

# SWARTHMORE COLLEGE



## PSC

Swarthmore College  
McCabe Library - ILL  
500 College Avenue  
Swarthmore, PA 19081

Tel: 610-328-7822  
610-328-8491  
FAX: 610-690-5782  
Ariel: 130.58.88.95

---

Please return this cover sheet, along with a copy of the original request if there are any transmission problems:

ILL Request # \_\_\_\_\_

- Missing Page(s)
- Edges Cut Off
- Unable to Read
- Other: \_\_\_\_\_

Page(s) needed: \_\_\_\_\_



\*94513859\*

**STATUS:** PENDING 20120909 **OCLC #:** 11435542  
**REQUEST DATE:** 20120909 **NEED BEFORE:** 20121009 **SOURCE:** ILLiad  
**BORROWER:** GDC **RECEIVE DATE:** **DUE DATE:**  
**RENEWAL REQ:** **NEW DUE DATE:** **SPCL MES:**

**LENDERS:** \*PSC, VVC, UMS, JNA, KLG

**TITLE:** Essays in Otomanguean culture history /  
**ISBN:** 9780935462227 (pbk.)  
**IMPRINT:** Nashville, Tenn. : Anthropology Section, Dept. of Sociology and Anthropology, Vanderbi...  
**SERIES:** Vanderbilt University publications in anthropology ; no. 31.  
**ARTICLE TITLE:** Mixtec dialectology: Inferences from linguistics and ethnohistory  
**ARTICLE AUTHOR:** Josserand, K, Jansen, M.E., and Romero, M. de  
**ISSUE DATE:** 1984  
**PAGES:** 141-63 † TP/VERSO  
**VERIFIED:** <TN:209835> <ODYSSEY:206.107.42.97/ILL> OCLC  
**SHIP TO:** 300 N. Washington St./Interlibrary Loan/Gettysburg College Library/Gettysburg, PA 17325-1493

**BILL TO:** same/ FEIN #23-135-2641 N  
**SHIP VIA:** IDS #132 or L/R  
**MAXCOST:** IFM - 25.00  
**COPYRIGHT COMPLIANCE:** CCL  
**ODYSSEY:** 206.107.42.97/ILL  
**FAX:** 717-337-7001  
**EMAIL:** illform@gettysburg.edu  
**AFFILIATION:** ACLCP, Oberlin Group, PALCI, LVIS PHA#99144000032703  
**BORROWING NOTES:** (maxCost: \$25)

PM 4145. E 78 1984

**PATRON:** Amith, Jonathan

# ESSAYS IN OTOMANGUEAN CULTURE HISTORY

Edited by

J. Kathryn Josserand

Marcus Winter

Nicholas Hopkins



COPYRIGHT

Vanderbilt University  
Publications in Anthropology

Nashville, Tennessee

1984

MIXTEC DIALECTOLOGY: INFERENCES FROM  
LINGUISTICS AND ETHNOHISTORY

J. Kathryn Josserand  
Centro de Investigaciones Superiores del INAH

Maarten E. R. G. N. Jansen  
University of Leiden

María de los Angeles Romero  
Centro Regional de Oaxaca, INAH

This analysis of Colonial documents written in Mixtec investigates the antiquity of some of the dialectal differences and their registration in Colonial orthography. When we began this study we did not know to what extent Colonial Mixtec manuscripts existed, or whether all official documents were in Spanish even in the early periods. And if not Spanish, it was possible that a single dialect of Mixtec, such as that of Teposcolula, might have been imposed on all provincial courts and convents. From the linguistic point of view, we were interested to see if the dialect areas posited from linguistic data are perceptible in the 16th century documents. That is, with two complementary sets of data--modern word lists and early Colonial transcriptions of Mixtec, from roughly the same areas--would we find the expected agreements? Would there be dialect areas identifiable in the documentary sources that coincided with those postulated from modern spoken varieties of Mixtec? We found both texts in Mixtec and differences in the dialects they record.<sup>1</sup>

The Documents from the Archives

To date we have located more than 100 documents written in Mixtec, the majority from the Archivo del Juzgado de Teposcolula (AJT) or the Archivo General de la Nación (AGN) of Mexico

City; a few come from some of the local archives which Romero and Jansen visited in the Mixteca Alta and Baja (Appendix III presents a complete index of these documents). Eight of these documents were written during the 16th century, 43 during the 17th century, and 53 during the 18th century. Upon analyzing the content of these documents, we found that those from the 16th century are each of a different type: letter, deed, lawsuit, etc. From the 17th century, however, 65% of the documents are wills, 16% are deeds and bills of sale for land and houses, and the remaining 19% include documents of diverse types (letters, statements, probates, community accounts, etc.). During the 18th century, the proportions are much the same: 66% are wills, 15% are titles and bills of sale, and 19% various. The correspondence between these two centuries suggests that we have obtained a representative sample of the types of documents which existed in Mixtec during the early Colonial period.

The texts found in the Archivo del Juzgado de Teposcolula are the result of a systematic search carried out by Angeles Romero and Ronald Spores (1976), covering the first 54 legajos inventoried in this archive. There are still more documents in Teposcolula not yet reviewed, and it is almost certain that they contain many more Mixtec texts. Mary Elizabeth Smith has given us a list of documents found by her in the Archivo General de la Nación in Mexico City. Certainly a systematic search of this archive would bring to light more texts. There are doubtless more Mixtec texts in other archives and libraries both within and outside of Mexico; we have examined only the library of the Sociedad Mexicana de Geografía y Estadística and the historical archive of the library of the Museo Nacional de Antropología.

