

# PERSONAL PRONOUNS IN ZAPOTEC AND ZAPOTECAN<sup>1</sup>

NATALIE OPERSTEIN

UNIVERSITY OF CALIFORNIA, LOS ANGELES

This paper is a comparative and historical study of personal pronouns in Zapotec and Zapotecan. It is based on data from more than 20 Zapotec languages and several dialects of Chatino. On the basis of this study, a number of dialectal isoglosses involving personal pronouns are identified and full reconstructions of the Proto-Zapotec and Proto-Zapotecan systems of personal pronouns are attempted.

[KEYWORDS: Zapotec, Chatino, Zapotecan, Otomanguean, personal pronouns]

## 1. Introduction.

**1.1. Zapotec and Zapotecan.** The Zapotec family of languages is spoken mainly in the State of Oaxaca, Mexico. Together with Chatino it constitutes the Zapotecan branch of the Otomanguean stock. The exact number of different languages within Zapotec has not been determined with certainty. Based on structural criteria, Kaufman (n.d.:1, 13) recognizes 5 to 10 different languages within Zapotec, while the Ethnologue (Grimes et al. 2002), based on mutual intelligibility testing, identifies 57. Zapotec is divided into the following dialectal zones: Solteco and Papabuco (spoken in Sola de Vega), Central (comprising the Zapotec languages of the Oaxaca Valley and the Isthmus of Tehuantepec), Northern and Southern (spoken to the north and south of the Oaxaca Valley, respectively) (on the classification of Zapotec, see Angulo 1926, Angulo and Freeland 1935, Kaufman, n.d., and Suárez 1990 and the bibliography cited therein).<sup>2</sup>

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<sup>2</sup> Even though the number of separate languages within Zapotec is, in the present state of Zapotec studies, a controversial matter, different varieties of Zapotec are uniformly referred to in this paper as “languages” (cf. a similar editorial decision in Munro 2002:38, n. 1). They are identified by the names of locations for which linguistic descriptions are available, and by their belonging to one of the major dialectal groups—Northern (abbreviated N), Central (C), Southern (S), Papabuco (P), and Solteco (Sol). Whenever necessary, a distinction is made between the Valley (V) and Isthmus (I) subbranches within the Central group.

**1.2. Zapotec personal pronouns.** From a formal and functional point of view, Zapotec personal pronouns are divided into free and bound (cf. Marlett 1993:82). Bound pronouns are phonologically clitics. They can function as subjects and objects of verbs, as possessors of nouns, and as objects of prepositions. Free pronouns are phonologically independent. They can appear in isolation, as focused arguments of the verb, and as objects of prepositions. In Southern Zapotec and Papabuco, bound pronouns are phonologically reduced allomorphs of the free forms. In Solteco, the free forms consist of a phonological host followed by clitic pronouns; this also applies to most forms in Central Zapotec and to third-person pronouns in Northern Zapotec. Occasionally, other types of relationships between the free and bound pronouns can be found. For example, the free and bound forms of the first-person singular in Papabuco have etymologically distinct stems, while the free forms of the first-person plural in some Central languages are expanded by clitic pronouns or deictics. Based on their phonological properties and syntactic functions, Marlett (1993) classified Zapotec personal pronouns into prosodically independent, syntactically independent, and syntactically dependent. However, even though from a functional viewpoint Marlett's (1993) classification appears to be more adequate, for comparative purposes it is more convenient to preserve the traditional division of Zapotec personal pronouns into free and bound.

**1.3. Historical studies of Zapotec pronouns.** Few studies take into account the comparative or historical aspects of Zapotec pronominal system. Jaime de Angulo collected personal pronouns in a number of Central, Southern, and Northern languages and made important generalizations about the origin and dialectal distribution of a number of the forms (Angulo 1926 and Angulo and Freeland 1935). Partial reconstructions of Proto-Zapotec personal pronouns are found in Fernández de Miranda (1995), Kaufman (1994), and Munro (2000); reconstructions in Fernández de Miranda (1995) do not take into account Papabuco and Solteco data. Smith Stark and López Cruz (1995) contains correspondences between the personal pronouns of San Pablo Güilá Zapotec and Fernández de Miranda's reconstructions.

This paper, therefore, is the first attempt at a comprehensive comparative and historical study of personal pronouns in Zapotec. For this purpose, sets of personal pronouns have been collected for a large number of Zapotec languages belonging to all dialectal branches. Most data come from modern descriptive grammars,<sup>3</sup> with earlier periods represented by a sixteenth-century Valley language (Córdova 1578*a*; 1578*b*; cf. Rendón 1969), late seventeenth-century Northern and Valley languages (Reyes 1700), early

<sup>3</sup> See Appendix A for the source materials for each Zapotec language and each dialect of Chatino, and Appendix B for their approximate geographical locations.

nineteenth-century Valley Zapotec (Anonymous 1823), and late nineteenth-century Papabuco (Peñafiel, n.d. and Belmar 1901) and Solteco (Smith Stark 1999a). On the basis of this study, I identify a number of dialectal isoglosses involving personal pronouns that complement and expand those discovered by Angulo (1926) and Angulo and Freeland (1935), and attempt a full reconstruction of the Proto-Zapotec system of personal pronouns. As an aid in the reconstruction of Proto-Zapotec forms, the pronominal paradigms of Chatino dialects have likewise been collected, and the pronominal system of Proto-Chatino reconstructed. On the basis of the reconstructions of Proto-Zapotec and Proto-Chatino pronouns, I also suggest a reconstruction of the pronominal system of Proto-Zapotecan (**10.2** below).

As a general note to reconstruction presented here it is necessary to say that, in contrast to Kaufman (1994), who provides separate reconstructions for the bound pronouns, I reconstruct only one set of forms. This decision is based on the following considerations. As stated in **1.2**, in Southern Zapotec and Papabuco the bound forms (except for Papabuco 1s, for which the bound and free forms are suppletive) are transparently reduced versions of the free pronouns. Since a similar situation obtains in Chatino (cf. Carleton and Waksler 2000:385), we may safely assume that this pattern was inherited from Proto-Zapotecan. The branches of Zapotec that make a formal distinction between the free and bound forms which goes beyond mere phonological reduction in clitic position are Solteco, Northern, and Central Zapotec. The emergence of a separate set of clitic pronouns correlates with the use of the morpheme *\*(l)leʔa* as a pronominal phonological host in these branches (cf. **8.4**) and separates them as a group from Southern Zapotec and Papabuco. Solteco, Northern, and Central branches thus constitute an early post-Proto-Zapotec common node (discussed in **10.1**); the development of two formally distinct sets of pronouns constitutes one of the common characteristics of this group. Consequently, since the emergence of a structural distinction between the bound and free forms is a post-Proto-Zapotec phenomenon specifically connected with the Solteco-Northern-Central dialect configuration, I reconstruct for Proto-Zapotec only one set of personal pronouns.

In the following sections, the reconstructed forms are presented first, followed by the supporting forms from a representative sample of languages and, where applicable, a discussion of their geographical distribution. The origin of Zapotec third-person pronouns is discussed in **7** and the dialectal distribution of pronominal plural markers in **9**. Section **10** contains reconstructions of the pronominal systems of Proto-Zapotec and Proto-Zapotecan. For a quick overview of the most important reconstructions discussed in the paper, see Appendix C.

## 2. First-person singular.<sup>4</sup>

**2.1. Reconstruction and supporting forms.** Kaufman's (1994:59; also personal communication) reconstructions of the 1s pronoun, based on the Valley, Isthmus and Southern forms, are *\*na?* (free) and *\*=ã?* (bound). Fernández de Miranda's (1995:188) reconstructions are *\*na?a*, based on the Isthmus, and *\*na*, based on Central and Southern forms. The factual evidence for these reconstructions includes such forms as Juchitán *na'a/=a'* (I), SLQZ *nà'a'/=a'* (V), Guelavía *na'a, na-re/=a* (V),<sup>5</sup> SM Coatlán *na'* (S), SB Loxicha/Xanaguía *n(a)* (S), Yalálag/Atepec/Yatzachi El Bajo *=a'* (N), SM Zaniza *=ã* (P), and SM Lachixío *li=a'a/=a* (Sol). My reconstruction of PZ 1s coincides with Kaufman's free form (*\*na?*), while the development of the clitic pronoun *\*=a(?)* is most likely a post-PZ innovation of the Northern-Central-Solteco group (see discussion in 1.3 and table 1). Chatino 1s pronouns genetically corresponding to PZ *\*na?* include the Taltaltepec 1s *nã'* and the Zenzontepec 1s *ã'/nã'*; PCh 1s can be reconstructed as *\*nã?*. PZ and PCh 1s forms find correspondences in other branches of Otomanguan: cf. Proto-Popolocan *\*?aN* (Veerman-Leichsenring 2000:333; *N* symbolizes the presence of the nasal feature) and Proto-Chinantec *\*hnia/=n(a)* (Rensch 1989:27).

**2.2. First-person plural exclusive *\*ya*.** Fernández de Miranda's and Kaufman's reconstructions of PZ 1s do not account for the following forms, which occur in all dialectal areas except the Southern: Córdoba's *=ya* (V),

<sup>4</sup> Throughout the rest of the paper, the following abbreviations and notations are used: PZ Proto-Zapotec; PCh Proto-Chatino; PZn Proto-Zapotecan; SA Santa Ana; SB San Baltazar; SM Santa María; SP San Pedro; SL San Lorenzo; SJ San Juan (in names of towns); SLQZ San Lucas Quiaviní Zapotec; 1/2/3s/p first/second/third person singular/plural; incl inclusive; excl exclusive; resp respect; rev reverential; hon honorific; fam familiar; anim animal; inan inanimate; h human; m masculine; f feminine; Poss possessive; Sub subject; Obj object; rel relativizer; = indicates a clitic boundary; - marks a morpheme boundary; ~ indicates variant forms. Following the *IJAL* reviewers' suggestions, an attempt has been made to standardize transcriptions of Zapotec data regardless of their source. Checked vowels are spelled *V'*, laryngealized vowels *V'*, long vowels *V:*; nasalized vowels are marked by a tilde. Fortis sonorants are written *nn* and *ll*, palatalized sonorants *ny* and *ly*; underlining indicates retroflex articulation. Following Marlett (1993), I omit all tonal information, which is not available for all the languages and is not reconstructed in this paper. Diacritics in SLQZ forms indicate phonation types (see Munro and Lopez 1999 for details). Double spellings of vowels in Guelavía Zapotec have been uniformly interpreted as laryngealized vowels.

<sup>5</sup> In Guelavía Zapotec, as in many other Central languages, a deictic clitic has been added onto the 1s pronoun for emphasis. In Guelavía, this may disambiguate a potential confusion with *na=a* 'my hand', which is homophonous with the 1s allomorph without the demonstrative (Jones and Church 1985:4).

Reyes's =*ya* (V and N), Anonymous (1823) =*ya* (V), Juchitán =*ya'* (I), Atepec =*ya'* (N), SL Texmelucan/SM Zaniza/Recibimiento de Cuauhtemoc *yā* (P). Some information about the phonological behavior of this pronoun is provided in Reyes's grammars of late seventeenth-century Valley and Northern languages. Reyes describes =*ya* as the only 1s pronominal clitic in both languages, but when =*ya* is attached to words ending in nonlow front vowels, the glide is lost in pronunciation. Using Reyes's (1700:16) examples for the Northern language, the words *biče* 'brother' and *liči* 'house' followed by the 1s clitic pronoun are pronounced *biče=a*, *liči=a*, not *biče=ya*, *liči=ya*; the same phenomenon in his Valley language is exemplified later (Reyes 1700:66). Reyes also stresses the overall tendency of his Northern language toward syncopation and observes that words like *liči=a* 'my house' and *šaba=ya* 'my clothes' are in fact pronounced *lič=a* and *šab=a* (1700:17; segmentation is mine). Córdova describes the behavior of this clitic in his Valley language in similar terms more than a century earlier (1578a:36). Córdova's and Reyes's considering =*ya* as the basic 1s clitic and =*a* as its phonologically conditioned allomorph deserves to be taken seriously. Basing my analysis on comparative evidence both inside and outside Zapotec, and supplementing this with the early grammarians' observations, I reconstruct a first-person pronoun *\*ya*. Semantic differences between its reflexes in Zapotec and the cognate forms in Chatino indicate that originally this was a first-person plural exclusive pronoun (cf. the relevant portions of 2.4, 5.8, 10.1, 10.2, and Appendix C). Possible cognates of PZ *\*ya* outside Zapotecan may include such first-person pronouns in Mixtecan as Ayutla Mixtec 1s *yu?u/=i* and 1p incl *yoo?e?* (Hills 1990:209).

