

**Intimate Linguistic Contact and Spanish: Western Nahua (Nawa) varieties of San Pedro Jícora and San Agustín Buenaventura, Durango, Mexico.<sup>1</sup>**

**Abstract**

This paper illustrates the extensive influence of Spanish on the Mexicanero language of Durango, Mexico, with comparisons with Spanish influence on other varieties of Nawa.

**Resumen**

*Este ensayo ilustra la influencia extensa del español en el idioma mexicanero de Durango, México, con comparaciones con influencia española en otras variedades del nahua.*

**1.Introduction.**

Hundreds of speakers in San Pedro Jicora (SPJ) and San Agustín Buenaventura (SBA) in the municipio of Mezquital in the southern part of the Mexican province of Durango speak forms of a variety of Western Nahua/Nawa popularly known as *Mexicanero*. All also speak Spanish; some in SBA furthermore speak Southeastern Tepehuán, which belongs to a different branch of Uto-Aztecan from Nawa. Durango Nawa has been extremely strongly influenced by Spanish over the centuries, to the extent that the typically Mesoamerican NP-NP possessive construction which is customarily found in other Nawa varieties has largely been replaced by one which incorporates the use of Spanish *de* with a Nawa article.

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Records of the language in the form of texts collected by German Americanist Konrad Theodor Preuss in the first decade of the 20<sup>th</sup> century (Ziehm 1968-76), mostly from speakers from SPJ, show that much of the influence was already in place by 1906 but further influence has taken place, including the incorporation of massive amounts of Spanish lexicon.

Drawing on a variety of sources, and illustrating several lexical and structural features I will attempt to place Mexicanero in the context of modern Nawa varieties which have been heavily hispanised. Some of these such as Pipil of El Salvador (an Eastern Nawa variety) are also highly moribund.

Section 2 presents the language in its historical context, while section 3 outlines Mexicanero data sources. The following section discusses some of the literature on Nawa-Spanish contact and section 5 gives illustrations from Mexicanero phonology and lexicon. Section 6 discusses some Mexicanero features which are attested in the Mesoamerican Sprachbund, with special reference to syntactic features regarding NP-NP possession, and Section 7 examines the use of some Spanish conjunctions in Mexicanero. Section 8 looks at Mexicanero on the Thomason-Kaufman borrowing scale (1988) and Section 9 on the effects of Spanish when compared with that found in Pipil. Conclusions are presented in Section 10.

## **2. The language and its historical context.**

Mexicanero is a Uto-Aztecan language. Uto-Aztecan languages comprise one of the most widespread language families in the Americas (Caballero 2011). There are several branches. According to the classification in Canger (1987), four of them comprise Northern (Numic, Takic, Tübatulabal, Hopi: all are confined to US, and Tübatulabal and Takic are severely endangered). Six branches constitute a Southern group: Taracahitan, Tepiman, Cahitan, Opatan, Corachol, Aztecan. These are mostly spoken in Mexico with Aztecan Pipil also used in El Salvador and some speakers of Tepiman (especially Tohono O'odham, formerly 'Papago')

and Cahitan languages (specifically Yo'eme or Yaqui) constitute language communities in the Southwestern US). Tepehuán, in which some speakers of Mexicanero in SBJ are bilingual, is a Tepiman language. Opatan is the only extinct branch in Southern Uto-Aztecan.

Aztecan comprises Pochutec of the Mexican state of Oaxaca, which is extinct and poorly attested, and Nahuatl or Nawa (which is generally if inaccurately known as 'Nahuatl', which is the name of some varieties rather than all of them; in Spanish it often also popularly called *mexicano*). According to Canger (1988), Nawa or Nahuatl comprises three branches: Western, Central, Eastern, each of which has numerous varieties. Pipil (autonym *nawat*) of El Salvador and formerly Nicaragua is a variety of Eastern Nawa, as are those of the area of La Huasteca (including parts of the province of Veracruz and San Juan Potosí); Classical Nahuatl (autonym *na:wal*) is a Central variety, as are those spoken in the states of Puebla, Guerrero, Tlaxcala and Hidalgo. Classifications which combine Western and Central Nawa as 'Western Nawa/Nahuatl' against Eastern Nawa (e.g. Romero to appear) refer to Canger's Western Nawa branch as 'Western Peripheral'.