Within the Mixtec area itself, we have visited to date the following places: Chalcatongo de Hidalgo, Huajuapán de León, Magdalena Jaltepec, San Jerónimo Sosola, San Juan Sosola, San Martín Huamelulpan, San Miguel Tlacotepec, San Pedro Yucunama, San Sebastián Tecomaxtlahuaca, Santa María Yolotepec, Santo

Domingo Tonalá, Santiago Apoala, Santiago Juxtlahuaca, Santiago Tilantongo, and Villa de Silacayoapan. Although we found Mixtec texts only in Tecomaxtlahuaca, Tilantongo and Yucunama, it is likely that more documents with Mixtec texts will be discovered in other towns as yet unvisited.

Initially, we considered the possibility that the documents we encountered written in Mixtec were only copies of the original documents, made by the scribes on the juzgados (courts) in which the different affairs were being treated. A meticulous analysis of these documents has convinced us that in the great majority of the cases we have in our hands the original texts of the wills, letters, deeds, and other legal papers. These same legal briefs, in some cases, indicate this:

...el señor Alcalde Mayor habiendo visto el testamento reducido a la idioma castellana dijo que acumulado con su original a estos autos...

...the Alcalde Mayor, having seen the will translated into Spanish, said that it be filed with its original for these proceedings...

(AJT leg. 43, exp. 29)

We have analyzed the style of the letters and the paper on which these Mixtec texts were written, and find that the quality and style of the characters are very different from those of the public scribes of Teposcolula. The signatures of individuals who were deceased by the time of the juridical proceedings, when the documents were entered as evidence to the court of Teposcolula, further confirms the local origin of these documents. Also, the paper of the original Mixtec texts was often much smaller than that used by the public scribes of Teposcolula, Yanhuitlán, or Mexico, and often did not bear seals.

Thus we maintain that the documents were written in different parts of the Mixteca: in the regions of Teposcolula (San Pedro y San Pablo Teposcolula, Yucunama, Yolomecatl, etc.), Tlaxiaco (Tlazultepec, San Pedro Mártir Chocaltepec, etc.), Yanhuitlán (Santo Domingo Yanhuitlán, San Pedro Topiltepec, Santa María Magdalena Yucucata or Zahuatlán), Coixtla-

huaca, Achiutla, Tamazulapan, and in a few communities of the Mixteca Baja (see Appendix III). We still have not made a reconnaissance of the Mixteca de la Costa to locate documents in the local archives of that area.

The majority of these Mixtec documents were written by the scribes of the indigenous cabildos (town halls) of the above-mentioned communities, men who surely belonged to the group of the principales (elders):

...como están los testamentos en la lengua mixteca y trasuntarla en la lengua castellana con tres principales de este pueblo de Yanhuitlán que han ejercido oficio de escribano en la republica que saben las dos letras mixteca y castellana y leen con claridad con uno y otro y ansi trasuntamos estos testamentos...

...since the wills are in the Mixtec language, and are translated into the Spanish language by three elders from this town of Yanhuitlán who have held the office of scribe in the country, who know both Mixtec and Spanish letters and read with clarity either one, in this manner we transcribe these wills...

(AJT leg. 50, exp. 38, f. 5)

The documents dating from the second half of the 16th century show that from this early period Indian scribes already existed in various indigenous communities of the Mixteca, literate in their own language, and that local literacy was maintained during all of the Colonial period (see Appendix II). During recent times, however, this practice has disappeared, so much so that the authorities of various of the communities which we visited were surprised to know that it was possible to write in Mixtec.

Not all the documents were written by the cabildo scribes, however; some of the wills and letters were written by caciques, some even by common folk. There also exist inquiries carried out in cases of murder, written by a government official (two documents written in 1602 in Tamazulapan). The fact that some of the documents were written by local Indian citizens can create some problems in their decipherment, because most of the time their writing is less clear than that

of the public scribes from the Alcaldías Mayores (district courts). But on the other hand, they give us a greater assurance that the local scribes are likely to have registered the local dialect, and they offer the possibility of knowing what was written by the Indians themselves, and since these legal documents were almost always written in the presence of government officials and the various witnesses, we are further assured that those present understood the dialect being written.

Thus we believe that these Colonial documents are reliable samples of the dialect spoken at a given time in a given place, and as such have much to offer to the linguistic studies of Mixtec. Although much has been written about the importance of the dialect of Teposcolula as a medium of communication throughout the Mixteca, we do not find it reflected in the documents from other dialect areas. Apparently the Spanish administrators did not attempt to unify the Mixtec language, and they did not impose the use of the Teposcolula dialect for legal documents written in the Indian language; this fact has allowed us to distinguish some of the dialect differences which existed during the three centuries of the Colonial period.

We have Mixtec texts from the Teposcolula area, where the dialect studied by de los Reyes (1593) and Alvarado (1593) was spoken. We also have texts in the Mixtec of the Tlaxiaco-Achiutla-Chalcatongo area, and from the area of Yanhuitlán (Zahuatlán, Yucuita, Sayultepec), from which Jaltepetongo differs somewhat. We also have texts from the regions of Tilantongo, Cuilapan de Guerrero (Chapultepec, in the Valley of Oaxaca), and the Mixteca Baja (Tecomaxtlahuaca, Tonalá, Huajuapán, and Acaquizapan). Although we have no texts from the Mixteca de la Costa, we know both from Antonio de los Reyes and from the glosses on a few pictographic manuscripts (the Lienzo of Jicayán, the Codex Colombino-Becker) that this region also formed a separate linguistic entity. We emphasize that neither the search for documents nor their analysis has



been completed, and therefore the conclusions offered here are only preliminary.

In Appendix I we present examples of some of the most obvious and diagnostic differences between the varieties of Mixtec recorded in 16th century documents from ten towns.

