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Words in Mixtec languages are typically disyllabic. A number of
nouns having general meaning can substitute for other nouns and so
function as pronouns. When they occur as a subject following a verb,
or as a possessor following a noun, and are not further modified them-
selves, they are shortened to a single syllable (Pike 1944:131). These
proniminal enclitics effectively divide Mixtec nouns into genders which
minimally include feminine, masculine, animal, and usually sacred.

Another feature of Mixtec is the use of superordinate terms in com-
pounds with nouns (in a few cases with verbs or adjectives) to indicate
certain lexical classes. Both full and cliticised nouns occur in the
function of classifiers. A further shortening of certain classifier
plus noun compounds has resulted in their being reduced to a single
disyllabic word. This process of morphological layering in which af-
fixes tend to coalesce with the root has been described by Gibson and
Bartholomew (1979:309 n2) as characteristic of the Otomanguean family
in general.

There are, then, two independent noun class systems: one, a gender
system, the other a partial system of lexical classification. As we
examine the two we will see that even though the classifying terms of
both systems are, in a few cases, phonologically identical and semanti-
cally related, they have very different syntactic functions. And while
the pronominal enclitics are not closely enough attached to the words

they follow to be termed affixes, the monosyllabic morphemes of the lex-
ical class system are intimately connected to the word they precede and
are properly called prefixes.

Mixtec is, in fact, not a single language, but a complex of perhaps
as many as thirty mutually unintelligible dialects. Data for this study
are from Atatlajuca (Alexander 1980), San Miguel (Pike 1944 and Dyk and
Stoudt 1965), and Chalcatongo (author's field notes), three neighboring
towns in the former district of Tlaxiaco; Peñoles (Daly 1973) spoken in
the district of Etla; and two southern dialects, Jicaltepec (Bradley
1970) and Chayucu (Pensinger 1974). Figure 1 gives their approximate
geographical locations, and identifies their subgroups as given by
Bradley (1970:1).[1]

The Gender System

Greenberg (1978:50) defines a noun gender system as:

> a system in which the noun stems of a language are divided
> into a set of genders, the distinction being based on the
> fact that the choice of a noun belonging to a particular
> gender determines the choice among a set of alternative
> "agreeing" forms in one or more other classes of morphemes
> or words, e.g., articles, demonstratives, adjectives, un-
> bound anaphoric pronouns, pronouns incorporated in a verb
> complex, etc.

In the case of Mixtec, the agreeing forms are the pronominal enclitics
which mark possession on nouns and subjects on verbs.[2] In most cases
the derivation of the enclitics from a full noun form is obvious. Table
1 shows the third person pronominal enclitics of six Mixtec dialects and
their full noun forms. Some of the blanks in the chart would probably
be filled in if more complete data were available. All six dialects
have a feminine, masculine, and animal gender. All but Chayuco have a

DIALECT	SUBGROUP	DISTRICT
Peñoles	eastern	Etla
San Miguel	central	Tlaxiaco
Chalcatongo	central	Tlaxiaco
Atatlahuca	central	Tlaxiaco
Jicaltepec	southern	Jamiltepec
Chayucu	southern	Jamiltepec

Figure 2. Mixtec dialects cited

	Atatlahuca	San Miguel	Chalcatongo	Penoles	Jicaltepec	Chayuco
Feminine						
pron	-ña	-ña	-ña	-a	-ña	-ña
noun	ñą7ą	ñą7ą	ña7a	ña-dɨ7ɨ	ñą7ą	ña7a
gloss	woman	woman	woman	woman	woman	woman
Masculine						
pron	-de	-de	-de	-dé	-rá	-ra
noun	tèe			tée	ráí	rayɨɨ
gloss	man			man	man	man
Animal						
pron	-tɨ	-tɨ	-tɨ	-dɨ	-ri	-tɨ
noun	kɨtɨ	kɨtɨ	kɨtɨ	kɨtɨ	kiti	kɨtɨ
gloss	animal	animal	animal	animal	animal	animal
Sacred						
pron	-ya	-ya	-ya	-ká	-yá	
noun	yaä	i7yà	i7a			
gloss	god	god	god			
Inanimate						
pron				-ší	-čI*	-si
noun						
gloss						
Human, collective						
pron		-yo	-yu	-ní	-ñu	
noun		ñayɨu	ñayɨu	ñíwí	ñiyivi	
gloss		people	people	people	people	
Child/person						
pron	-i	-i				
noun	sùčí	sùčí				
gloss	child	child				
Tree/vehicle						
pron						-tu
noun						yutu
gloss						tree
Water/rain						
pron	-te					
noun	ndute					
gloss	water					