Mexicanero is a Western Nawa language as is the Nawa of Michoacán and what remains of Nawa in the states of Jalisco, Colima and Nayarit (Sischo (1979, 2015) describes Michoacán Nawa). This area is referred to in Nawa studies as 'la perifería occidental'. In terms of speakers, Western Nawa is certainly the smallest of the three branches, and the one with the smallest amount of coverage and documentation. Guerra (1692) and Cortes y Zedeño (1765) described earlier forms of Western Nawa then used in Jalisco, in and around the city of Guadalajara, and both authors commented upon the impact which Spanish had had on Nawa's vocabulary (cf. Canger 2001: 10). Canger (1988) is the definitive classification of Nawa lects and its findings are followed here.

Mexicanero has as autonyms *Nawat* and *Meshikan*. Its popular name is *Mexicanero*. This is also its Spanish name and is used in linguistic literature. It should not be confused with

*Mexicano*. It is spoken close to Durango's border with Nayarit, where there are also some speakers. The varieties exhibit a number of differences (eg. SPJ *at*, SAB *ati* 'water') but the impact of Spanish on them is very similar and they will usually be treated here jointly. Ethnologue codes are *azd* for the variety used in SPJ, and *azn* for the form used in SAB and Nayarit. In 2016 Mexicanero varieties had around 1300 speakers, all bilingual in Spanish. Those in SAB also often know Southeastern Tepehuán. Mexicanero is largely unwritten, though a literacy project has been developed (an account is given in Castro Medina 2008).

Mexicanero shares the earlier part of its history with other Nawa varieties; in terms of contact this means that it has been influenced by Huastec (Wasteko/Teenek; a divergent Mayan language), by Mixe-Zoquean languages and by Totonac (see Kaufman 2001) and that it has moved northwest into its current territory from its earlier home in the Valley of Mexico. This is manifested in some borrowings from these languages which are found throughout Nawa. These include terms found in Mexican Spanish such as *petate* 'mat', *zacate* 'grass', both of which come from MZ via their earlier absorption into Nawa. There is some influence on Mexicanero from Cora (a Corachol Uto-Aztecan language of the neighbouring province of Nayarit, indeed the name *Nayarit* is from the Cora autonym *nááyeri*). A cultural term containing non-Nawa /r/ in Mexicanero is noteworthy: <xurawet> /ʃurawet/ 'festival' < Cora *ʃúʔráve-*, Huichol *ʃuráve-* 'star' (Kaufman 2000: 6; see also Dakin 2017).

### 3. Data sources for Mexicanero

There are two major bodies of work reflecting the Mexicanero language at the beginning and the end of the 20<sup>th</sup> century respectively. Though different in nature, these clearly reflect the

same language, with material from both SPJ and SBA in both, and the amount of diachronic change between the two ends of the century is rather small.

### 3.1 Early 20<sup>th</sup> century:

The crucial collection of earlier Mexicanero material comprises three volumes of texts collected in 1907 in SPJ by the eminent Mesoamericanist Konrad Theodor Preuss. These were edited with notes and published between 1968 and 1976 by Elsa Ziehm, a pupil of the Aztecianist Gerd Kutscher, himself Preuss' pupil. These texts comprise legends and myths (including some folktales containing plots and motifs of European origin), prayers, songs, jokes, and anecdotes, collected from ten consultants. A grammar of the language was written by Ziehm (who did fieldwork on the language in the course of three periods of work from spring 1962 to winter 1968) but her projected vocabulary never appeared in print. Evidence from pictures of Preuss' manuscript work suggests that Ziehm, trained as an ethnomusicologist set out Preuss' texts in the poetic format in which they were published. She also provided the near-phonemic spelling used in the published volumes. One consultant who worked with Preuss was from SBJ and dictated three published texts, one was from Rio Guastita and gave one text, as did a consultant from the village of San Antonio. The other eight women and men who dictated published texts (114 in all) came from SPJ. Ziehm's work on the texts is discussed in Alcocer (2005). At the time of their appearance these collections were the largest set of post-Conquest texts available for any Nawa variety. They include 518 pages of Mexicanero text and numerous supporting appendices.