### The Linguistic Background for the Analysis

When trying to analyze the linguistic features that might be recorded in these early Mixtec documents, it should be remembered that 16th century Spanish had sounds other than those common in New World Spanish today. Orthographic practices then current may obscure our understanding of the Mixtec forms, but close attention to internal characteristics of the dialects represented and an understanding of Colonial Spanish phonology will almost always render the Mixtec transcriptions intelligible. Although they must be read with care, the 16th century Dominican linguists, Fray Francisco de Alvarado and Fray Antonio de los Reyes, have much of interest to say concerning the language and social groupings of the Mixteca. De los Reyes gives some beguiling and very accurate phonetic descriptions; for example, when explaining the two-letter sequence dz, he says (de los Reyes 1593:2) "En la pronunciación de la dz herimos blandamente en la d, y mas rezió en la z..." ("In the pronunciation of the dz, we strike softly on the d, and more strongly on the z..."). If we remember that in 16th century Spanish the z was pronounced as θ (theta, voiceless interdental fricative), then this statement is easily understandable as an attempt to describe the pronunciation of a fricative d, essentially a voiced θ. Again, in explaining the pronunciation of the sequence yu, de los Reyes (1593:3) says they should be spoken "hiriendo con ambas yu de suerte que sola vna se entienda clara y distintamente" ("striking both the letters yu so that only one is heard clearly and distinctly"); the sound thus described is a single sound, the semivowel w.

The eight pages of de los Reyes' prologue to his 1593 Arte en Lengva Mixteca are filled with interesting information about

various Mixtec dialects, principally Teposcolula and Yanhuitlán but also commenting on Tlaxiaco-Achiutla, Coixtlahuaca, Cuilapan, Tejupa, Tilantongo, Mitlatongo, Tamazulapan, Jaltepec, Nochitlán and the Mixteca Baja. This prologue is of fundamental importance for the dialectology of Mixtec, because it presents a discussion of the different pronunciations and idiomatic variants in the diverse regions of the Mixteca. Certain of the correspondences noted by de los Reyes were treated by Bradley and Josserand (1978): the dz of Teposcolula corresponds to s in Tlaxiaco (proto-Mixtec \*s); the s of Teposcolula corresponds to the ch of the Coast and to the j of Tlaxiaco (proto-Mixtec \*x).

De los Reyes is very insightful in his comments and presents with clarity some of the key differences found in the Mixteca Alta. It is surprising that he treats them so lightly, for they are of great importance for distinguishing varieties of Mixtec and must have impaired communication. De los Reyes' own attitudes towards the language situation influenced his presentation of the Teposcolula dialect. Besides his more technical discussion, his interests as a missionary are clear from his remarks; he was concerned with finding (or creating) a standard language which could be used for preaching throughout the Mixteca Alta. It is true that he had a vested interest in the Teposcolula dialect, and with good reason. The aim of his Arte and the complementary Vocabulario en lengua misteca published by Alvarado in the same year (1593) was to provide the Dominicans with the necessary materials for preaching the Gospel in the language of the region, and it is significant that for this purpose they chose the dialect of Teposcolula: "...la [lengua] de Tepuzculula es mas universal y clara, y que mejor se entiende en toda la Mixteca" ("...the language of Teposcolula is more widespread and clearer, and the best understood in all the Mixtec region") (de los Reyes 1593:iii). Furthermore, de los Reyes appears to believe that this dialect represented the most original and authentic form of the Mixtec language:

Pero hablando sin agravio delos de mas pueblos de la Mixteca que merecen mucha loa y tiene otras cosas particulares que notar en ellos, de el de Tepuzculula podemos dezir que es el que mas ha conseruado la entereza de la lengua y que con menos mezcla de otras se halla el dia de oy...

But speaking without prejudice towards the rest of the towns in the Mixteca, which merit much praise and have other noteworthy features, it is in Teposcolula that we can say that the integrity of the language has been most preserved, and today has less mixture from other languages...

(de los Reyes 1593:iii)

At the end of his prologue, Fray Antonio explicitly observes:

Enfin aunque son muchas las diferencias desta lengua Mixteca como esta dicho, y que en vn mesmo pueblo se suelen hallar barrios que tienen diuersos vocablos, y distintos modos de hablar, es consuelo muy grande saber, que el que entendiere bien la lengua de Tepuzculula, la puede hablar en todas las partes dichas de la Mixteca, con seguridad de que sera entendido de los naturales. Y ya que no sea en tanto grado la de Yanguitlán, por las particularidades, que tiene, no dexara de entenderse entre los principales, y gente que cursa los caminos, y pueblos, con sus tratos, y mercaderias, y la gente plebeya sacara vnas razones que otras.

Finally, although there are many differences in the way this Mixtec language is spoken, and in a single town it is possible to find neighborhoods which have different words and distinct manners of speaking, it is a great comfort to know that he who understands the language of Teposcolula well can speak it in all the mentioned parts of the Mixteca, with the security of being understood by the Indians. And although the same does not hold to such an extent for the language of Yanhuitlán, because of the peculiarities it has, it can still be understood among the elders and the people who travel the roads and towns with their trades and merchandises, and even the common people can catch a word or two.

(de los Reyes 1593:viii)

These texts may be interpreted as indicating that the dialect of Teposcolula functioned as a lingua franca in at least part of the Mixtec region; de los Reyes states that it was the variety most widely understood, and that the other varieties were derived from it:

...parecen los de mas lenguas de que aqui se haze mencion, hijas de la de Tepuzculula, y que se deriuaron de ella,

dando el primer lugar a lo mas perfecto, como lo es esta lengua en la pronunciacion, y que ella mejor que otra de la Mixteca se puede escribir mas cumplidamente con todas las letras.