* -čI is realized as /či/, /če/, or /ča/ in various environments.

Table 1.   Third person pronouns in Mixtec

sacred gender. Atatlahuca and San Miguel have an -i enclitic derived from sùčí 'child.' In Atatlahuca it also has the more general meaning of 'person.' Peñoles, Jacaltepec, and Chayuco have an inanimate gender, not shared by the central dialects. Several groups also have a human collective gender 'people.' Chayuco has a separate gender for trees and vehicles. This unlikely pairing may be explained by the fact that trees and wooden objects are often classed together, and that the first wheeled vehicles seen by the Mixtec were undoubtedly made of wood. Atatlahuca is unique in having a separate gender for water and rain.

Penoles has two encliticized forms for the feminine. -a may be derived from 'woman' ña-dɨ7ɨ as is the case with the other dialects, and is used for women of high respect. The other form -ši is the less formal pronoun, and may be related to šita 'grandmother.'

The following examples show the enclitics used with nouns to indicate the gender of the possessor:

(1) sò7o - i   (Atatlahuca)
     ear   3S Child
     'his/her (child's) ear'

(2) kʷayú - de   (San Miguel)
     horse   3S Masculine
     'his horse'

(3) nu7u   - de   (Chalcatongo)
     tooth   3S Masculine
     'his tooth'

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(4)   sátá - dɨ   (Peñoles)

        back   3S Animal

        'its (animal's) back'

(5)   sa7ma   ~ rá   (Jicaltepec)

        clothes   3S Masculine

        'his clothes'

(6)   za7ma   - ña   (Chayuco)

        clothes   3S Feminine

        'her clothes'

Pike (1944:132) illustrates how in San Miguel full noun forms are
used whenever there is further modification by another noun or adjective:

(7)   yá7a kúu ve7e   - i

        this is house   3S Child

        'This is the child's house.'

(8)   yá7a kúu ve7e   sùčí lúlí

        this is house child little

        'This is the little child's house.'

These examples show how the enclitics function as person markers
with verbs to indicate the gender of the subject:

(9) ñą7ą y šíko - ña   staà   nùù maestro (Atatlahuca)

     woman the sells   3S Fem. tortillas to teacher

     'The woman sells tortillas to the teacher.'

(10) hʷeves čako   - yo   ñayɨu ñuu   (Chalcatongo)

Thursday come from   3S Coll.people town(s)

'On Thursday people come from many towns.'

(11) nì kiší - yà   (San Miguel)

Past sleep   3S Sacred

'She/he (the god or saint) slept.'

(12) ní - šeši - di   ndà-yo7o   (Peñoles)

Past   eat   3S Animal dried cornstalks

'It (the animal) ate dried cornstalks.'

(13) kíči - ña   (Jicaltepec)

came   3S Feminine

'She came.'

(14) ndito - tu   (Chayuco)

live   3S Tree

'It (the tree) is living.'

In many, perhaps all, Mixtec dialects, the use of the enclitic following
the verb is optional if the subject is given in its full form as in (9)
and (10) above.