**2.3. Northern Zapotec first-person singular.** Northern languages, as compared to other branches of Zapotec, innovated by introducing a new form of the 1s in their pronominal paradigm which can be reconstructed as *\*nata?/=ta?*. (Fernández de Miranda's reconstruction, based on the clitic pronouns, is *\*da'*.<sup>6</sup>) The supporting forms include Yatzachi El Bajo *nada'/=da'*, Yalálag *nada'*, Rincón *neda'*, Zoogocho *neda'/=da'* (Sub), =*nda'* (Obj), and Atepec *inte'/=te'*, =*ti'*. The free pronoun *\*nata?* probably contains as its first element PZ 1s *\*na?*. The second element may be a demonstrative (Smith Stark, p.c.); for a typological parallel within Zapotec, note Guelavía 1s *na-re*, cited in 2.1. *\*nata?* completely ousted reflexes of *\*na?* as the free form in Northern Zapotec, but reflexes of *\*ya* may coexist

<sup>6</sup> PZ *\*d* in Fernández de Miranda's reconstructions corresponds to *\*t* in mine. I follow Swadesh (1947) and Kaufman (1994) in reconstructing the single/geminate contrast in PZ obstruents. Fernández de Miranda's (1995) and Munro's (2000) notations operate in terms of voicing distinction (i.e., my *\*t/\*tt* corresponds to their *\*d/\*t*).

TABLE 1

Proto-Form	Northern Zapotec	Central Zapotec	Solteco	Southern Zapotec	Papabuco
PZ 1s <i>*na?</i>	Zoogocho <i>ne-da'</i>	Guelavía <i>na-re</i>	—	SB Loxicha <i>n(a)</i>	SM Zaniza <i>=ā</i>
PZ 1p excl <i>*ya</i>	Atepec 1s <i>=ya'</i>	Juchitán 1s <i>=ya'</i>	—	—	SM Zaniza 1s <i>yā</i> 1p <i>ya=n/=ya</i>
Post-PZ 1s <i>*=a(?)</i>	Zoogocho <i>=a'</i>	Guelavía <i>=a</i>	SM Lachixío <i>li=a'a/=a</i>	—	—

with its bound allomorph *\*=ta?* (e.g., the set of 1s clitics in Atepec Zapotec includes *=te'*, *=ti'*, *=a'*, and *=ya'*).

**2.4. Summary.** The above discussion of the 1s forms and their reconstructions is summarized in table 1, with one example of each form in a modern language.

### 3. Second-person singular.

**3.1. Reconstruction and supporting forms.** Fernández de Miranda's reconstructions of the 2s pronoun are a somewhat chaotic array of *\*lu?*, *\*lo?*, and *\*li?* (1995:186). Kaufman (1994:59) distinguishes between the free form *\*li?* < *\*lu?wi* (based on Northern, Central, and Southern languages)<sup>7</sup> and the clitic pronoun *\*lu?* (based on all branches except Papabuco and paralleled by cognates in Chatino). Second-person singular forms that warrant Kaufman's reconstruction include Córdova's *lowi* ~ *loy/=lo* (V), Reyes's *luy* ~ *loy/=lo* (N) and *luy/=lo* (V), Atepec *lu'=/lu'* (N), Juchitán *li'i'=(l)u'* (I), Guelavía *liu/=u* (V), SLQZ *liu'/=üu'* (V), Mitla *luh'=(l)u* (V), Chichicapan *yi:'=lu'* (V), SP Güilá *li:'ga*, *li:'=u'* (V), Xanaguá *lu'y/=l'*, *=a'* (S), SM Coatlán *lo* (S), SM Lachixío *li'i=lo/=lo*.

As can be appreciated from the forms cited above, 2s pronouns that continue Kaufman's *\*lu?wi* (*\*li?*) show only a sporadic distribution across Zapotec, while reflexes of *\*lu?* occur everywhere as both free and bound forms. Given this distribution, I reconstruct for PZ only the latter form (*\*lu?*). The longer form consists, most likely, of PZ *\*lu?* and an optional deictic element *\*i* (i.e., the resulting form is *\*lu?-i*). As was shown in connection with 1s forms, Zapotec pronouns often add a deictic: cf. SJ Guelavía 1s *na-re* or Mitla 1p excl *nu-re* (see n. 5 as well as 5.5). A deictic

<sup>7</sup> Second-person pronouns in Papabuco are a continuation of PZ 1p excl (see 5.7).

of the shape *\*i* is also reconstructible for Chatino 2s forms: cf. Tataltepec *nu'ũ* and Zenzontepec *nũ'ũ* versus Zona Alta and Yaitepec *nu'wĩ*.

**3.2. Second singular *\*nu?*.** In addition to forms with the initial liquid that served as the basis for Fernández de Miranda's and Kaufman's reconstructions, some languages have 2s forms with the initial nasal. In my sample, these are nineteenth-century Solteco (with 2s *no'o*) (Smith Stark 1999a) and Rincón Zapotec (N) (with 2s =*nu'*; Pickett 1990). These forms are thus close to 2s pronouns in Chatino (cf. Tataltepec *nu'ũ* and Zenzontepec *nũ'ũ*). In order to account for such forms in Zapotec, which, given their distribution and scant attestation, must be viewed as preserved archaisms, it is necessary to assume (at least, provisionally) the existence of an additional PZ second-person pronoun of the shape *\*nu?*. Kaufman (p.c.) prefers to reconstruct PZ 2s as *\*lũ?*, which could in principle be the source of both the *l*-initial and the *n*-initial forms, but since nasalized vowels are not generally reconstructed for PZ, such a reconstruction for the PZ level may be problematic.

**3.3. Northern Zapotec second-person singular.** 2s forms in a number of Northern languages are not directly derivable from the proposed reconstruction *\*lu?* (cf., in particular, Choapan =*le'* and Zoogocho/Yatzachi El Bajo *le'*). The vocalism of these forms is probably derived from the 2p forms in the same languages (cf. Zoogocho/Yatzachi El Bajo *le'e*, Choapan 2p *le*). Zoogocho, however, also preserves the expected 2s *lo* which has survived in male speech (Aaron Sonnenschein, p.c.).

**3.4. Allomorphs of the 2s pronoun.** In some languages, there exist two phonologically conditioned allomorphs of the bound 2s pronoun, the form with the initial *l*- occurring after vowels and the allomorph without *l*- after consonants. For example, in Juchitán Zapotec the corresponding forms are =*lu'* and =*u'*. The existence of two phonologically conditioned allomorphs is remarked on by both Córdova (1578a:36) and Reyes (1700:16–17). The existence of two allomorphs of the 2s clitic strongly resembles the situation with the 1s clitic =*ya* discussed above, and indeed both early grammarians treat the two phenomena together. In some modern languages, the two allomorphs exist side by side, while in others the *l*-less clitic became generalized. In Guelavía and SLQZ it got secondarily attached to the free form (cf. SLQZ 2s *li=u'/=ũu'*).

**3.5. 2s clitic pronouns in Northern Zapotec.** A number of Northern languages possess 2s clitics with the initial alveolar stop; for example, both Zoogocho and Yatzachi El Bajo have =*do'* alongside =*o'*. Such forms appear to be of secondary origin, having been built by analogy with the 1s

TABLE 2

Proto-Form	Northern Zapotec	Central Zapotec	Solteco	Southern Zapotec	Papabuco
PZ 2s *lu <sup>?</sup> (-i)	Atepec lu'/'=lu'	Córdoba's lowi/=(l)o	SM Lachixío =lo	SB Loxicha l(o)	—
PZ 2s *nu <sup>?</sup>	Rincón =nu'	—	—	19th-century Solteco no'o	—

clitics. The basis for such an analogy would have been the following relationship: 1s  $a'$  :  $da'$  = 2s  $o'$  :  $x$  (hence, 2s clitic  $do'$ ).

**3.6. Summary.** The 2s forms and their PZ reconstructions are summarized in table 2, with one example of each form in a modern language.

#### 4. Second-person pronouns of respect.

**4.1. Northern and Valley 2s polite pronouns.** A Number of Northern and Valley languages have polite forms of address which consist of an emphatic base followed by the 2s clitic. Jaime de Angulo was the first to identify the dialectal distribution of the two emphatic bases used in the polite pronouns of address. The base used in Northern Zapotec is represented by Reyes's *kwina=lo*, Rincón *kwin=u*, and Atepec *cuiā=lu'*, while the base used in the Valley is that of Córdoba's *yobi=lo*, Chichicapan *yu'ubi=lu'*, SP Güilá *gyu:'by=u'*, SLQZ *làa'=yu-u'/'=yu-u'*, *=yibù=u'*, and Guelavía *la'a=bi=u*. Córdoba and Reyes translate this form as 'you yourself'. The 2s pronouns of respect in SLQZ (*làa'=yu-u'/'=yu-u'*) and Guelavía (*la'a=bi=u/'=bi=u*) seem to indicate that the Valley form of the emphatic base consists of two elements, the first of which is attested in SLQZ (*=yu=*) and the second in Guelavía (*=bi=*).

**4.2. Northern and Valley 2p polite pronouns.** Languages that distinguish familiar and polite forms in the 2s also make this distinction in the structurally parallel 2p forms. Northern Zapotec pronouns of this kind include Rincón *kwin=li'* and Atepec *culā'=le*, and Valley Zapotec forms include Córdoba's *yobi=(ka/be)=to*, Reyes's *yo'obi=to*, Chichicapan *yu'ubi=(ra'a)=tu* ~ *la=ra=yu'ubi=tu/'=yu'ubi=tu*, SLQZ *làa'=yù=ad/'=yù=ad*, *=yibù=ad*, and Guelavía *la'a=gip=tì/'=gip=tì*.

**4.3. Alternative forms of polite pronouns.** In some Central and Southern languages, there exist two alternative strategies of creating polite second-person pronouns to the one described in 4.1 and 4.2. One of them consists of adding 3s to 2s, as in Mitla (V) 2s resp *luh=la*, the other of using



2p for 2s, as in SM Coatlán (S) 2s resp/2p *ko*. The use of 2p for 2s was apparently present also in the historical development of Papabuco, where 2s and 2p forms coincide. The Northern languages seem to have developed 2p by adding the 3s pronominal clitic of respect to the 2s pronoun; originally, such a form might have been used as a pronoun of polite address (see 6).

## 5. First-person plural.

**5.1. Inclusive–exclusive distinction in the 1p.** Zapotec languages present a kind of continuum with respect to the consistency with which they preserve the distinction between the inclusive and exclusive forms in the 1p. Papabuco lacks this feature altogether, Northern Zapotec and Solteco carry it through in the most thorough way, while Central and Southern languages are not consistent in exhibiting this trait. But even some of the languages that lack this distinction may preserve relics of the old inclusive pronoun which can linger on in a limited number of contexts (for example, in religious vocabulary) or form suppletive paradigms with forms of a more recent origin.

**5.2. First-person inclusive *\*na*.** Geographically, the most widespread 1p incl pronoun, and the only one that finds an exact semantic match in Chatino, is reconstructible as *\*na*. Reflexes of this form are preserved as a robust first-person plural, without the inclusive–exclusive distinction, in Papabuco. In the rest of Zapotec it is preserved as a relic form, having been replaced by pronouns of a more recent origin. One of the reasons for this replacement could have been the extreme closeness of this form to the 1s pronoun. The concrete pronominal forms that warrant the reconstruction of PZ *\*na* include Córdova's *do=na/=na* (V), Reyes's *=na* (V), Cuixtla 1p incl *na'* (S), SM Coatlán *na* (S), Huixtepec *=na* (V), SL Texmelucan *de=n/=n(a)* (P), SM Zaniza *(bi)=(ya)=n(a)/=(ya)=n(a)* (P), SJ Elotepec *=na* (P), Recibimiento de Cuauhtemoc *de=na* (P). It is likely that PZ *\*na* forms the first part of Northern 1p excl that Fernández de Miranda (1995:177), based on forms similar to Reyes's *neto/=neto*, Yalálag *neto'/=to'*, Rincón *netu/=tu'*, Zoogocho *neto/=to*, Yatzachi El Bajo *neto'/=to*, Atepec *intu'/=tu'*, and Choapan *=ndo'*, reconstructed as *\*netu'*.