It would appear that the rest of the languages here mentioned are daughters of that of Teposcolula, and are derived from it, giving first place to the most perfect, as that language is in its pronunciation, and it is also the best language among all the rest of the Mixteca for writing most correctly, with all of the letters.

(de los Reyes 1593:v)

The sense that should be understood here is that from the Teposcolula dialect the forms of words in other dialects could be predicted, thus the practical value of Teposcolula Mixtec for written intelligibility was greatly enhanced. This fact, which we do not dispute, is probably a result of Teposcolula being in the center of innovations for almost all of the phonological changes which have affected Mixtec speech communities, both a result and a contributing factor to its continuous importance in prehistoric times. This does not mean, however, that it was the oldest variety, or the "purest" in any linguistic sense (it certainly was not the most conservative). If it was used as a lingua franca throughout the area, or at least in most of the Mixteca Alta and Baja, it was as a sort of "standard" or second, more refined language for the more cosmopolitan segments of the population. It is not clear from de los Reyes' assertions about the widespread intelligibility of Teposcolula Mixtec whether he includes all classes of people or only the upper classes and merchants, nor what geographic extent that intelligibility might have, although he does mention specific towns to which his statements apply.

Establishing dialect areas and talking about mutual intelligibility or lack of it, although both depend on rigorous and ample data bases, still represent subjective assessments of real-world phenomena. The boundaries between varieties of Mixtec which we have drawn from linguistic data certainly reflect real differences between types of speech, but the question remains, what do these differences mean to the speakers themselves? The same is true for the results of intelligibility

testing; an excellent modern survey has been carried out in the Mixteca on comprehension of neighboring varieties of speech, with the aim of establishing which dialects reach the greatest number of speakers for planning literacy materials (see Eglan 1978). But it is the analyst of these data who decides at what level of mutual intelligibility communication is seriously impaired, when we are dealing with the same language, and when lack of comprehension indicates different languages. These arbitrary divisions should be recognized as such, but they are based on experience and realistic expectations; generally after three or four independent sound changes, intelligibility is impaired. Also, there is a difference between types of sound changes (or other linguistic innovations): an innovation which changes the phonological system is much more devastating to intelligibility than a change which affects the content but not the structure. In Mixtec, the change of \*s to ə is of minor importance for comprehension, whereas the two changes \*x becomes č (in the Mixteca Baja), and \*t becomes č (in most of the Mixteca Alta), create the same units but in different structures, and are thus likely to mark more permanent disruptions in communication.

Mutual intelligibility depends, above all, on motivation and the attitudes of the speakers, rather than on any objectively definable linguistic criteria. But the fact that the results of two methods of establishing dialect and language boundaries--linguistic isoglosses and intelligibility testing--usually produce congruent or parallel divisions, even though their bases for establishing dialect areas are different, gives us more confidence that these divisions accurately reflect the linguistic reality. To date, the intelligibility studies (Casad 1974; Eglan 1978) have made finer cuts in subgroupings than we have proposed on the basis of other linguistic data. Although it is certainly possible to further subdivide the areas on the basis of linguistic features, we have not done so here. We have been more interested in the larger groupings as evidence of diffusion spheres and related dialect

areas. Furthermore, we have been reconstructing the linguistic development of these dialects from a common period--proto-Mixtec--and it is difficult to deal with many finely distinguished varieties in such a reconstruction. We have presented our analysis of the development of twenty representative varieties (Bradley and Josserand 1978); for purposes of this comparison with documentary sources we have chosen eleven of these varieties plus data for Teposcolula from the Colonial sources (de los Reyes and Alvarado). These towns are: Cuilapan de Guerrero, San Bartolo Soyaltepec, San Juan Mixtepec, San Miguel Achiutla, San Miguel el Grande, San Pedro Jicayán, San Pedro Tututepec, Santa María Peñoles, Santiago Apoala, Santiago Tilantongo, and Silacayoapan. Map 1 shows these and other Mixtec towns divided into dialect areas on the basis of Bradley and Josserand's linguistic study (1978).

#### Dialect Areas

The general picture from the linguistic data is of dialect areas which correspond roughly to valley and river systems, such as the Nochixtlán Valley, or the Achiutla-Tlaxiaco systems, or the Juxtlahuaca-Mixtepec area which drains to the Río Balsas, or the upper Balsas drainage around Acatlán, Puebla. For purposes of the present analysis we have chosen five large dialect areas (Map 1), all internally diversified, which can be established by a restricted but diagnostic number of linguistic features:

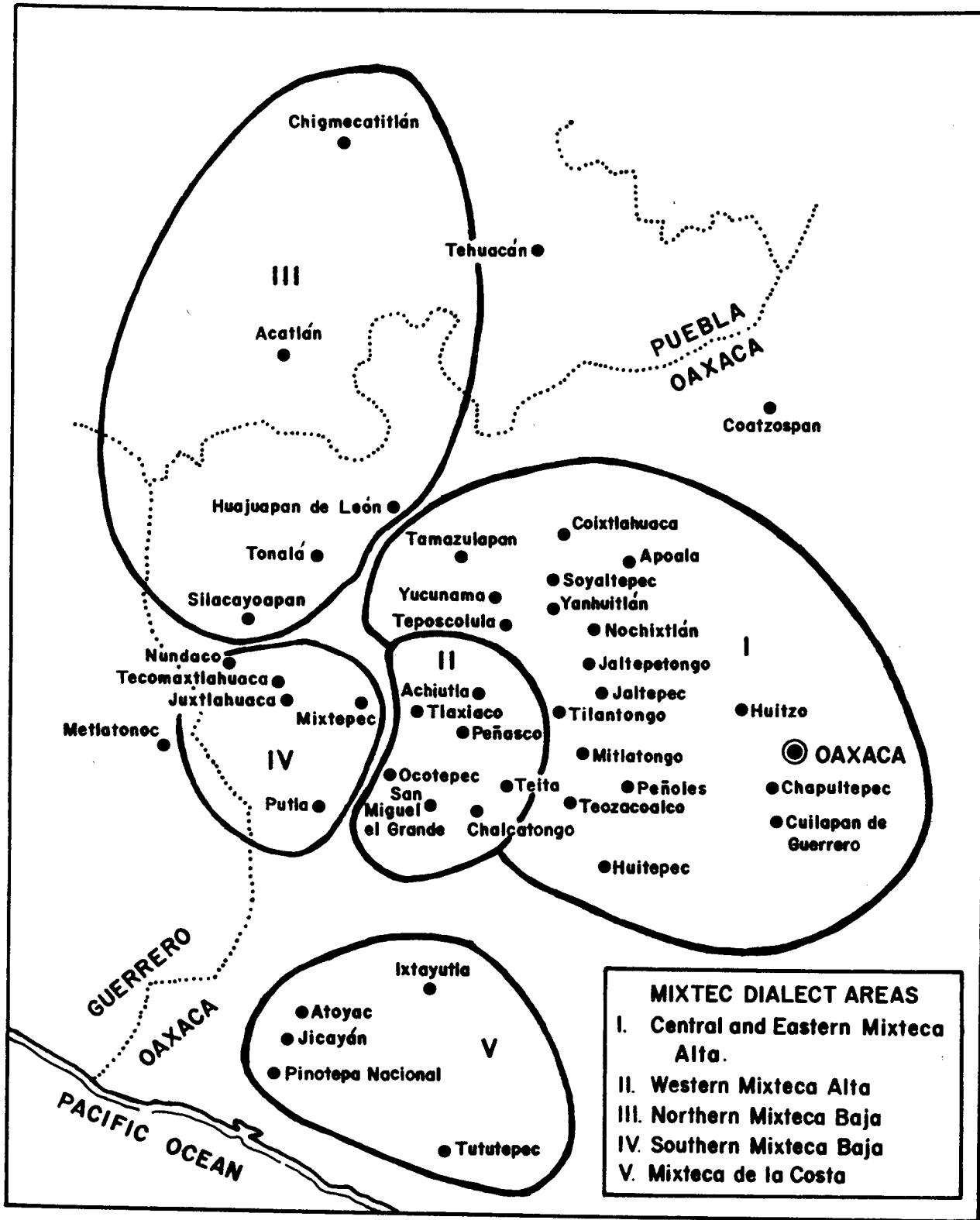
I. The Central and Eastern Mixteca Alta includes the broken highlands west of the Valley of Oaxaca and probably also all of the larger structural basins in this high mountain area: Teposcolula, Tamazulapan, Coixtlahuaca and the Valley of Nochixtlán.

The Nochixtlán Valley is clearly a key area for understanding the dynamics of the prehistoric Mixtecs; it is the largest valley in the entire Mixtec region, and as a dialect area it is paradoxically sometimes the most homogeneous (because it is a bounded, well-integrated area) and sometimes the

most diverse (because of the greater time-depth of the settlements in the valley) of all the regions we will here discuss. Its influence extends into the adjacent parts of the mountainous areas to the south and east towards Tilantongo, Mitlatongo, Peñoles and the Valley of Oaxaca. Groups controlling the Nochixtlán Valley must certainly have been important in the rest of the Mixteca. Although numerous towns with Mixtec speakers remain in the valley, the largest and most important towns (both pre- and post-Conquest) are now wholly Spanish-speaking.

The two centers treated here are Yanhuitlán and Teposcolula, both seats of large and important Dominican convents established early in the 16th century. Linguistic data for Teposcolula are taken from Alvarado and de los Reyes. For the Yanhuitlán area, which forms the northwestern arm of the Nochixtlán valley, linguistic data come from the modern village of San Bartolo Soyaltepec. Other towns from the linguistic sample which frequently follow the same linguistic pattern exhibited by Yanhuitlán and Teposcolula include Tilantongo and Peñoles in the eastern Mixteca Alta, and Cuilapan de Guerrero in the Valley of Oaxaca. Coatzospan, to the northeast, and Silacayoapan, to the west, show some similarities to the Nochixtlán area, but probably belong to distinct dialect groups; other changes, not discussed here, serve to differentiate these latter areas.

II. The Western Mixteca Alta, which lies south and west of the Yanhuitlán-Nochixtlán valley system, centers around Tlaxiaco and Achiutla and terminates in the south in a high mountain massif called Yucuyacua, "Crooked Mountain", near Chalcatongo and San Miguel el Grande. This is a very broken, mountainous area over 7000 feet in altitude, and is characterized by many small, long valleys, separated by knife-edged ridges, all draining to the Pacific. The ridges are the geographic barriers to communication, and the linguistic dialect boundaries coincide with the ridges and group into larger units parallel to the hydraulic systems. The Western Mixteca Alta dialect area is represented in the linguistic data by San Miguel Achiutla and San Miguel el Grande.



Map 1. Mixtec dialect areas.



III. The Northern Mixteca Baja, or the upper Balsas drainage, includes Acatlán, Huajuapán de León, Tonalá, and Silacayoapan, from north to south. This very large area is inadequately represented in the linguistic data, since we have included only one town, Silacayoapan, in this analysis. Several subdivisions of this area appear when more towns are included and the analysis is refined (Josserand, in preparation). The towns near Acatlán on the Río Mixteco in southern Puebla form such a sub-group, distinct from the northernmost town of Chigmecatitlán. The towns between Huajuapán de León and Silacayoapan are linguistically quite diverse, and also reveal many small sub-groupings.