The Lexical Class System

For the purposes of this paper we will define a lexical class system
as a noun class system in which the nouns of a language are divided into
classes by the use of superordinate terms, which are combined with the
noun itself, but do not involve agreement with any other class of

morphemes. It also differs from a gender system in that it does not in-
clude every noun in the language, unless we posit a large and heterogen-
eous class with a zero marker. Greenberg (1978:51) notes that such a
class system has no syntactic function, and therefore is not grammati-
cally relevant. In Mixtec the superordinate term can be either a full
noun or an affix which precedes the noun in question.

Examples of noun-noun compounds, in which the second stands in a
genitival relationship to the first are frequent in Mixtec. The follow-
ing are from Chalcatongo:

ñuù bikò	town + cloud	'town of clouds'
čii kɨtɨ	belly + animal	'belly of the animal'
nda7a yuča	hand + river	'tributary of the river'
nduči í7a	eye + god, holy one	'the eye of the Virgin'

This can extend to even longer sequences such as:

| rayu í7a ndikandi | ray + god + sun | 'rays of the sun god' |

To the degree to which certain body-parts used as locative prepositions
can be called noun-noun constructions, they do not violate this pattern:

šìnì yuna	head + tree	'above the tree'
nuù yukú	face + mountain	'on the mountainside'
čií mèsa	belly + table	'under the table'

The same construction occurs with the lexical class system in which
nouns of general meaning are modified by other nouns to create what
Greenberg calls lexicalized phrases (1978:51). In Chalcatongo, for ex-
ample, we find the following town names:

ñuù kava	town + boulder	'Boulder Town'
ñuù viko	town + cloud	'Cloud Town'
ñuù nde7eyu	town + mud	'Mud Town'

and in San Miguel:

ñuù yoskuíá	town + ?	'Juxtlahuaca'
ñuù šinɨ ñúù	town + head + town	'Chalcatongo, Town
		above the Towns'
ñuù šinì víkó	town + head + cloud	'San Juan Mixtepec,
		Town above the Clouds'

In the Chayuco dictionary nine different kinds of buildings are listed,
all beginning with ve7e 'house.' For example:

ve7e kaa	house + metal	'jail'
ve7e ndiši	house + whiskey	'bar'
ve7e tyiño	house + authority	'town hall'

Other classes marked in Mixtec by compounds of two nouns include 'beans,'
'snakes,' 'words,' 'flowers,' 'birds,' 'sicknesses,' and 'men.'

A second type of compound consists of a classificatory prefix foll-
owed by a noun. In Atatlahuca the word for 'tree, wood' is yuhnu. It
is shortened to nu and used as a prefix on names of trees and on objects
made of wood:

nunde7é	'fruit tree'
nuyuhé	'ocote grove'
nu7isá	'loom'
nuhií	'rifle'

In a few cases classifying prefixes are phonologically and semantically
related to encliticized pronouns.

The following examples from Chayuco begin with the shortened form
of ña7a 'woman':

ña ta7a yo	woman + relative	'female companion; cousin of a man'
ña tyivaa	woman + noisy one	'girl, young woman'
ña yoko	woman + marriageable	'senorita, virgin'
ña zi7i	woman + mother	'woman'

A large majority of animal names in all Mixtec dialects begin with
ti- or ti-. Words for objects such as 'blanket' and 'onion' are also
included in this group. According to Longacre (1957:148), the prefix
ti-/ti- represents the merger of two historically different morphemes.
One is the Proto-Mixtecan classificatory noun *tu 'egg, fruit, round ob-
ject' (Rensch 1976:213) which has extended its range of meaning to in-
clude 'thing.' The other is *kitu 'animal' which has become kiti. So
while the animal gender suffix -ti is a shortened form of the word
'animal,' at least some of the classificatory prefixes which are iden-
tical to it come from an entirely different source. In fact, in the
examples below, etymologies of words beginning with ti- are offered us-
ing only the more general meaning of 'thing.' These words are from San
Miguel, but nearly all of them are also used by Chalcatongo speakers
(often with a difference in tone).[3]

tika	ti 'thing' + kaa 'go up'	'grasshopper'
tikačí	ti 'thing' + kačì 'cotton'	'blanket, poncho'
tikokò	ti 'thing' + kókó 'swallow'	'maggot, beetle'
tikaña	ti 'thing' + kaña 'snarl'	'disturbance'
tikasù	ti 'thing' + kasù 'toast'	'corn bread'
tiñuu	ti 'thing' + ñuù 'face'	'owl'