**5.3. Reflexes of *\*na* in older sources.** The inclusive meaning of PZ *\*na* is well attested in Colonial Zapotec. The comprehensive semantics of this form, which already at that time was perceived as archaic, is stressed by both Córdova and Reyes. According to Córdova (1578a:33), this pronoun is used “quando se habla en general por todos los hombres” [‘when one speaks of people in general’]. Córdova (1587a:34) also observes that this pronoun can be used with the emphatic base (*yobi=na*) as a polite form of address approximately equivalent to “vuestra merced” [‘your grace’] or “vuestra

señoría” [‘your lordship’] in his Spanish. Such use is consistent with the inclusive meaning of the form, the semantic shift being from 1p incl ‘I and you’ to 2s polite ‘you’. Reyes (1700:66) likewise maintains that this pronoun “comprende mas . . .” [‘comprises more’]. He makes his analysis of this form even more explicit when he compares it to the 1p incl in his Northern language (1700:17). Reyes’s examples of the use of this pronoun belong to religious vocabulary (e.g., *bišo’oze=na* ‘Our Father’). The inclusive semantics of PZ \**na* is matched by that of its cognates in Chatino, namely, Tataltepec 1p incl *nã*, Zona Alta *nã*., Yaitepec *õ*, and Zenzontepec *na*; the PCh 1p incl is reconstructible as \**nã*.

**5.4. The morpheme \*(t)tu(?).** The Northern 1p excl forms cited in 5.2 (Reyes’s *neto/=neto* and so on) contain as the second element a morpheme that Kaufman had originally reconstructed as PZ 1p excl \*(t)tu(?) (1994:59). Kaufman’s reconstruction of this morpheme seems to take into account also Central 1p excl pronouns such as Juchitán *la’a=du/=du*, which would explain the uncertainty in the reconstruction of the stop (Fernández de Miranda 1995:177, e.g., provides a separate reconstruction, \**la’a-du*’, based exclusively on the Isthmus form). It is unclear whether Central and Southern 2p (Córdova’s *la’a=to/=to*, Reyes’s *la’a=to/=to’o*, Mitla *la’=tu/=tu*, SP Güilá *la:=du/=du*, Chichicapan *la’=(ra)=tu/=ra=tu*, SLQZ *là=ad/=ad*, Guelavía *la’a=t=t(ɨ)*, Juchitán *la’a=tu/=tu*, Xanaguía *to* [S], Guevea de Humboldt =*d*, Quiegolani *de* [S]), as well as Valley 1p (Córdova’s *do=no*, *dao=no/=no*, SP Güilá *du=nu=nu/=nu*, Guelavía *du=n=ni*, and SLQZ *da=nno=ohnn/=inn*) contain the same morpheme. In Central languages such as SLQZ and SP Güilá, both 1p and 2p contain a lenis stop (SLQZ 1p *da=nno=ohnn* and 2p *là=ad*, SP Güilá 1p *du=nu=nu* and 2p *la’a=du*). In some other Central languages, the 1p form contains a lenis and the 2p a fortis stop (cf. Guelavía 1p *du=n=ni*, 2p *la’a=t*; Juchitán 1p *la’a=du*, 2p *la’a=tu*). This may indicate that originally two distinct morphemes existed and a reconstruction such as \*(t)tu(?) is simply a conflation of the two. At least one of the contributing morphemes could have been a plural marker. Thus, while reflexes of \*(t)tu(?) are not attested in the pronominal paradigms of SM Lachixío (Sol) and Chatino, the pronominal pluralizer attested in two Papabuco languages does appear to be a related form (cf. 5.9, 9, and Appendix C). Plural markers in general can and do develop into pronouns in Zapotec, as witnessed by the origin of 1p forms in a couple of Southern languages (see 5.6). But, since \*(t)tu(?) functions as a pronominal category only in Northern, Central, and Southern Zapotec, (a) it should be reconstructed with a different meaning, probably that of a plural marker, for the PZ level, and (b) its use as a personal pronoun should be regarded as a common innovation of the Northern-Central-Southern area (in other words, a relatively late development).

**5.5. Central-Southern first-person plural \**nu*.** The form reconstructed by Kaufman (1994:59) as 1p incl \**nu* is based on Central and Southern languages. Supporting forms for this reconstruction include Mitla 1p incl *nu=nu* ~ *nu=r=nu* and 1p excl *nu=re/=nu* (C), Chichicapan *la'=nu'/=nu* ~ *la'=ra=nu/=ra=nu* (C), Juchitán 1p incl *la'a=nu/=nu* (C), Córdoba's *do=no* ~ *dao=no/=no* (C), SP Güilá *du=nu=nu/=nu* (C), Guelavía *du=n=ni/=n(i)* (C), SLQZ *da=nno=ohnn/=inn* (C), Guevea de Humboldt 1p incl *=no* and 1p excl *=no'* (S), Cuixtla 1p excl *nu* (S), Quiegolani 1p excl *no'o* (S), Xanaguá 1p incl *no* and 1p excl *no'* (S).

In most languages, this pronoun is reinforced by attaching clitics. In Mitla and Chichicapan, it is expanded by a deictic (cf. Mitla *nu=re*); in SP Güilá, Guelavía, SLQZ, Teotitlán, and SL Mixtepec, it is enlarged by a 1p clitic pronoun of the same origin (cf. SLQZ *da=nno=ohnn* alongside *=inn*). In Chichicapan and Juchitán, the 1p pronoun got cliticized by attaching itself to a phonological host (cf. Juchitán *la'a=nu*). In Córdoba's and Reyes's Zapotec, SP Güilá, Guelavía, SLQZ, and Teotitlán, the element to which the 1p pronoun got attached may be a reflex of the morpheme \*(*t*)*tu*(?) discussed in 5.4. In SLQZ, Guelavía, Teotitlán, and SP Güilá, the clitic got attached to \*(*t*)*tu*(?) twice, which resulted in such complex forms as SP Güilá *du=nu=nu* and SLQZ *da=nno=ohnn*.

As was already mentioned, this 1p pronoun occurs only in the Central and Southern languages. Given its localized distribution, it is doubtful that it needs to be reconstructed for the PZ. It is better interpreted as a common post-PZ innovation of the Southern-Central area (see also table 3 and Appendix C).

**5.6. Dialect-specific forms of the 1p.** A few dialect-specific developments may be mentioned in addition to the 1p forms already discussed. Southern forms such as Lagueche 1p excl and Quiegolani 1p incl *be* appear to correspond to pronominal plural markers in Papabuco (*bi*) and SM Lachixío (*be*), and possibly also to the second element of the Valley emphatic pronominal base (cf. 4.1). SM Lachixío 1p incl *=awa* is a transparent conflation of 1s *=a* and 2p *=wa*. SB Loxicha 1p incl *ŋo* also seems to be a combination of 1s *na* and 2s resp *go* (the latter presumably from 2p; cf. SM Coatlán *ko* used as both 2p and 2s resp). The origin of 1p excl in SB Loxicha (*sa*) and SM Coatlán (*sa'*) may be nominal. In this connection, third-person pronouns of possible nominal origin in Quiegolani (*zaa*) and SP Coatlán (*sa-ba*), discussed in 8.8, may be relevant: the passage from 3s to 1p is typologically common. The distinction in vowel quality in Xanaguá and Guevea de Humboldt (S) 1p incl *no* and 1p excl *no'* is probably secondary.

**5.7. First-person exclusive \**tyi?u*.** PZ 1p excl is reconstructible as \**tyi?u* (Kaufman, p.c.). This form is attested in the North, Papabuco, and

Solteco, but in the first two groups it changed its original semantics, in Northern Zapotec to 1p incl and in Papabuco to 2p (and, later, to 2s as well). The bound forms in most Northern languages appear to be recent contractions of the corresponding free pronouns; for Reyes, as late as at the end of the seventeenth century, the clitic form was uncontracted. Reflexes of *\*tyiʔu* include Zoogocho *čioʔ/=čo* (N), Yatzachi El Bajo *čioʔo/=čo* (N), Xaltianguis *ryuu/=ryuu* (N), Atepec *riʔu/=riʔu* (N), Choapan =*ro* (N), SM Lachixío *liʔi=ro/=ro* (Sol), and SL Texmelucan/SM Zaniza *ru/=r* (P).

**5.8. First-person plural in Chatino.** PCh 1p incl is reconstructible as *\*nã* (the supporting forms are quoted in 5.3). Chatino 1p excl forms fall into two groups. One group is represented by forms such as Zona Alta *ware/=wa*, Yaitepec *ba*, Tataltepec *kwa-re*. The similarity of these forms to 2p in some of the dialects (e.g., Yaitepec *wō*, Zona Alta *wã* discussed in 6) may be an indication of a semantic shift from 2p to 1p excl (cf. a typologically parallel shift in the opposite direction, from PZ 1p excl to 2p, in Papabuco).

The second group of forms is represented by Tataltepec and Zenzontepec 1p excl *ya*. This pronoun seems to correspond to one of the 1p forms in Papabuco (Recibimiento de Cuauhtemoc *bi=ya*, SM Zaniza (*bi*)=*ya=n(a)/=(bi)=y(a)*) which are used alongside reflexes of *\*na*. This form of Papabuco 1p brings us back to the PZ first-person pronoun reconstructed as *\*ya* (2.2). It is likely that this is in fact the same form, and, given the semantics of its reflexes in Zapotec (as 1s and 1p) and Chatino (as 1p excl), it is probably to be reconstructed as PZ (and PZn) 1p excl (cf. 2.2, 2.4, 10.1, 10.2, and Appendix C).

**5.9. Summary.** The reconstructions of the 1p forms in PZ discussed in 5 are summarized in table 3.

**6. Second-person plural.** The only dialectal areas to preserve PZ 2p are the Southern and Solteco: cf. SM Coatlán *ko* (S), SB Loxicha *go* (S), Cuixtla *wu* (S), and SM Lachixío *liʔi=wa/=wa* (Sol). Macuiltianguis (N) second-person formal pronoun =*kkwaʔ* seems to belong here as well. The common ancestor of these forms is reconstructible as *\*wa*. The corresponding forms in Chatino include Tataltepec 2p *mã ~ kuʔmã*, Zona Alta *wã*, Yaitepec *wō*, Zenzontepec *wa ~ waʔa*; PCh 2p is reconstructible as *\*wã*. Reflexes of PZ 2p *\*wa* are summarized in table 4 (the relevance of SM Lachixío and SB Loxicha 1p incl to PZ 2p is discussed in 5.6).

The rest of the Zapotec languages show considerable and mostly independent innovation in their forms of the 2p. As mentioned in 5.7, Papabuco developed 2p out of PZ 1p excl. At present, this form is used also for the 2s, and plural reference can be optionally indicated by a preposed pluralizer (*de* in SL Texmelucan, *bi* in SM Zaniza). 2p in Central and part of Southern languages was discussed in 5.4: provided the identification of

TABLE 3

Proto-Form	Northern Zapotec	Central Zapotec	Solteco	Southern Zapotec	Papabuco
PZ 1p incl * <i>na</i>	Zoogocho 1p excl <i>ne-to'</i>	Córdova's 1p incl <i>do-na/=na</i>	—	SM Coatlán 1p incl <i>na</i>	SL Texmelucan 1p <i>de-n/=n(a)</i>
PZ 1p excl * <i>ya</i>	Atepec 1s = <i>ya'</i>	Juchitán 1s = <i>ya'</i>	—	—	SM Zaniza 1s <i>yā</i> 1p <i>ya=n/=ya</i>
PZ 1p excl * <i>ryi?u</i>	Atepec 1p incl <i>ri'u/=ri'u</i>	—	SM Lachixío 1p excl <i>=ro</i>	—	SM Zaniza 2s/p <i>ru/=r</i>
PZ plural marker *( <i>t</i> ) <i>tu</i> (?)	Zoogocho 1p excl <i>ne-to'</i>	Córdova's 1p incl <i>do-na</i> Juchitán 1p excl = <i>du</i> 2p = <i>tu</i>	—	Quiégolani 2p <i>de</i>	SL Texmelucan plural marker <i>de</i>
Post-PZ 1p incl * <i>nu</i>	—	Chichicapan 1p <i>la'=nu'/=nu</i>	—	Xanaguía 1p incl <i>no</i> 1p excl <i>no'</i>	—

TABLE 4

Proto-Form	Northern Zapotec	Central Zapotec	Solteco	Southern Zapotec	Papabuco
PZ 2p * <i>wa</i>	Macuilianguis 2formal = <i>kkwa'</i>	—	SM Lachixío 2p = <i>wa</i> 1p incl = <i>awa</i> (1s + 2p)	SM Coatlán 2p = <i>ko</i> SB Loxicha 1p incl <i>ŋo</i> (1s + 2p)	—

\*(*t*)*tu*(?) as a single morpheme is correct, the second plural in these languages is cognate with Northern 1p excl. Northern Zapotec seems to have developed 2p by adding the clitic form of the 3s resp pronoun to the 2s—cf., e.g., Zoogocho and Yatzachi El Bajo 2p *le'e/=le* (versus 2s *le'*, 3s resp =*e'*), Yalálag *le'/=le* (versus 2s *lo'*, 3s resp =*e'*), Atepec *le*(=*bi'i*)/=*le* (versus 2s *lu'*, 3s resp =*e*). In Atepec and a number of other Northern languages, the 2p pronoun got further expanded by attaching a clitic 3s human pronoun *bi'i*, which indicates the cyclicity in the use of the third for the second in this area (in light of these data, Angulo's 1926:59 observation that the adding of 3s clitics onto the second-person forms in Northern lan-

guages was influenced by the use of the third for the second in Spanish has to be reexamined).