IV. The Southern Mixteca Baja includes the area around San Juan Mixtepec and Santiago Juxtlahuaca. Like the Northern Baja, this region drains into the Balsas, but via a distinct system. These two dialect areas of the Mixteca Baja are but two of the several suspected dialect groupings in the Mixteca Baja and western Mixtec area, which extends into the Guerrero highlands adjacent to Oaxaca, with a high mountain refuge around Metlatonoc. This is an important area which spawned several out-migrations towards the Pacific Coast, and it differs markedly from the Mixteca Alta dialect areas. In general, the Northern Mixteca Baja dialects relate more closely to the Central and Eastern Mixteca Alta region, while the Southern Mixteca Baja more closely connects with the Western Mixteca Alta area.

V. The Mixteca de la Costa, occupying the small coastal plain of Oaxaca traditionally called the Costa Chica, is the last dialect area included in this analysis. Linguistically it is represented by San Pedro Tututepec and San Pedro Jicayán; the documentary source is the Lienzo de Jicayán, from the west coast. This dialect group is both recent and relatively homogeneous, formed by two major population movements which probably originated in the region of San Juan Mixtepec, reaching the coast by A.D. 900-1000. There are differences between western and eastern coast dialects, but they are nonetheless quite similar.

Linguistic Diagnostics

Among the linguistic diagnostics which define and characterize these five dialect regions are five of the more widespread changes (Map 2) of the set of sixteen phonological innovations which Bradley and Josserand (1978) have reconstructed to account for the development of the modern varieties of Mixtec from proto-Mixtec. These changes, in their probable order of occurrence, are:

1. Proto-Mixtec \*t becomes tn before nasalized vowels. The development of this conditioned variant of t is characteristic of 16th century Teposcolula and of Soyaltepec (Yanhuitlán), Achiutla, San Miguel el Grande, Tilantongo, Peñoles, and Cuilapan; that is, almost all of the Mixteca Alta, both Central-Eastern and Western dialect areas. This innovation did not reach Apoala, Silacayoapan, Mixtepec, nor any of the coastal towns. It does occur in the Tonalá-Acatlán areas of the upper Balsas drainage, however, and probably represents colonization of that area from the Nochixtlán Valley, presumably the innovating center for this change. This is an early phonological change which essentially defines the central region and distinguishes it from the peripheries. It indicates that by this time there was a separate population in the Mixtepec-Juxtlahuaca area of the Mixteca Baja, which did not participate in the innovation. It is probable that all areas of the Mixteca Alta were populated when the change occurred, but they were not very distinct linguistically from the Nochixtlán area.

This change can be identified in the documentary sources through inspection of the data presented in sets 36, 37, 39 and 40 of Appendix I. As expected, the innovation occurs in the Mixteca Alta towns. Its appearance in Jicayán, however, seems anomalous when compared to modern coastal dialects, and the same is true for its occurrence in Tonalá and Nundaco in the Mixteca Baja.

2. Proto-Mixtec \*s becomes ḁ (a voiceless fricative becomes fronted and voiced; often written as dz in Colonial

sources). This represents a change in the pronunciation of words with the s sound, and is an innovation in the speech habits of the Nochixtlán-Teposcolula Mixtecs, which spread as their cultural influence expanded into adjacent areas of the Mixteca Alta (to towns like Tilantongo and Peñoles), and ultimately into the Valley of Oaxaca (Cuilapan), west into the upper Balsas drainage (Silacayoapan), and north (Apoala).

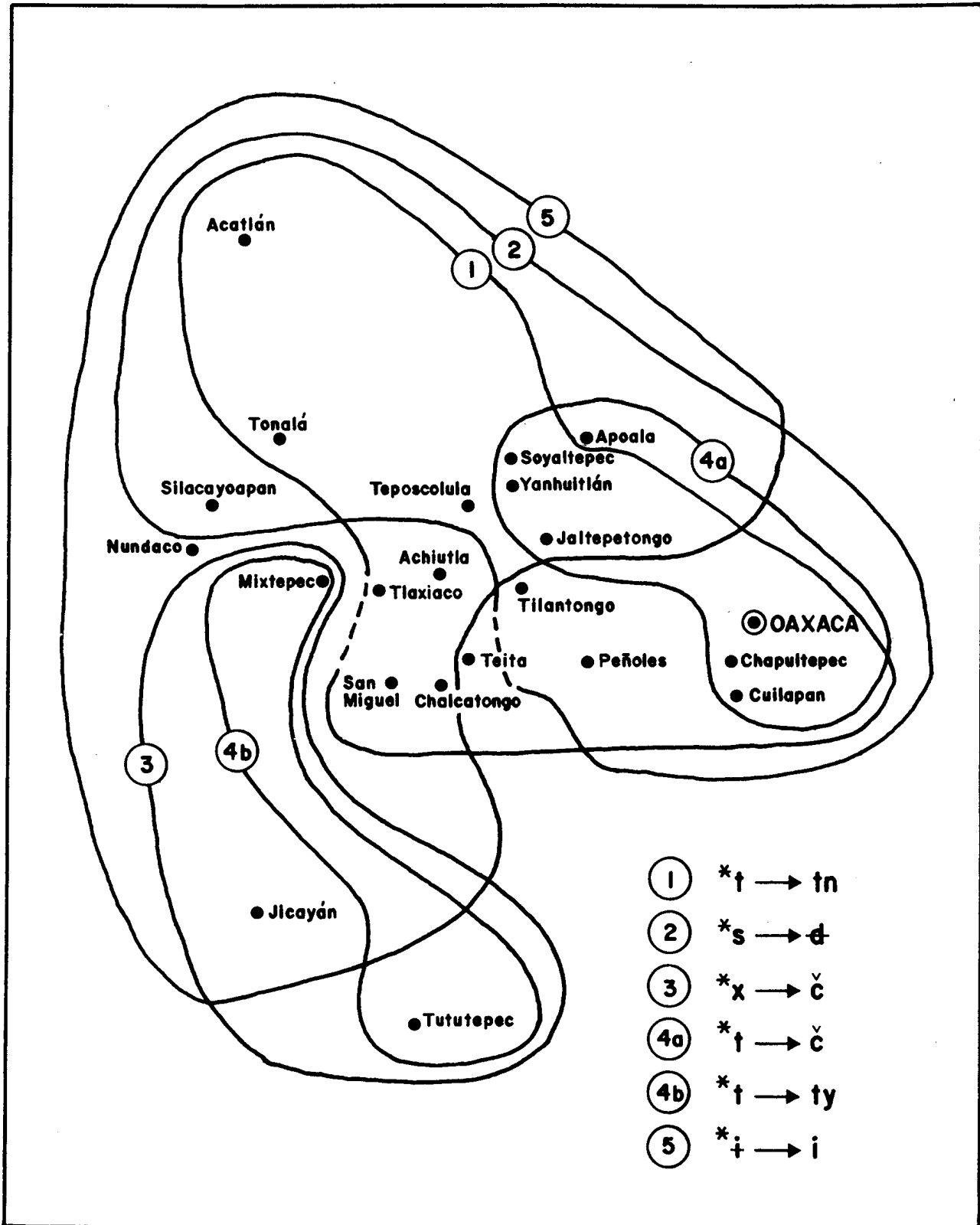
The documentary forms showing this change can be seen in sets 1-6, 18, 25 and 41 of Appendix I, where all the sources except those from Chalcatongo, Nundaco and Jicayán show the innovation.