Longacre (1957:66) notes that tVy- becomes č- in the central dia-
lects, and ty- in Jicaltepec (Chayuco). This amounts to a fusion of the
ti- prefix with words which begin with y. San Miguel has both fused and
unfused forms.

tɨyókó, čókó	(San Miguel)
tyoko	(Chayuco)
'ant'	
tɨyò7ó, čò7ó	(San Miguel)
tyo7o	(Chayuco)
'flea'	

For some words in San Miguel only the fused form is used:

 čuku rɨ́ɨ *tɨyuku rɨɨ tɨ + yuku 'louse' + rɨɨ 'lamb' 'tick'

A number of animal names and objects also begin with ndɨ-/ndi- and
lɨ-/li. Many are analyzable in the same way as words beginning with tɨ-,
although the meanings of the prefixes are not clear. The cognate sets
in Longacre (1957) show that ndɨ- and tɨ- prefixes were separate at the
level of Proto-Mixtecan. Some examples from San Miguel with recogniz-
able second elements are:

 ndikóó ndi- + kòò 'snake' 'lizard'
 ndìyunu ndi- + yunu 'tree, wood' 'an insect'

In one example the prefix is added to a Spanish loan:

 ndiší7ú ndi- + Spanish chivo 'goat' 'goat'

This is evidence that the process of prefixing has been operative at
some period since Spanish contact.

In the six Mixtec dialects examined in this paper, there are two
words for 'tree': yunu in the central dialects, and yutu in Peñoles and

Jamiltepec. What is interesting is that yu-, -nu, and -tu have all been used as classifiers for 'tree.' In San Miguel we find the following:

yuà	'herb'
yukù	'shrub, herb'
yuha	'foliage'
yuša	'foliage'
yuši	'hay'

Most of these words are also found in Chayuco and other dialects. However, in languages that have yunu for 'tree,' -nu is also used as a classifier as in the examples from Atatlahuca given above, and in San Miguel:

nundókó	'zapote grove'	nu- + ndoko	'zapote'
numa	'tree leaves'	nu- + ma	?
nupélé	'pear tree'	nu- + pélé	'pear'

The last example is another case of a classifier added to a Spanish loan (pélé from pera).

In Chayuco and Peñoles where 'tree' is yutu, -tu is used as a prefix:

tu yavi šuu ve7e	'cross beam'	(Chayuco)
tu yoo	'reed grass'	(Chayuco)
tu yusa	'ocote stick'	(Chayuco)
tɨ-tìči	'avocado tree'	(Peñoles)
tɨ-yoo	'cane'	(Peñoles)

The use of the first syllable of 'tree' as a prefix is probably older since the yu- compounds are now disyllabic, while compounds with nu- and tu- are usually trisyllabic, often analyzable. The incorporation

of a Spanish loan confirms the fact that this process has been produc-
tive since the Spanish conquest.

In Chayuco, the one dialect we have looked at that has a 'tree'
gender, it is -tu, the second syllable of yutu 'tree' which is the en-
cliticized pronoun. While the lexical class system seems to have used
different prefixes at different points in history, we do not have evi-
dence of a similar sequence in the gender system.

Discussion

A certain amount of caution must be exercised in trying to estab-
lish the relative ages of the two noun class systems. For example, since
nearly every gender is so clearly identified with a full noun form, the
gender system would appear to be a very recent development. And since
the prefixes used in the lexical class system have, in some instances,
fused with the noun itself, it would seem to be older. However, both
gender systems and the tendency to use lexical classifiers are found
throughout the Otomanguean family. The external realization of the
gender system in Mixtec may not be ancient; the idea of the system is.
Within the lexical class system there exist noun-noun compounding which
is productive at the present time, prefix-noun compounding which has
been productive at some time since the Conquest as attested by the incor-
poration of Spanish loans, and much older disyllabic nouns in which the
prefix has completely fused with the stem.