**7. Third-person pronouns.** Third-person pronouns form the basis of a semantic division of Zapotec nouns into gender classes. Basic to this semantic split is the distinction between animates and inanimates, as is shown by the existence of two interrogative pronouns, one for animates (SLQZ/ Juchitán *tu*, SL Texmelucan/Mitla *ču* ‘who?’), the other for things (SLQZ/ Mitla/Córdova’s *ši*, Juchitán *ši’i* ‘what?’). In most languages, the animate class is further subdivided into those of humans and animals. For example, the third-person pronouns of Juchitán Zapotec encode exactly these three classes: the human, animal, and inanimate. The human class may then be further split into a number of categories depending on such parameters as sacredness, relative social status, relative age, personal worth, relation to the community, and sex of the referent. In some languages, either the use or the set of referents of certain pronouns may depend on the sex of the speaker. For instance, SP Güilá Zapotec distinguishes between sacred, respectful, familiar, informal, animal, and inanimate referents; the pronoun designated ‘informal’ is used exclusively by males when speaking of brothers, friends, and girlfriends (López Cruz 1997:115–20).<sup>8</sup> The division of third-person pronouns into the three basic classes is common to all Zapotec languages, while the subcategories of the human class are of a much more recent origin. This is apparent from the fact that the categories themselves are in most cases language-specific, and the concrete pronominal forms that encode them are confined to certain dialectal or areal configurations.

Most third-person pronouns in Zapotec appear to be of nominal origin. The development of pronouns out of nouns may be connected with the general Otomanguean tendency toward the creation of compounds in which the first member defines the category to which the second member of the compound belongs.<sup>9</sup> For example, the first member of SM Zaniza *yag-šily* ‘chair’ is the noun *yag* ‘wood’, which classes chairs with other wooden objects, and

<sup>8</sup> The number of third-person pronouns in any single language in my sample varies between three and six. Languages with only three pronouns can distinguish between the three basic classes, as does Juchitán, or make other distinctions. For example, Atepec has third-person pronouns of respect, familiar, and a general form that can refer to things, animals, and people. Mitla Zapotec has a general pronoun, a pronoun of respect, and a pronoun used by males. However, languages that have more than three pronouns always seem to have the three basic ones (human, animal, and inanimate), to which they add a number of categories of the human class. For instance, the fourth pronoun in SL Texmelucan refers to males, while the three additional pronouns in Guelavía add ‘child’, ‘familiar’, and a male-to-male form. On the discourse functioning of third-person pronouns, see Munro (2002).

<sup>9</sup> I thank Thomas C. Smith Stark for drawing my attention to the general tendency of the Otomanguean languages toward this type of compounding (see Smith Stark and Tapia García 1984:212).

the first part of Amuzgo *ki-so* ‘horse’ classifies horses as animals (*ki-* being a reduced form of *kio* ‘animal’) (Smith Stark and Tapia García 1984:212). A reverse version of the Zapotec dictionary published by the Junta Colombina (Whitcotton and Whitcotton 1993) contains several pages of entries beginning with the word *beni* ‘person’, which serves as a mere indicator of the category ‘human’; most entries under the letter *m* in the same dictionary are names of animals containing the word *mani* ‘animal’ in the same function. Out of this compounding pattern there seem to have developed a number of classifier-like elements which occur in modern Zapotec as prefixes on nouns and are no longer analyzable as independent words. SM Lachixío *ni-hyo* ‘man’ and *ni-ko* ‘dog’ exemplify one of such prefixes (*ni-*), and SM Zaniza *bi-nya* ‘woman’ and *bi-ziny* ‘mouse, rat’ contain another (*bi-*) (cf. Kaufman 1994). The use of such classifier-like nouns seems to have been optional and nonuniform in PZ as it did not cover all of the relevant vocabulary. A comparison of cognates from various languages illustrates this point. For example, the word for ‘bird’ occurs with one prefix in Cajonos Zapotec (N) (*b-yine*) and a different prefix in SM Zaniza (P) (*ṣ̌i-giny*); and the word for ‘crab’ has no prefix in SJ Elotepec (P) (*be:*), while in closely related SM Zaniza (P) it appears with a prefix (*ṣ̌i-be*), the cognate of which is found in Cajonos (N) *či-be* (Nellis and Hollenbach 1980:96).

From the viewpoint of productivity, Zapotec does not reach the stage of Mixtecan in the creation of nominal classifiers, but the earliest grammars clearly document the use of classifier-like elements in counting. Juan de Córdova, for example, devotes nearly two pages in his *Arte* to what amounts to numeral classification (1578a:197–98). Córdova mentions the use of *beni* ‘person’ for counting humans, *mani* ‘animal’ for counting animals, *kie* ‘stone’ for counting such things as cocoa, grain, eggs, tamales, figs, and other kinds of round fruit, and *lati* ‘clothing’ for counting blankets and hides “y toda cosa assi” [‘and other such things’]. To count single objects that constitute halves of functional pairs—such as shoes, gloves, and paired body parts—he uses the word *čo’o* meaning something like ‘side’.<sup>10</sup> The generic counter *lao*, recorded with the meaning ‘thing’ in the Junta Colombina dictionary, is mentioned as a counter for such diverse entities as sermons, speeches, and markets. Examples of numeral-classifier-noun phrases in Córdova’s *Arte* include *tobi kike beni* (lit. ‘one head person’, i.e., ‘one person’), *tobi čo’o lao=ni* (lit. ‘one side eye=his’, i.e., ‘his eye’), and *tobi lao liba’ana* (lit. ‘one thing sermon’, i.e., ‘one sermon’).

<sup>10</sup> This word is documented with two meanings in both Córdova’s dictionary and that of the Junta Colombina. The meaning “medio animal” [‘half the animal’] or “mitad de animal, sea muerto ó vivo” [‘half of the animal, dead or alive’] is probably derived from what appears to be the original meaning “lado derecho o siniestro” [‘right or left side’].

In Córdoba's catalog of numeral classifiers there still is no mention of their anaphoric use, which becomes prominent in later sources. In Reyes's Northern Zapotec, for instance, humans are counted by placing *bi* and animals by placing *ba* after the numeral; the corresponding clitics in his Valley Zapotec are *bi* and *ma ~ me* (1700:24, 71). The 'animal' clitic is a phonetically reduced version of the word for 'animal' (e.g., *mani* in Córdoba's Zapotec), and the 'human' clitic appears to be cognate with the word for 'person' (cf. Córdoba's *beni*). Many examples of the anaphoric use of numeral classifiers are found in the Junta Colombina dictionary. They include *tobi lo'oča* (lit. 'one stick'), translated as "una caña, paja, cabello, cosa larga" ['a reed, straw, hair, a long object'], *tobi čo'o* or *čaga čo'o* (lit. 'one side'), translated as "un ojo, oreja, mano, ó asi, pares" ['an eye, ear, hand, or such like, paired (objects)'], and *tubi bela* (lit. 'one row'), translated as "par de cosas que precisamente han de ser dos para usar de ellas, como ciriales, bueyes, etc." ['a pair of objects that have to be exactly two to be used, like candlesticks, oxen, etc.']. In these examples, the classificatory nouns *lo'oča* 'stick', *čo'o* 'side', and *bela* 'row' are used anaphorically for the corresponding categories of objects. Counting with the help of classifier-like elements is attested in modern Zapotec languages as well. For example, in SLQZ (V) we find *tyo'p ndahg gù'a'nn* (lit. 'two leaf bull') 'two bulls' (Munro 2002:61–62). In Quiegolani (S) *ga'ay mil za'a* (lit. 'five thousand 3s m', i.e., 'five thousand men'), the third-person pronoun *za'a* is used anaphorically with a numeral (Black 1994:53).

In light of these data, it appears that the process of creating third-person pronouns out of nouns with generic meaning rests on their use with a classifier-like function in compounds and their anaphoric use in counting. The deletion of head nouns in numeral classifier constructions and the development of third-person pronouns out of the anaphorically used classifiers are typologically common processes (Greenberg 1977:278, Aikhenvald 2000:252, and Givón, p.c.). In the Mesoamerican area, third-person pronouns of similar origin exist in several Mayan languages; within Otomanguean, such pronouns are attested, for example, in Chatino and Mixtec (see Craig 1986; 1990, Kaufman 1990:94–95, Campbell, Kaufman, and Smith Stark 1986:550, and Hills 1990:210). Moreover, in Mixtecan languages, whose systems of third-person pronouns are typologically close to those of Zapotec, pronouns can and do function synchronically as classifiers (see, e.g., Farris 1992:98–99 for examples from Yosondúa Mixtec).

## 8. The system of third-person pronouns includes the following forms.

**8.1. Third-person singular \**yu*.** The pronoun reconstructed as 3s m \**yu* by Kaufman (1994:59) and 3s resp \**ye* by Munro (2000:10) is common



to Zapotec and Chatino. The supporting forms for these reconstructions occur in all branches of Zapotec (except, possibly, the Southern) and include Xaltianguis *la=ye/=ye* 'rev' (N), Macuilgiantuis *=ye* 'resp' (N), SA del Valle *=i* 'ordinary' (V), SL Texmelucan *y(u)* 'm' (P), SM Zaniza *=y(a)* 'm' (P), SM Lachixío *li'=i/=i* 'm' (Sol). In Papabuco, this form is also used as a relativizer. The corresponding Chatino forms include Angulo's *yu kwa/=yu*, Tataltepec and Zenzontepec *yu*. The second element of Angulo's form is a demonstrative (cf. Tataltepec *kwa* 'this, that') that may have its exact correspondence in the third-person pronoun *k<sup>w</sup>e* attested in Zapotec writing (Kaufman, p.c.), in the second element of such Zapotec pronouns as SP Coatlán 3m *sa-ba* and SP Coatlán 3inan *ta-ba*, and possibly in nineteenth-century Soteco 3s *le-kwi*. Córdova's and Reyes's 3s *ni-ke*, although not etymologically related, provide an exact morphological parallel (*ke* in Córdova's Zapotec means 'that') (1578a:106).

**8.2. Third singular \*ne.** Reflexes of the pronoun reconstructed by Kaufman as *\*ne* 'sacred, deity, respect' (1994:59)<sup>11</sup> include Choapan, Zoogocho, and Yatzachi El Bajo *=ne* 'resp' (N), Atepec *=ne* 'resp' (Obj) (N), Yalálag *=ne* 'h' (N), Reyes's *ni-ke/=ni* (N), Córdova's *ni-ke/=ni* (V), SLQZ *làa'=ni'/=ni'*, *làa'=iny/=iny* 'rev' (V), Chichicapan *la'=ny:* (isolated), *la'a=nye* (preverbal Sub), *la'=ny:* (Obj)/=*ny:* 'sacred' (V), Guelavía *la'a=ny/=ny* 'hon' (V), SP Güilá *la:=ni'/=ni'* 'sacred' (V), Tlacolula *=ni* 'adult h/inan' (V), Mitla *la=ni/=ni* 'sacred' (V), Quiépolani *=ne* 'deity/baby' (S), SL Texmelucan *=ñi* 'f/inan' (P), and SM Zaniza *=ny* 'f/inan' (P). In Tlacolula, SL Texmelucan, and SM Zaniza, reflexes of this pronoun seem to have fallen together with those of 3s inan *\*ni* (see 8.9), which would explain their syncretism of meaning. This merger may have occurred already by the second half of the sixteenth century, which might help explain the single pronominal form for animates and inanimates in Pedro Feria's 1567 *Doctrina christiana*,<sup>12</sup> Córdova's Zapotec, Reyes's Northern and Valley languages, and the Zapotec legal documents from the sixteenth, seventeenth, and eighteenth centuries examined by the UCLA Zapotexts group (Munro 2000:8–9; 2002:58–61).