3. Proto-Mixtec \*x becomes č (a voiceless fricative fronts and becomes an affricate; usually written ch). This pronunciation change, characteristic of the speech of San Juan Mixtepec and of the coastal populations which emigrated from that area, defines the variants of the lower Mixteca Baja and the Costa Chica. It is one of the changes which causes most difficulty in intelligibility with other dialects because other areas developed the same sound, č, but from a different source (see below). This means that the same element participates in different structures; homonyms were created that did not previously exist, and a stronger barrier to communication between the areas now emphasized the independence of the Mixtepec-Juxtlahuaca area.

In the documentary sources only Jicayán shows the innovation, as expected, since there were no documents from other coastal towns or from San Juan Mixtepec. Sets 21 and 34 of Appendix I give the data corresponding to this change.

4. Proto-Mixtec \*t becomes č (palatalized and affricated) or ty (palatalized only) before front vowels. These two parallel innovations took place in different (complementary?) regions of the Mixteca.

The development of the affricate č before the front vowel i is common to all of the Mixteca except for the coastal towns, but the development of this same č sound before the front vowel e has a much more restricted distribution, as shown by line



Map 2. Distribution of phonological innovations.

4a in Map 2. It is the defining characteristic for a sub-area of the Mixteca Alta which includes the towns of Apoala, Soyaltepec and Cuilapan; the documentary sources for Yanhuitlán, Jaltepetongo and Chapultepec also show the change (see sets 12, 13 and 14 in Appendix I; note that there were no examples of \*t before i in the sample set of words from the documentary sources). This change, \*t becomes č, is structurally important within Mixtec as a whole, for it is responsible for the creation of the č sound in most of the Mixteca, but from a different original sound than the č of the Coast and Mixtepec (see change 3).

The alternant form of this innovation, 4b, accounts for the development of a palatalized alveolar stop ty. This particular presentation of the change is limited to San Juan Mixtepec and the second wave of emigrants to leave that area for the Coast. It is not characteristic of the first emigrating populations, already settled on the west coast by this time. Thus Mixtepec and San Pedro Tututepec (and other towns of the eastern coast) share this change, but San Pedro Jicayán and other west coast towns do not. Since the documentary sources for Appendix I include only Jicayán from this area, the ty does not occur in the sample, but its absence can be confirmed through an inspection of sets 12 and 13.

5. Proto-Mixtec \*ɨ becomes i. This change merges two vowels into one and is therefore very important structurally because it reduces the vowel inventory. It is common to most of the Mixtec region except for the eastern Mixteca Alta and the east coast, where the original ɨ is retained. There is a contrast between the data from the linguistic study and that from the documentary sources, however. In the documentary sources this innovation seems to have a different form; most of the 16th century developments are e rather than the ɨ found in Bradley and Josserand's (1978) sample. Further investigation reveals a sub-area, again in the Mixteca Alta, including the towns of Apoala, Soyaltepec, Yanhuitlán, Jaltepe-

tongo and Teposcolula, where e regularly appears instead of \*ɨ. Sets 7, 8 and 41-44 in Appendix I show the documentary data for this innovation.

Several towns show mixed reflexes, between i and ɨ (San Miguel el Grande, Cuilapan), and others between i and e (Tonallá, Nundaco, Teita). Chalcatongo shows only i in the documentary sample, but both i and ɨ in the modern data. Tilantongo shows e in the documents cited here, but ɨ is regularly reported in modern linguistic materials. Since ɨ was not a vowel found in Spanish, it is possible that in the 16th century sources it was spelled with e, the closest Spanish vowel sound; the appearance of e where ɨ is expected in the Tilantongo document might also be attributed to the spelling conventions of a central area Mixtec scribe, whose dialect would be expected to have e.