The fact that the pronominal enclitics have not undergone fusion
with the words they follow, can perhaps be explained by their syntactic
relationship with them. When they serve as subject markers following

verbs, they are part of the subject noun phrase, separated from the verb phrase at the highest node. For example:

```
          S
         / \
        /   \
      VP     NP
       |      |
       |      |
     kusu    tᵻ
```
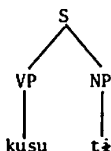
will sleep it (the animal)

'It (the animal) will sleep.'

The superordinate terms of the lexical class, however, are always part of the same noun phrase as the word they classify, and are thus more intimately bound to it, and more easily affected by it on a phonological level. Therefore, the difference in the degree of fusion of the two noun class systems, which might appear to indicate that the lexical class system is older, is actually explained by syntactic differences.[4]

In summary, Mixtec appears to have two independent noun class systems which, although they sometimes define similar semantic classes, function in very different ways. The gender system is a covert system in which the marker does not appear on the noun itself, but is an enclitic which marks subjects of verbs and possessors of nouns. The lexical class system, on the other hand, is an overt system in which the classifying terms are marked directly on the noun itself. This prefixing may take the form of a lexicalized phrase, in which the classifier word occurs before a full noun, a trisyllabic word which includes a classifying prefix, or a disyllabic word which consists of a prefix and a cliticized root.

What are needed now are more detailed studies of the noun class
systems in Mixtec itself, as well as descriptions of the systems in
neighboring, related languages. The rich variety of such systems in the
Otomanguean family may provide insights into the more general problem of
their genesis and development.

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encouragement and comments during the time I was writing this paper. I
would also like to thank Nicolas Cortez from Chalcatongo, Oaxaca, who
shared with our class his language and his friendship.

Footnotes

[1]The orthographies of the sources have been kept, with the follow-
ing exceptions: the voiceless velar stop is represented by k̲ rather than
c̲ and q̲u̲, the glottal stop by 7̲ rather than h̲, the glottal fricative by
h̲ rather than j̲, the voiceless palato-alveolar fricative by š̲ rather than
x̲, the voiceless palato-alveolar affricate by č̲ rather than ch̲, and the
voiced palatal fricative/approximant by y̲ rather than ž̲. Vowel nasali-
zation is indicated by V̧. High tones are marked by V́, low tones by V̀.
Mid tones are unmarked.

[2]In this paper we are considering only the third person singular.

[3]Identifications of the second elements in the following compounds
should be considered tentative.

[4]I am grateful to Leanne Hinton for this important observation.

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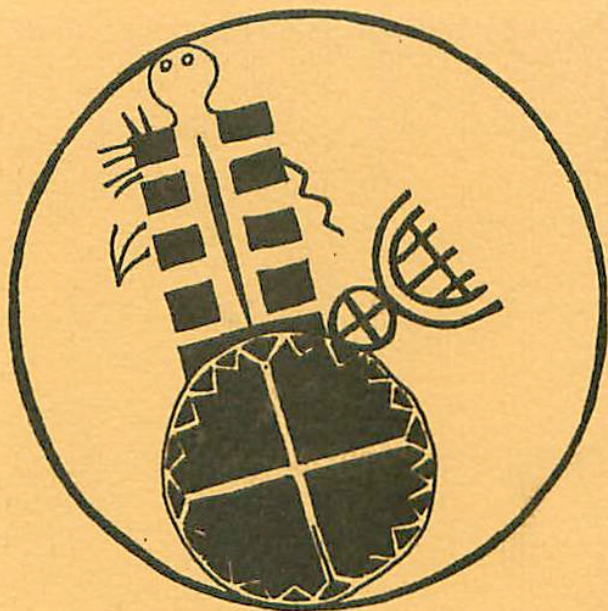
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