<sup>11</sup> Munro (2000:10) conflates two of Kaufman's reconstructions, *\*ne* 'sacred, deity, respect' and *\*ni* 'thing, animal', into *\*ni* 'reverential/baby/inanimate' (see 8.9).

<sup>12</sup> In the short fragment of Pedro Feria's *Doctrina christiana en lengua çapoteca*, reproduced in Canfield (1934), for example, the pronoun *=ni* is used both with reference to God (*ši-tiča=ni* 'his command') and with reference to animals (*mani tetago=dono ši-bela=ni* 'animals whose flesh we eat') (1934:107; segmentation is mine). However, as one of the *IJAL* reviewers pointed out, these two pronouns could have been distinguished by their tone or phonation type, and their similarity, due to the inadequate orthography used for Zapotec in these early documents, may be only apparent.

**8.3. Third singular/relativizer \**nu*.** A number of pronouns in modern Zapotec languages are not accounted for by the proto-form \**ne*. Such forms include Rincón (N) =*nu* ‘f resp’, SM Lachixío (P) *li’i=no/=no* ‘infant/endeared elder’, one of the two pronouns which are synonymous in SLQZ (V) (*làa’=ni’/=ni’*, *làa’=iny/=iny*), one of the two similar-looking but semantically distinct pronouns in SP Güilá (*ni:*’ used for ‘persons, animals and things which are not present’ or *ni*’ that refers to deceased people and is used as a coreferential pronoun) (Smith Stark, p.c.), and, possibly, Mitla 3fam/inan *la=ni/=ni* (Briggs 1961:78–79). In order to account for these and similar forms, I reconstruct a PZ third-person pronoun \**nu*. This pronoun may, in addition, be the source of a common Zapotec relativizer (*ni* in Cordova’s Zapotec, Mitla, Juchitán, and SM Zaniza, *no* in Zoogocho, *nu* in SL Texmelucan and Atepec). The double outcome of \**nu*, as a personal pronoun and relativizer, is paralleled by the synchronic functioning of the reflexes of 3s \**yu* in Papabuco, where they are used as both third-person pronouns and relativizers (see 8.1). PZ pronoun \**nu* is matched by such Chatino forms as Angulo’s and McKaughan’s *nu-kwa*; in at least one Chatino dialect this form is also used as a relativizer (Pride and Pride 1970:94).

**8.4. Proto-Zapotec \*(*l*)*le*?*a*.** Solteco, Northern, and Central Zapotec possess a pronominal element reconstructed by Fernández de Miranda (1995:165) as \**lle*?/\**la*? ‘he’ and by Kaufman (1994:55) as \**le*?*a* ‘third-person pronoun base’. The uncertainty in Fernández de Miranda’s reconstruction of the lateral is due to the fact that it can be reflected as either fortis or lenis even within the same dialectal group (see 5.4 on a similar problem in the reconstruction of Northern-Central-Southern \*(*t*)*tu*(?)). This element seems to function as a third-person pronoun in the North: cf. Atepec *le/=e* ‘resp’, Zoogocho *lle’/=e’*, =*de*’ ‘resp’, Yalálag =*le’*, =*e’* ‘resp’, and Yatza-chi El Bajo *lle’/=e’* ‘resp’; and possibly also in Juchitán (I) (*la’a*) (though the Juchitán form is analyzed differently in Marlett and Pickett 1996). In the clitic position, this pronoun seems to have lost the initial consonant in most Northern languages (compare, e.g., clitics =*le’* and =*e’* in Yalálag). The clitic form =*de’* in Zoogocho is an analogical formation built under the paradigmatic pressure of the first- and second-person forms, i.e., 1s =*a’*, =*da’* and 2s =*o’*, =*do’* (hence, 3s =*e’*, =*de’*) (cf. 3.5).

In addition to their possible use as third-person pronouns in the North and Juchitán, reflexes of \*(*l*)*le*?*a* function as an obligatory part of free pronouns in Solteco, Northern, and Central Zapotec (Marlett 1993:84; also see table 6 and Appendix C). The three branches differ in the degree of the extension of this element throughout the paradigm. In Colonial grammars, it is recorded only with the Valley 2p; the same is true of Guevea de Humboldt Zapotec, which is a Southern language that appears to have moved into the Isthmus area and acquired certain Central characteristics relatively

recently. In Northern Zapotec, this morpheme serves as a phonological host only in the third-person pronouns. In the Central languages such as Mitla, SP Güilá, Guelavía and SLQZ, its use comprises 3s, 3p, and 2p forms. In Chichicapan (V) and Juchitán (I) it also includes the 1p forms, while in Solteco (in particular, SM Lachixío) it forms part of every single free pronominal form. Reflexes of *\*(l)le?a* are also attested in Southern Zapotec, where they function as focus/discourse markers (Beam de Azcona 2002:14, Black 1994, and Piper 1994). The existence of this morpheme in Southern Zapotec confirms its Proto-Zapotec age, but its functioning there exclusively as a marker of focus or definiteness indicates that its association with the system of personal pronouns is a post-PZ innovation specifically associated with the Solteco-Northern-Central group.

**8.5. Proto-Zapotec *\*ma(ni)* and *\*pi*.** These pronouns for 3anim and 3h, respectively, have influenced each other to such an extent that it is convenient to discuss them together. The first is probably derived from the noun meaning ‘animal’: cf. Kaufman (1994:59) *\*mma(n)* < *\*mman(i)?* (Munro’s 2000:10 reconstruction is *\*ma*). The second pronoun has been reconstructed by Kaufman (1994:59) as 3m *\*pi* and by Munro (2000:10) as *\*b*[back vowel] ‘3 formal’. Both pronouns are attested in all branches of Zapotec except SM Lachixío (Solteco), which has these semantic distinctions but seems to have replaced the forms themselves.

The mutual influence of the two pronouns shows in the quality of the initial labial. With respect to this feature, Zapotec languages fall into three groups. Central languages preserve the nasal quality of the initial consonant in the 3anim pronoun and the oral quality in the 3h pronoun. The 3anim forms in the Central area include SLQZ *làa’=mm/=imm* (V), Guelavía *la’a=m/=m(i)* (V), SP Güilá *la:=ma/=ma* (V), SM Tlapazola *=imm* (V), Tlacolula *imm, =ma* (V), SA del Valle *=mu* (V), San Dionicio *=am* (V), and Juchitán *la’a=me/=me* (I). The 3h forms include SLQZ *làa’=b/=ib* ‘formal’ (V), Guelavía *=b(i)* ‘fam’ (V), SP Güilá *la:=ba/=ba* ‘resp’ (V), SM Tlapazola *=ib* ‘adult human’ (V), Tlacolula *=b(a)* ‘adult human’ (V), SA del Valle *=bu* ‘resp’ (V), San Dionicio *=ab* ‘resp’ (V), Chichicapan *la’=ba/=ba* ‘resp’ (V), Guelavía *la’a=b/=b* ‘fam’ (V), Juchitán *la’a, la’a=be/=be* ‘h’ (I).

In non-Central languages, the initial consonant of one of the pronouns influenced the other to the point of replacing it. In the North, the oral quality of the labial prevailed. Consequently, 3anim pronouns in the Northern area are as follows: Macuiltianguis *=ba*, Yatzachi El Bajo *le=b/=(e)b*, Zoogocho *le=ba’/=ba’*, Yalálag *le=ba’/=ba’* ‘informal’, Xaltianguis *la=ba/=ba*, Rincón *-ba’*, and Choapan *=ba’*. 3h pronouns have expected outcomes and include Yalálag *le=be’/=be’* ‘informal’, Yatzachi El Bajo *=bo’* ‘fam’, Zoogocho *le-be’/=be’* ‘fam’, and Choapan *le=bi’/=bi’* ‘fam’. In Southern Zapotec and Papabuco, the nasal labial prevailed in both pronouns. 3anim

TABLE 5

	Third-Person Human Pronoun	Third-Person Animal Pronoun
Central Zapotec	<i>b-</i>	<i>m-</i>
Northern Zapotec	<i>b-</i>	<i>b-</i>
Southern Zapotec/Papabuco	<i>m-</i>	<i>m-</i>

pronouns in these languages include Quiegolani *ma'a* (S), Xanaguía =*ma* (S), SB Loxicha/Guevea de Humboldt =*ma*' (S), SL Texmelucan =*ma* (P), SM Zaniza =*m(a)* (P); and 3h pronouns include Quiegolani =*me* 'resp', *men* 'general' (S), Xanaguía =*ma* 'impersonal', *men* 'h' (S), SB Loxicha =*m(e)* 'resp' (S), Guevea de Humboldt =*m(e)* 'h', =*mu* 'one' (S), SL Texmelucan =*m(i)* 'resp' (P), SM Zaniza *mi-re*=*m* 'resp' (P). The forms that end in a nasal, such as Quiegolani and Xanaguía *men*, may continue PZ *\*p+enne?* (Kaufman 1994:12), whose lexical outcomes, including Córdova's *beni*, Mitla *bejnn*, and SLQZ *bùnny*, generally mean 'person' or 'people'.

The fact that the only documented combinations of the two pronouns in any single language are as shown in table 5 argues for the correctness of an analysis of the 3h and 3anim pronouns in terms of only two original forms and their subsequent mutual influence. As can be observed in table 5, there appear to be no languages that would have, at the same time, an *m*-initial 3h and a *b*-initial 3anim pronoun. If such a combination occurred, it would have been necessary to look for additional sources of the *m*-initial 3h and *b*-initial 3anim forms. The fact that there exists a special closeness between the 3anim and the default 3h pronouns in Zapotec is apparent also from the SM Lachixío paradigm: even though this language has a different source for these pronouns, they are synchronically very close (*li'*=*i* with low tone is 3m, with high tone 3anim). In SM Zaniza (P), as a result of final-vowel loss, the clitic pronouns for 3h resp and 3anim have merged completely (=m). Mutual influence of the third-person animal and the default human pronouns may be the result of the synchronic use of the 'animal' pronoun to refer to various categories of humans in certain speech registers (cf. SLQZ data in Munro 2002:43).

**8.6. Proto-Zapotec *\*p+i?i* 'child'.** The use of PZ noun *\*p+i?i* 'child' (Kaufman 1994:15) as a pronoun referring to children is a late Northern-Valley isogloss.<sup>13</sup> In some languages (e.g., in Macuiltianguis and Tlacolula) it extended its function to include familiar reference to adults, while in some others (e.g., in Atepec, Rincón, and Chichicapan) the familiar designation of

<sup>13</sup> Munro's reconstruction of this pronoun is *\*b*[front vowel] 'familiar/child' (2000:10). Lexical reflexes of this proto-form include Zoogocho *bi'* and Yatzachi El Bajo *bi'i* 'child'.

adults has become its primary function. The pronouns in question include Atepec *la=bi/=bi* 'fam' (N), Macuiltianguis *=bi* 'child/fam' (N), Zoogocho *=bi* 'baby' (N), Rincón *bi* 'fam' (N), Guelavía *la'a=by/=by* 'child' (V) SP Güilá *la: '=bi/=bi* 'fam' (V), SM Tlapazola *=by* 'child' (V), Tlacolula *=bi, =by* 'child/fam' (V), SA del Valle/San Dionicio *=bi* 'ordinary human' (V), and Chichicapan *la'bi/=bi* 'fam' (V).

**8.7. A South-Valley form.** A few Southern and Valley languages share the following third-person pronouns that appear to be cognate: *la=ang/=ang* 'h' (Teotitlán, V), *la'=anng/=ing* 'proximate' (SLQZ, V), *nang dö* '3h' (Laachila, S). Angulo and Freeland (1935:16) derive this pronoun from the word 'male' (*ngiu* in Teotitlán), but deriving it from a demonstrative is also possible: cf. Juchitán *nga* 'that one' (< *ni ka* 'it there'), SM Lachixío (*ni)nke* 'this (thing)', Zoogocho *nga* 'this', and similar forms in other languages cited in Angulo and Freeland (1935:12). The proximate clitic *=ag* in SLQZ (Munro and Lopez 1999:22) appears to be related.