The mixed reflexes which correspond to this sound change present a complex pattern, perhaps reflecting a change still in process during the 16th century. It appears from internal linguistic evidence to be a relatively late phonological development, and its presence may reflect the impact of a foreign language with a 4 or 5 vowel system, such as Nahuatl, whose speakers were making incursions into Mixtec territory before the Spanish Conquest. More important than who participated in this innovation, from our point of view, is who resisted it--the conservative areas of the Mixteca Alta (Tilantongo, Teita, Peñoles) and the east coast (Tututepec). Although shared retentions are not good evidence for sub-grouping, and we do not suggest grouping the east coast with the Peñoles area, this change does serve to distinguish the east coast from the Mixtepec area, and the retention of the old six-vowel system coincides generally with the Señorío of Tututepec, well known in late Postclassic Mixtec history.

### Conclusions

Appendix I presents a list of 44 words found in the ethno-historical sources which appeared to be of interest linguistically; that is, they varied in their transcriptions from document to document. These examples demonstrate the problems of Spanish orthography as well as Mixtec intelligibility. Sets 7, 8 and 36 show the various orthographic conventions for transcribing the wi sounds: vui, hui, vj and vi are all used for the same sequence. Set 9 shows the various spellings of ku: qh, cu, c, qu; the letter q alone had the syllable value ku at times. Other sets reveal sound correspondences between dialects rather than variant spellings of the same sounds: examples 1-6, 18, 25 and 41 all show the distinction between dialects with d versus dialects with s (Tlaxiaco, Nundaco and Jicayán). Sets 12-17, and possibly 19, 20, 24 and 36, show correspondences between t and č, or <sup>n</sup>d and <sup>n</sup>č (or <sup>n</sup>j), which do not enter into the present analysis, but are very important dialect differences nonetheless. The correspondence between x, š and č appears in sets 15, 21 and 32-35 (Tlaxiaco and Teita should have x, and the Coast should have č; where there are data, this hypothesis is confirmed). The expected contrast between t and tn is unfortunately lacking, probably due to the sample, which does not include enough towns outside the central area. San Pedro Jicayán, which should not show tn, does so in set 39 (and elsewhere lacks corresponding data). Whether this abnormality should be attributed to a scribal error (hyper-correction), or a transitory imposition of Teposcolula influence on the Coast, is impossible to tell from this limited data. The lack of documents from San Juan Mixtepec and the coastal areas makes it impossible to test for the last two changes selected for dialect definition, the t to ty correspondence and the merger of z with i.

In conclusion, we have found a satisfactory overall congruence between the linguistic expectations and the ethnohistorical indications of Mixtec dialect differences during the

16th century. Linguistic data enabled the delineation of large dialect areas, which we hypothesized would be characterized by specific orthographic conventions, or at least that the sounds would be distinguished adequately. The documentary sources do confirm the hypothesis. With this preliminary study as a foundation, we believe that a more careful inspection of early documentary sources will yield more evidence for reconstructing the dialect situation during early Colonial times.

Aside from the importance of these documents for the linguistic analysis of Mixtec dialects, we do not wish to omit mention of the enormous value of the data contained in these documents, written by the Mixtecs themselves. These early Colonial Mixtec sources are particularly intriguing with respect to our understanding of the system of land tenure in the Mixteca, and for studies of social stratification and the lines of succession and inheritance among the noble classes.

The great number of documents located so far could be more than duplicated by an exhaustive investigation in the Teposcolula archive, in the Archivo General de la Nación, and in the many municipal and parochial archives. We believe that the custom of writing in Mixtec was very widely diffused in the Mixteca during all of the Colonial period (see Appendix II). This custom may have been determined at least in part by two circumstances: the political stance adopted by the authorities of New Spain with respect to the use of the Indian languages, and the socio-economic situation of the Mixteca itself.

Despite repeated orders sent forth by the Spanish crown, trying to establish the Spanish language as the official language in all its empire and suggesting the manner in which these orders could be carried out, this policy never had much success. This was due in part to the difficulties of communication and to the isolation of many of the Indian regions. One might suspect that the authorities of New Spain never took the necessary measures to implement the royal decrees because it was in their interests to maintain a society of privileged and non-privileged, in which the use of an Indian language was



one more trait which marked an individual as Indian and thus subject to tribute-giving. That is, the use of an Indian language in the society of New Spain was one more mark of an inferior status (Heath 1972).

The type of economy which developed in the Mixteca during the Colonial period, dominated by the interests of the merchants who united the region with the Puebla area, tended to perpetuate the indigenous community. The Spaniards obtained important raw materials from the Indian communities (silk, grains, tallow, skins, etc.) and had no need to transform the Indians into salaried workers, which would have functioned as a disintegrating factor for the Indian community and consequently would have favored loss of the native language. On the other hand, the maintenance of their native tongue functioned during the Colonial period as a factor which permitted the identification of the Mixtecs as an ethnic group distinct from other indigenous populations.

The Mixteca had been unified as a political entity during the reign of 8 Deer "Tiger Claw," whose life marked, for the Mixtecs themselves, the beginning of the florescent Mixtec culture of the Postclassic period. After this king's violent death the entire Mixteca was never unified under a single central government, but it did persevere as a cultural entity, with a common ideology: the myth of the common origin of the Mixtec kings in Apoala clearly functioned as a unifying concept. The ruling class was united by ties of kinship, and spoke a language which despite dialect differences was at least partially intelligible in all of the area. Social changes related to the Conquest, and later to the Independence movement, began the decline and disintegration of the Mixtec region as a political and cultural unity, and doubtless these changes have also influenced the linguistic diversification.

Although archeological investigations do not lend themselves to letter-correspondences for linguistic analysis, we believe that they offer other valuable information for understanding the dynamics of these populations. The combination

of linguistic with archeological data as well as ethnohistorical information can and should form the basis for greater understanding of the social and cultural development of the Mixtec as well as other Mesoamerican peoples.