronology and reconstruction allow us to form hypotheses about the cultures and movements of the ancient peoples of Mexico and Central America.

The indigenous languages are also central to understanding preconquest, colonial, and contemporary Mesoamerican views of the world. The voices of native peoples in Mesoamerica have been expressed in both native and colonial languages, but the choice of languages has rarely been neutral. Choosing one or another language or dialect conveys complex messages about colonialism, community, and ethnic identity.

Finally, not only has language served as a medium for the expression of the histories, religions, and dreams of Mesoamerican people, but it has also acted as a conservative force in shaping the content of these expressions as well. Language is one of the strongest links between the achievements of ancient Mesoamerica and the struggles and accomplishments of the peoples in this part of the modern world.

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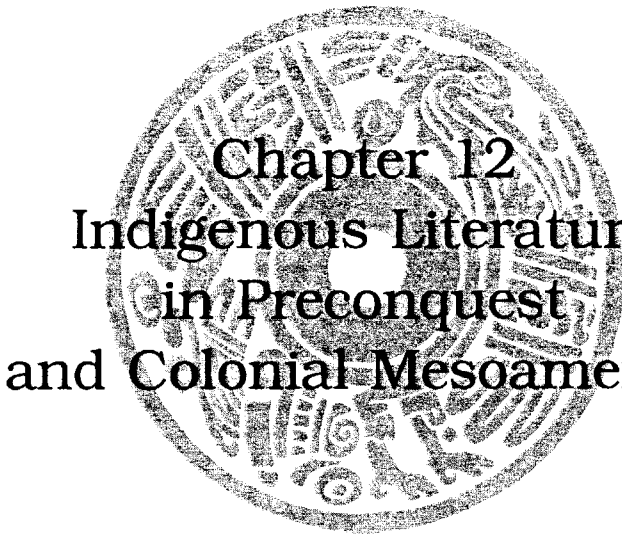

# Chapter 12
# Indigenous Literature in Preconquest and Colonial Mesoamerica

## PRECOLUMBIAN LITERATURE

### Characteristics of Native Literature

Verbal art in preconquest Mesoamerica was predominantly an art of the spoken word, an art of oratory and of song. When systems of writing were invented, they were rarely if ever used to produce word-for-word transcriptions of speech, such that the reader would repeat the exact words of the writer. Rather, the written text provided a kind of model or key—widely varying in its degree of detail and specificity—that the speaker interpreted orally. The precise words chosen to express the text's meaning could vary among different readers or from one reading to the next. However, particularly in the case of very sacred texts, a particular wording that was considered the true or original one could be memorized and passed along word for word. But always the written form was intended to be the basis for an oral performance: There were no texts whose principal function was to be contemplated in silence and solitude.

When we look at literature from other civilizations, it is wise to keep in mind that what we think of as "reading" is a relatively recent phenomenon—given that writing was first invented around 7,000 years ago. It was not until the time of the Renaissance in Europe, when the invention of movable type made books much easier to produce, that the act of reading came to be separated from that of speaking aloud. Until then, books were normally read out loud. This explains