**8.8. Additional South-Valley forms.** Several Valley and Southern languages, as well as SM Lachixío (Sol), share the following forms that appear to be related: SLQZ *làa' =ž/=ahž* 'resp' (V), Guelavía *la'a =ž/ž'i* 'male to male' (V), San Dionicio *=ž'a* 'male to male' (V), SP Güilá *la: '=š'a' =š'a* 'fam' (V), Mitla *la =ž'i/=ž'i* 'h'/male speech (V), Xanaguía *š(o)* 'resp' (S), SB Loxicha *š(aʔ)* 'stranger' (S), SM Coatlán *šša* 'specific' (S), and SM Lachixío *li'i =ž'a/=ž'a* 'resp' (Sol). In the South, sibilant-initial forms are also attested: cf. Quiegolani 3m *zaa* and SP Coatlán 3m *sa-ba*. The first of these forms may have to do with the noun meaning 'person': cf. SM Coatlán *šša* 'person' versus third-person specific pronoun *šša*. Kaufman (1994:59) reconstructs this pronoun as 3f *\*(š)še* and Munro (2000:10) as *\*Sa* (*S* is unspecified sibilant) 'male//respectful'. Quiegolani and SP Coatlán sibilant-initial pronouns either have a nominal origin or are derived from a demonstrative: cf. in particular SM Coatlán *ssa-pa* 'this' versus SP Coatlán 3m *sa-ba*.

**8.9. Third-person singular \*ni.** Reflexes of third-person inanimate pronoun *\*ni* (originally, in all possibility, a noun meaning 'thing') (Kaufman 1994:59; Munro 2000:10 'reverential/baby/inanimate') are attested in all languages except the Southern and SM Lachixío (Sol): cf. Atepec *lā/=ā, =na* 'animals, things, people' (N), Yatzachi El Bajo *le=n/(e)n* 'cosa o persona despreciada' ['a worthless thing or person'] (N), Zoogocho *le=n/(e)n* 'inan' (N), Yalálag *le=n/=n* 'inan' (N), Xaltianguis *la=na/=na* (N) (cf. *na* 'thing'; Angulo and Freeland 1935:2), Ixtlan *te na* lit. 'one thing' (N), Córdova's *ni* (V), Chichicapan *la' =an/=η* (V), SLQZ *nii* (V), Guelavía *=ni* 'inan' (V), SP Güilá *la: =ni/=ni* 'inan' (V), Tlacolula *=ni* 'adult human/inan' (V), SA del Valle *=ni* 'inan' (V), San Dionicio *=any* 'inan' (V), Mitla *ni* (V), Juchitán *la'a =ni/=ni* (I), SL Texmelucan *=ny(i)* 'f/inan' (P),

SM Zaniza =*ny* ‘f/inan’ (P). In some languages—in Tlacolula, possibly Mitla, Córdoba’s Zapotec, SL Texmelucan, and SM Zaniza—reflexes of the 3<sup>in</sup>an pronoun *\*ni* appear to have fallen together with those of *\*ne* or *\*nu* (discussed in 8.2 and 8.3). The homophony of the outcomes of *\*ni*, *\*ne*, and *\*nu* may have been one of the reasons for replacing the reflexes of *\*ne* or *\*nu* with forms derived from *\*pi* for default 3<sup>h</sup> in most languages, and the reflexes of *\*ni* with various nouns meaning ‘object, thing’ for 3<sup>in</sup>an reference in the South, SM Lachixío, and certain Valley languages. Based on the choice of the noun ‘thing’ in the function of these late 3<sup>in</sup>an pronouns, four groups of languages may be distinguished: (1) Teotitlán *la=ing/=ing* (from *kwing* ‘thing’) (V), Guelavía *ngui* (V), Lagueche *kwan-ba* (S); (2) Guevea de Humboldt =*u*, =*w* (S), Quiegolani *w(e)*, *o* (S), Xanagúa *o* (S); (3) SB Loxicha *ta?* (*taʔn* ‘thing’) (S), SP Coatlán *ta-ba* (S); and (4) Cuixtla =*i* (S), SM Lachixío *li’=i/=i* (Sol) (regarding the last set, see remarks in Angulo and Freeland 1935:12, 21).

**8.10. Summary.** PZ third-person forms are summarized in table 6.

**9. Pluralization in third-person pronouns.** Pluralization is optional with third-person pronouns, and in most contexts third-person singular pronouns can be used for both single and plural reference. Overt indication of plurality in third-person pronouns has been studied by Marlett and Pickett (1985). Plural markers encountered in the languages used for the present study and their areal distribution coincide, with minor differences, with those outlined in Marlett and Pickett (1985) and can be summarized in a few words. Northern and Isthmus languages use two plural morphemes: (1) Yatzachi El Bajo *ga’ak* (N), Yalálag/Rincón *gaka* (N), Zoogocho *gak* (N), Guevea de Humboldt *yahk* (although technically this is a Southern language, it is located in the Isthmus and patterns in this respect with the Northern-Isthmus group), and (2) Xaltianguis/Atepec/Lachatao/Ixtepexi/Macuiltianguis/Laxopa/Cajonos *ka* (N), Juchitán *ka* (I). Southern and Valley languages likewise use two plural morphemes: (1) Chichicapan *ra* (V), SLQZ *ar* (V), Lagueche *re* (S), Zaachila *ra* (S), and (2) Guelavía *de* (V), Teotitlán *de* (V), SM Coatlán *te* (S). At least two Papabuco languages also use the latter form (SL Texmelucan/Recibimiento de Cuauhtémoc *de*) (see 5.4 on the connection between this plural marker and the Northern-Central-Southern pronominal morpheme *\*(t)tu(?)*). Other Papabuco languages share the pronominal plural marker with Solteco: cf. SM Zaniza/SJ Elotepec *bi* (P), SM Lachixío *be* (Sol) (see also 5.6).

## 10. Personal pronouns in Zapotec and Zapotecan.

**10.1. Zapotec.** Based on the data and reconstructions discussed in 2–8, the pronominal system of PZ appears to have been as follows:

TABLE 6

Proto-Form	Northern Zapotec	Central Zapotec	Solteco	Southern Zapotec	Papabuco
PZ 3s/rel * <i>yu</i>	Macuilianguis 3resp = <i>ye</i>	SA del Valle 3h = ' <i>i</i>	SM Lachixío 3m = <i>i</i>	—	SL Texmelucan 3m/rel y(u)
PZ 3s/rel * <i>nu</i>	Zoogocho rel <i>no</i>	Mitla rel <i>ni</i> 3fam/inan = <i>ni</i>	SM Lachixío rel <i>no</i> 3infant = <i>no</i>	Quiegolani rel <i>ne</i>	SM Zaniza rel <i>ni</i>
PZ 3s sacred * <i>ne</i>	Choapan 3resp = <i>ne</i> '	Mitla 3sacred = <i>ni</i>	—	Quiegolani 3deity/baby = <i>ne</i>	—
PZ 3s h * <i>pi</i>	Yalálag 3sinformal = <i>be</i> '	SP Güilá 3resp = <i>ba</i>	—	Quiegolani 3resp = <i>me</i>	SM Zaniza 3resp = <i>m</i>
PZ 3s animal * <i>ma(ni)</i>	Yalálag = <i>ba</i> '	SP Güilá = <i>ma</i>	—	Quiegolani <i>ma'a</i>	SM Zaniza = <i>m</i>
PZ 3s inan * <i>ni</i>	Zoogocho =( <i>e</i> ) <i>n</i>	Guelavía = <i>ni</i>	—	—	SM Zaniza 3f/inan = <i>ny</i>
PZ focus marker *( <i>l</i> ) <i>le'a</i>	Atepec focus marker <i>la</i>	SLQZ focus marker <i>làa'a</i> '	No information	Quiegolani focus marker <i>le</i>	—
Post-PZ pron. host *( <i>l</i> ) <i>le'a</i>	Zoogocho phon. host <i>lle</i> =	SLQZ phon. host <i>làa'</i> =	SM Lachixío phon. host <i>li'i</i> =	—	—

1s	* <i>na</i> ?	1p incl	* <i>na</i>
		1p excl	* <i>tyi'u</i> , * <i>ya</i>
2s	* <i>lu</i> ?(- <i>i</i> ), * <i>nu</i> ?	2p	* <i>wa</i>
3s/relativizer	* <i>yu</i>		
3s/relativizer	* <i>nu</i>		
3s sacred	* <i>ne</i>		
3s inan	* <i>ni</i>		
3s h	* <i>pi</i>		
3s anim	* <i>ma(ni)</i>		

The pattern of subsequent major changes and innovations in the pronominal systems of different branches of Zapotec allows us to interpret the development of PZ into modern language groups as shown in figure 1. As

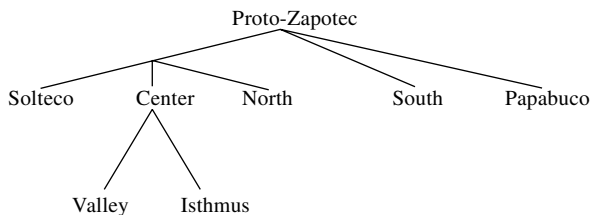


FIG. 1

shown in this diagram, PZ first appears to have split into three branches: Solteco-Northern-Central, Southern, and Papabuco. The Solteco-Northern-Central group is defined against the other two by (a) its split of personal pronouns into structurally distinct free and bound forms, (b) the use of the focus/definiteness marker *\*(l)le?a* as a phonological prop for the free forms, and (c) the development of the 1s clitic of the shape *\*=a(?)*. Solteco seems to have separated from the Northern-Central group very early, as it had time to replace most of PZ third-person pronouns of nominal origin (e.g., *\*ni* and *\*ma[ni]*) with different forms. Southern Zapotec and Papabuco fail to form a common node, since they lack common innovations in the pronominal system.<sup>14</sup> After its separation, Papabuco appears to have evolved in isolation from the rest of Zapotec as it does not participate in any of the later innovations of the other branches (with the possible exception of the phenomenon discussed in 8.5, where the development in Papabuco is equivalent to that of Southern Zapotec). Southern Zapotec, on the other hand, appears to have been in close areal contact with Northern and Central branches after their separation from Solteco, since all three groups have developed the pronominal use of *\*(t)tu(?)*. Later, probably due to the intermediate geographical position of Central Zapotec between the Northern and Southern branches, it developed common innovations with each of them separately. The most important of these late isoglosses are the 1p form *\*nu* that the Central group shares with Southern Zapotec and the pronominal use of PZ *\*bi?i* ‘child’ that it shares with the Northern branch. The structure of the second-person polite pronouns, which consist of an emphatic base followed by the pronominal clitic, is also a shared feature of the Central and Northern groups, even though the emphatic bases are not etymologically equivalent. Solteco may have shared some of its late innovations in the third-person forms with the Southern group; moreover, its 1p incl is a fusion of 1s and 2p, just as, for example, in the Southern language SB Loxicha (see 5.6).

<sup>14</sup> Thus, the scheme proposed here differs in details both from Kaufman’s (as reported in Sicoli 1999:xi) and Smith Stark’s (1999a).



**10.2. Zapotecan.** By comparing (below) the PZ and PCh systems of personal pronouns, it is possible to arrive at the following tentative reconstruction of the PZn system:

Proto-Chatino			Proto-Zapotecan		
1s	* <i>nã</i> ?	1p incl	* <i>nã</i>	1s	* <i>nã</i> ?
		1p excl	* <i>ya</i>		1p incl
					* <i>nã</i>
2s	* <i>nũ</i> ?( <i>-i</i> )	2p	* <i>wã</i>	2s	* <i>lũ</i> ?
3s	* <i>yu</i>			2p	* <i>wã</i>
3s	* <i>nu</i>			3s	* <i>yu</i>
				3s	* <i>nu</i>

On the whole, Chatino is more conservative and better preserves the more vulnerable parts of the PZn system, namely, the first- and second-person plural forms. Some of the more conservative Zapotec languages also preserve PZn 1p (Papabuco) and 2p (Southern Zapotec and Solteco). The major areas of innovation in the pronominal system of Zapotecan as a whole are thus first- and second-person plural (in Zapotec) and third-person forms (in both Zapotec and Chatino).<sup>15</sup>

**11. Conclusion.** The historical study of Zapotec and Zapotecan personal pronouns seems to corroborate Smith Stark's (1999*a*) conclusion that Western Oaxaca should be regarded as the original homeland of the Zapotecs. However, more historical work on different facets of Zapotec historical phonology and morphosyntax is needed before linguistic findings can be applied to historical research.

## APPENDIX A

Pronominal paradigms used in this study come from a variety of sources that differ greatly in their completeness, accuracy, and orthography. The following publications have been used:

### Northern Zapotec

Reyes (1700), Atepec (Nellis and Goodner de Nellis 1983), Zoogocho (Long and Cruz 1999), Yatzachi El Bajo (Leal and Leal 1954 and Butler 1976*a*; 1976*b*; 1980), Rincón (Pickett 1990), Yalálag (Marlett 1993 and Heriberto Avelino, p.c.), Laxopa, Cajonos, Lachatao, Itepxi, Xaltianguis, Macuilianguis (Angulo 1926), Xaltianguis, Ixtlán (Angulo and Freeland 1935), SP Macuilianguis (Munro 2000: third-person clitics only), Choapan (Lyman 1964 and Radetzky 1999: partial paradigms).

<sup>15</sup> Chatino, like Zapotec, developed most of its third-person pronouns out of nouns. For example, Tataltepec Chatino has 3f *čo*' alongside *čo*' 'woman', 3p *ngu*' beside *ngu*' 'people', and 3anim *ni*' (cf. *na'ni* 'animal').

### Central Zapotec

(a) Valley: Córdoba's Zapotec (Córdoba 1578*a*; 1578*b*), Reyes (1700), Anonymous (1823), Chichicapan (Smith Stark 1999*b*), Mitla (Briggs 1961 and Stubblefield and Miller de Stubblefield 1991), Guelavía (Jones and Church 1985), SLQZ (Munro and López 1999), Teotitlán (Angulo 1926 and Angulo and Freeland 1935), Huixtepec (Angulo 1926), SM Tlapazola, Tlacolula, SA del Valle, San Dionicio (Munro 2000: third-person clitics only), SP Güilá (López Cruz 1997).

(b) Isthmus: Juchitán (Pickett et al. 1979; Pickett 1990; Pickett, Black, and Cerqueda 1998).

### Southern Zapotec

SM Coatlán (Robinson 1963), Quiegolani (Black 1994), SB Loxicha (Beam de Azcona 2000), Xanaguía (Marlett 1993), Lagueche (Angulo 1926 and Angulo and Freeland 1935), SP Coatlán, SP Mixtepec, SL Mixtepec, Laachila (Angulo 1926), Cuixtla (Angulo and Freeland 1935), Guevea de Humboldt (Marks 1980).

### Papabuco

SL Texmelucan (Speck 1978), SM Zaniza (author's field notes), Río Espejo, Recibimiento de Cuauhtemoc (Rendón 1971), SJ Elotepec (Peñañiel, n.d. and Belmar 1901).

### Solteco

SM Lachixío (Mark Sicoli, p.c.), late nineteenth-century form of Solteco (Smith Stark 1999*a*).

### Chatino

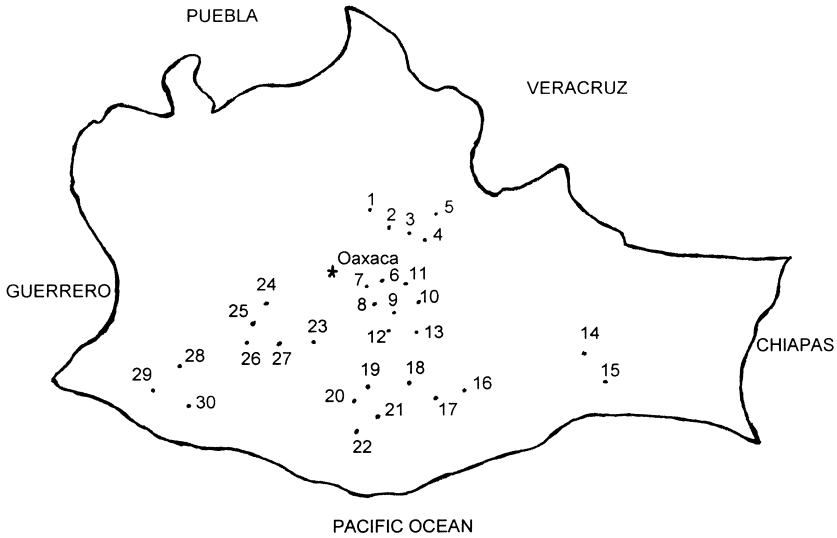
Descriptive materials on Chatino dialects are few in number and uneven in quality. Often the particular dialect from which the data are quoted is not identified in the source. In such cases, the data are cited under the name of the author. The following publications have been used: Boas (1913), Angulo (1926), McKaughan and McKaughan (1951), Upson (1960) (Yaitepec), Price (1965) (Yaitepec), Pride and Pride (1970) (Tataltepec), Pride and Pride (1997) (Zona Alta), and Carleton and Waksler (2000) (Zenzontepec).

## APPENDIX B

The map in figure 2 shows the approximate locations of Zapotec languages and dialects of Chatino.

## APPENDIX C

The development of personal pronouns in Zapotec is illustrated in table 7.



ZAPOTEC

- 1. Atepec
- 2. Zoogocho
- 3. Yatzachi El Bajo
- 4. Yalálag
- 5. Choapan
- 6. Teotitlán
- 7. SJ Guelavía
- 8. San Marcos Tlapazola
- 9. San Lucas Quiavini
- 10. Mitla

11. Santa Ana del Valle

- 12. SP Güilá
- 13. San Dionicio
- 14. Guevea de Humboldt
- 15. Juchitán
- 16. Quiegolani
- 17. SP Mixtepec
- 18. SL Mixtepec
- 19. Cuixtla
- 20. SP Coatlán
- 21. SM Coatlán

22. SB Loxicha

- 23. SM Lachixío
  - 24. SJ Elotepec
  - 25. Recibimiento de Cuauhtemoc
  - 26. SM Zaniza
  - 27. SL Texmelucan
- CHATINO
- 28. Zenzontepec
  - 29. Tataltepec
  - 30. Yaitepec

FIG. 2

TABLE 7

Proto-Form	Northern Zapotec	Central Zapotec	Solteco	Southern Zapotec	Papabuco
PZ 1s * <i>na</i> ʔ	Zoogocho <i>ne-da</i> ʔ	Guelavía <i>na-re</i>	—	SB Loxicha <i>n(a)</i>	SM Zaniza <i>=ā</i>
Post-PZ 1s * <i>=a</i> (ʔ)	Zoogocho <i>=a</i> ʔ	Guelavía <i>=a</i>	SM Lachixío <i>li=a'a/a</i>	—	—
PZ 1p incl * <i>na</i>	Zoogocho 1p excl <i>ne-to</i> ʔ	Córdova's 1p incl <i>do-na/=na</i>	—	SM Coatlán 1p incl <i>na</i>	SL Texmelucan 1p <i>de-n/=n(a)</i>
PZ 1p excl * <i>ya</i>	Atepec 1s <i>=ya</i> ʔ	Juchitán 1s <i>=ya</i> ʔ	—	—	SM Zaniza 1s <i>yā</i> 1p <i>ya=n/=ya</i>
PZ 1p excl * <i>tyiʔu</i>	Atepec 1p incl <i>ri'u/=ri'u</i>	—	SM Lachixío 1p excl <i>=ro</i>	—	SM Zaniza 2s/p <i>ru/=r</i>
PZ plural marker *( <i>t</i> ) <i>tu</i> (ʔ)	Zoogocho 1p excl <i>ne-to</i> ʔ	Córdova's 1p incl <i>do-na</i> Juchitán 1p excl <i>=du</i> 2p <i>=tu</i>	—	Quiégolani 2p <i>de</i>	SL Texmelucan plural marker <i>de</i>
Post-PZ 1p incl * <i>nu</i>	—	Chichicapan 1p <i>la'=nu'/=nu</i>	—	Xanaguía 1p incl <i>no</i> 1p excl <i>no</i> ʔ	—
PZ 2s * <i>lu</i> ʔ(-i)	Atepec <i>lu'/=lu</i> ʔ	Córdova's <i>lowi/=(l)o</i>	SM Lachixío <i>=lo</i>	SB Loxicha <i>l(o)</i>	—
PZ 2s * <i>nu</i> ʔ	Rincón <i>=nu</i> ʔ	—	—	19th-century Solteco <i>no'o</i>	—
PZ 2p * <i>wa</i>	Macuilianguis 2formal <i>=kkwa</i> ʔ	—	SM Lachixío 2p <i>=wa</i> 1p incl <i>=awa</i> (1s + 2p)	SM Coatlán 2p <i>ko</i> SB Loxicha 1p incl <i>ʔo</i> (1s+2p)	—
PZ 3s/rel * <i>yu</i>	Macuilianguis 3resp <i>=ye</i>	SA del Valle 3h <i>=i</i>	SM Lachixío 3m <i>=i</i>	—	SL Texmelucan 3m/rel <i>y(u)</i>
PZ 3s/rel * <i>nu</i>	Zoogocho rel <i>no</i>	Mitla rel <i>ni</i> 3fam/inan <i>=ni</i>	SM Lachixío rel <i>no</i> 3infant <i>=no</i>	Quiégolani rel <i>ne</i>	SM Zaniza rel <i>ni</i>

TABLE 7 — *continued*

Proto-Form	Northern Zapotec	Central Zapotec	Solteco	Southern Zapotec	Papabuco
PZ 3s sacred * <i>ne</i>	Choapan 3resp = <i>ne</i> '	Mitla 3sacred = <i>ni</i>	—	Quiegolani 3deity/baby = <i>ne</i>	—
PZ 3s h * <i>pi</i>	Yalálag 3sinformal = <i>be</i> '	SP Güilá 3resp = <i>ba</i>	—	Quiegolani 3resp = <i>me</i>	SM Zaniza 3resp = <i>m</i>
PZ 3s animal * <i>ma(ni)</i>	Yalálag = <i>ba</i> '	SP Güilá = <i>ma</i>	—	Quiegolani <i>ma'a</i>	SM Zaniza = <i>m</i>
PZ 3s inan * <i>ni</i>	Zoogocho =( <i>e</i> ) <i>n</i>	Guelavía = <i>ni</i>	—	—	SM Zaniza 3f/inan = <i>ny</i>
PZ focus marker *( <i>l</i> ) <i>le'a</i>	Atepec focus marker <i>la</i>	SLQZ focus marker <i>làa'a'</i>	No information	Quiegolani focus marker <i>le</i>	—
Post-PZ pron. host *( <i>l</i> ) <i>le'a</i>	Zoogocho phon. host <i>lle=</i>	SLQZ phon. host <i>làa'=</i>	SM Lachixío phon. host <i>li'i=</i>	—	—

## REFERENCES

- AIKHENVALD, ALEXANDRA Y. 2000. *Classifiers: A Typology of Noun Categorization Devices*. Oxford and New York: Oxford University Press.
- ANGULO, JAIME DE. 1926. The development of affixes in a group of monosyllabic languages of Oaxaca. *Language* 2:46–61, 119–33.
- ANGULO, JAIME DE, AND L. S. FREELAND. 1935. The Zapotecan linguistic group. *IJAL* 8:1–38, 111–30.
- ANONYMOUS. 1981 [1823]. *Gramática de la lengua zapoteca por un autor anónimo*. Edited by Antonio Peñafiel. México: Editorial Innovación.
- BEAM DE AZCONA, ROSEMARY G. 2000. Report on the status of Coatlán-Loxicha Zapotec, or “what I learned over winter break.” Paper presented at the conference “La Voz Indígena de Oaxaca.” Los Angeles.
- \_\_\_\_\_. 2002. Report on 2002 fieldwork on Southern Zapotec: takes from a linguistics road trip. Paper presented at the American Indian Seminar, University of California, Los Angeles.
- BELMAR, FRANCISCO. 1901. Breve noticia del idioma papabuco del pueblo de Elotepec. Oaxaca: Imprenta del Comercio.
- \_\_\_\_\_. 1902. *Investigaciones sobre la lengua chatina*. Oaxaca: Imprenta del Comercio.
- BLACK, CHERYL A. 1994. *Quiegolani Zapotec syntax*. Ph.D. dissertation, University of California, Santa Cruz. [Reprint ed., Dallas: SIL International and University of Texas at Arlington, 2000.]
- BOAS, FRANZ. 1913. Notes on the Chatino language of Mexico. *American Anthropologist* 15:78–86.

- BRIGGS, ELINOR. 1961. *Mitla Zapotec Grammar*. México: Instituto Lingüístico de Verano and Centro de Investigaciones Antropológicas de México.
- BUTLER, INEZ M. 1976a. Reflexive constructions of Yatzachi Zapotec. *IJAL* 42:331–37.
- \_\_\_\_\_. 1976b. Verb classification in Yatzachi Zapotec. *SIL-Mexico Workpapers* 2:74–84.
- \_\_\_\_\_. 1980. *Gramática zapoteca: Zapoteco de Yatzachi El Bajo*. México: Instituto Lingüístico de Verano.
- CAMPBELL, LYLE; TERRENCE KAUFMAN; AND THOMAS C. SMITH STARK. 1986. Meso-America as a linguistic area. *Language* 62:530–70.
- CANFIELD, DELOS LINCOLN. 1934. *Spanish Literature in Mexican Languages as a Source for the Study of Spanish Pronunciation*. New York: Instituto de las Españas en los Estados Unidos.
- CARLETON, TROI, AND RACHELLE WAKSLER. 2000. Pronominal markers in Zenzontepec Chatino. *IJAL* 66:381–95.
- CÓRDOVA, JUAN DE. 1987 [1578a]. *Arte del idioma zapoteco*. Facsimile edition. México: Ediciones Toledo.
- \_\_\_\_\_. 1987 [1578b]. *Vocabulario en lengua çapoteca*. Facsimile edition. México: Ediciones Toledo.
- CRAIG, COLETTE G. 1986. Jacalteco noun classifiers: a study in language and culture. *Noun Classes and Categorization*, ed. Colette Craig, pp. 263–93. Amsterdam and Philadelphia: John Benjamins.
- \_\_\_\_\_. 1990. Clasificadores nominales: una innovación Q'anjob'al. *Lecturas sobre la lingüística maya*, ed. Nora C. England and Stephen R. Elliott, pp. 253–68. La Antigua: CIRMA.
- FARRIS, EDWIN R. 1992. A syntactic sketch of Yosondúa Mixtec. *Studies in the Syntax of Mixtecan Languages*, ed. C. Henry Bradley and Barbara E. Hollenbach, vol. 4, pp. 1–171. Dallas: Summer Institute of Linguistics and University of Texas at Arlington.
- FERNÁNDEZ DE MIRANDA, MARÍA TERESA. 1995. *El protozapoteco*. México: El Colegio de México and Instituto Nacional de Antropología e Historia.
- GREENBERG, JOSEPH H. 1977. Numeral classifiers and substantival number: problems in the genesis of a linguistic type. *Linguistics at the Crossroads*, ed. Adam Makkai, Valerie Becker Makkai, and Luigi Heilmann, pp. 276–300. Padova; Liviana Editrice and Lake Bluff, Ill.: Jupiter Press.
- GRIMES, BARBARA; ET AL. 2002. *Ethnologue*. Dallas: Summer Institute of Linguistics. Available at (<http://www.sil.org/ethnologue/>).
- HILLS, ROBERT A. 1990. A syntactic sketch of Ayutla Mixtec. *Studies in the Syntax of Mixtecan Languages*, ed. C. Henry Bradley and Barbara E. Hollenbach, vol. 2, pp. 1–260. Dallas: Summer Institute of Linguistics and University of Texas at Arlington.
- JONES, TED E., AND ANN D. CHURCH. 1985. *Personal pronouns in Guelavía Zapotec*. *SIL-Mexico Workpapers* 7:1–15.
- KAUFMAN, TERRENCE. 1983. *New perspectives on comparative Otomanguean phonology*. Ms., University of Pittsburgh.
- \_\_\_\_\_. 1990. Algunos rasgos estructurales de los idiomas Mayances con referencia especial al K'iche'. *Lecturas sobre la lingüística maya*, ed. Nora C. England and Stephen R. Elliott, pp. 59–114. La Antigua, Guatemala and South Woodstock, Vt.: CIRMA.
- \_\_\_\_\_. 1994. *Proto-Zapotec reconstructions*. Ms., University of Pittsburgh.
- \_\_\_\_\_. n.d. *Phonology and morphology of Zapotec verbs*. Ms., University of Pittsburgh.
- LEAL, MARY, AND OTIS LEAL. 1954. Noun possession in Villa Alta Zapotec. *IJAL* 20:215–16.
- LEFEBVRE, CLAIRE. 1979. Quechua's loss, Spanish's gain. *Language in Society* 8:395–407.
- LONG C., REBECCA, AND SOFRONIO CRUZ M. 1999. *Diccionario zapoteco de San Bartolomé Zoogocho, Oaxaca*. México: Instituto Lingüístico de Verano.
- LÓPEZ CRUZ, AUSENCIA. 1997. *Morfología verbal del zapoteco de San Pablo Güífla*. Tesis de licenciatura, Escuela Nacional de Antropología e Historia, México, D.F.

- LYMAN, LARRY. 1964. The verb syntagmemes of Choapan Zapotec. *Linguistics* 7:16–41.
- MARKS, DONNA. 1980. Morphophonemics of the Guevea de Humboldt Zapotec verb. *SIL-Mexico Workpapers* 4:43–84.
- MARLETT, STEPHEN A. 1993. Zapotec pronoun classification. *IJAL* 59:82–101.
- MARLETT, STEPHEN A., AND VELMA B. PICKETT. 1985. Pluralization in Zapotec languages. *The Twelfth LACUS Forum 1985*, ed. Mary C. Marino and Luis A. Pérez, pp. 246–55. Lake Bluff, Ill.: LACUS.
- \_\_\_\_\_. 1996. El pronombre inaudible en el zapoteco del Istmo. III Encuentro del Lingüística en el Noroeste, ed. Zarina Estrada Fernández et al., pp. 119–50. Hermosillo, Sonora: Editorial Unison. Available at (<http://www.sil.org/mexico/zapoteca/istmo/G008-PronInaudible-ZAI.htm>).
- McKAUGHAN, HOWARD, AND BARBARA McKAUGHAN. 1951. *Diccionario de la lengua chatina*. México: Instituto Lingüístico de Verano.
- MUNRO, PAMELA. 2000. Elaboration in Valley Zapotec pronouns. Paper presented at the Conference “La Voz Indígena de Oaxaca,” Los Angeles.
- \_\_\_\_\_. 2002. Hierarchical pronouns in discourse: third-person pronouns in San Lucas Quiavini Zapotec narratives. *Southwest Journal of Linguistics* 21:37–65.
- MUNRO, PAMELA, AND FELIPE H. LOPEZ. 1999. *Di'csyonnary x:të'n dii'zh Sah Sann Lu'uc/San Lucas Quiavini Zapotec dictionary/Diccionario zapoteco de San Lucas Quiavini*. 2 vols. Los Angeles: Chicano Studies Research Center Publications.
- NELLIS, DONALD G., AND BARBARA E. HOLLENBACH. 1980. Fortis versus lenis in Cajonos Zapotec phonology. *IJAL* 46:92–105.
- NELLIS, NEIL, AND JANE GOODNER DE NELLIS. 1983. *Diccionario zapoteco de Juárez*. México: Instituto Lingüístico de Verano.
- PEÑAFIEL, ANTONIO. n.d. *Vocabulario comparativo en zapoteco de Elotepec*. Ms., Oaxaca, Mexico.
- PICKETT, VELMA. 1990. Comparación de dos ‘dialectos’ zapotecos. Homenaje a Jorge A. Suárez, ed. Beatriz Garza Cuarón and Paulette Levy, pp. 407–36. México: El Colegio de México.
- PICKETT, VELMA; CHERYL BLACK; AND VICENTE MARCIAL CERQUEDA. 1998. *Gramática popular del zapoteco del Istmo*. Juchitán, Oaxaca, México: Centro de Investigación y Desarrollo Binnizá A.C. and Tucson, Ariz.: Instituto Lingüístico de Verano.
- PICKETT, VELMA; ET AL. 1979. *Vocabulario zapoteco del Istmo*. México: Instituto Lingüístico de Verano.
- PIMENTEL, FRANCISCO. 1875. *Cuadro descriptivo y comparativo de las lenguas indígenas de México*. Vol. 2. México.
- PIPER, MICHAEL J. 1994. The functions of *lëë* in Xanica Zapotec narrative discourse with some implications for comparative Zapotec. *SIL-Mexico Workpapers* 11:67–78.
- PRIDE, KITTY. 1965. *Chatino syntax*. Mexico: Summer Institute of Linguistics.
- PRIDE, LESLIE, AND KITTY PRIDE. 1970. *Vocabulario chatino de Tataltepec*. México: Instituto Lingüístico de Verano.
- \_\_\_\_\_. 1997. *Chatino de la Zona Alta*, Oaxaca. México: El Colegio de México.
- RADEZKY, PAULA. 1999. Pronouns in Choapan Zapotec. Paper presented to the Project for the Documentation of the Languages of Mesoamerica, Catemaco, Veracruz, Mexico.
- RENDÓN, JUAN JOSÉ. 1969. Nuevos datos sobre el origen del vocabulario en lengua zapoteca del Padre Córdova. *Anales de Antropología* 6:115–29.
- \_\_\_\_\_. 1971. Relaciones externas del llamado idioma papabuco. *Anales de Antropología* 8:213–31.
- RENSCH, CALVIN R. 1989. *An Etymological Dictionary of the Chinantec Languages*. Dallas: Summer Institute of Linguistics and University of Texas at Arlington.

- REYES, GASPAR DE LOS. 1891 [1700]. *Artes de la lenguas cerrana y del valle*. 2d ed. Oaxaca: Imprenta del Estado.
- ROBINSON, DOW F. 1963. *Field notes on Coatlan Zapotec*. Hartford, Conn.: Hartford Seminary Foundation.
- SICOLI, MARK. 1999. A comparison of Spanish loanwords in two Zapotec languages: contact-induced language change in Lachixío and Juchitán. M.A. thesis, University of Pittsburgh.
- SMITH STARK, THOMAS S. 1999*a*. *El solteco y el zapoteco occidental: un aprecio a partir de los vocabularios de Peñafiel*. Paper presented at the V Congreso Nacional de Lingüística, Monterrey, Nuevo León, México.
- \_\_\_\_\_. 1999*b*. *Pronouns in Chichicapán Zapotec*. Paper presented to the Project for the Documentation of the Languages of Mesoamerica, Catemaco, Veracruz, Mexico.
- SMITH STARK, THOMAS, AND AUSENCIA LÓPEZ CRUZ. 1995. *Apuntes sobre el desarrollo histórico del zapoteco de San Pablo Güilá. Vitalidad e influencia de las lenguas indígenas en Latinoamérica*, ed. Ramón Arzápalo and Yolanda Lastra, pp. 294–343. México, D.F.: Universidad Nacional Autónoma de México.
- SMITH STARK, THOMAS, AND FERMÍN TAPIA GARCÍA. 1984. *Los tonos del amuzgo de San Pedro Amuzgos*. *Anales de Antropología* 21:199–220.
- SPECK, CHARLES H. 1978. *The phonology of Texmelucan Zapotec verb irregularity*. M.A. thesis, University of North Dakota.
- STUBBLEFIELD, MORRIS, AND CAROL MILLER DE STUBBLEFIELD. 1991. *Diccionario zapoteco de Mitla, Oaxaca*. México: Instituto Lingüístico de Verano.
- SUÁREZ, JORGE A. 1990. *La clasificación de las lenguas zapotecas. Homenaje a Jorge A. Suárez*, ed. Beatriz Garza Cuarón and Paulette Levy, pp. 41–68. México: El Colegio de México.
- SWADESH, MORRIS. 1947. *The phonemic structure of Proto-Zapotec*. *IJAL* 13:220–30.
- UPSON, JESSAMINE. 1960. *A preliminary structure of Chatino*. *Anthropological Linguistics* 2, no. 6:22–29.
- UPSON, JESSAMINE, AND ROBERT E. LONGACRE. 1965. *Proto-Chatino phonology*. *IJAL* 31:312–22.
- VEERMAN-LEICHSENRING, ANNETTE. 2000. *Popolocan independent personal pronouns: comparison and reconstruction*. *IJAL* 66:318–59.
- WHITECOTTON, JOSEPH W., AND JUDITH BRADLEY WHITECOTTON. 1993. *Vocabulario zapoteco-castellano*. Nashville, Tenn.: Vanderbilt University.