### 3.2 Later sources

Later sources on Mexicanero are disparate. Among them is Lastra (1986: 254-258), part of a work on the dialects of Nawa which includes responses to a 431-item lexical and structural questionnaire, most of which is vocabulary (including much of the Swadesh list) with some conjugations and short sentences. The data were collected in Rancho Agua Fría, in the municipio of Mezquital, by Cristina Monzón in 1975, from a speaker who was then about 50 years old. Lastra and her colleagues also collected data on Western Nawa lects in Nayarit, Jalisco and Colima. A locally produced work, De la Cruz (1993), is a short dictionary (c. 500 items) of part of the non-borrowed component of the Mexicanero lexicon, with circuitous explanations in Spanish. Despite its title it does not discuss phonology.

The work by Castro Medina (2000), based on fieldwork and a close study of previous sources on Mexicanero, is a treatment of its verbal morphology. It includes a discussion of the segmental and templatic phonology of the language, an outline of other inflectional morphological classes, lists of affixes, and a version of the same questionnaire which Lastra (1986) had collected. It ends with a list of around 780 verbs with morphological information and translations (84 deriving from Spanish) into Spanish and German, with a corresponding Spanish-Nahuatl-German index of these verbs. Castro Medina (2008) describes a literacy project. Castro Medina (ed. 2012) is a collection of stories, poems and anecdotes in a puristic register of Mexicanero and Spanish assembled by native speakers from Durango and Nayarit and gloriously illustrated in colour.

Important work was done on the dialect by Una Canger. Canger (2000) is a discussion of stress placement in the dialect, while Canger (1998) had discussed the different kinds of Nawa spoken in Durango and Nayarit states and their differences. Canger (2001), a much comprehensive work, comprises the 'Archivo de Lenguas Indígenas de México' grammatical questionnaire of 594 entries (some comprising several questions or several responses to a single

question), together with a vocabulary of c. 500 words, and a short narrative text and conversation, all of which are analysed, glossed and translated into Spanish. Fieldwork for this was carried out in the space of a few days in early 1996 in SAB. Although much of the data are elicited via Spanish rather than spontaneously generated (with any provisos which this implies), there is spontaneous text too. Valiñas Coalla (1981) is a general account of Western Nawa ‘Peripheral’ varieties.

Duly assembled and integrated, these materials give a good account of much of the language. We lack a full modern grammar and a modern dictionary of any great scope; both could be elaborated from the data we have. Further fieldwork is problematic, since southern Durango (bordering on Sinaloa) is at the nexus of much of the continuing Mexican conflict with organised narcotics gangs. Additionally, the number of remaining speakers is small.

The impact of Spanish on Mexicanero is very extensive. Such Spanish morphology as has been borrowed is confined to words of Spanish origin (especially the pluralisation of Spanish nouns, including original adjectives which are used as nouns), and this seems to apply almost as much to derivational as to inflectional morphology ((the few exceptions are mentioned in section 6). Nawa nominal morphology is retained intact (this is also the case with the agglutinative Nawa verbal morphology), no Spanish inflectional morphological elements are borrowed for use with Nawa nominal or verbal stems, and Mexicanero morphophonemics retains the complexities of the morphophonemics of other Nawa varieties.

#### **4 Fabric and pattern in contact-induced linguistic change**

Contact-induced linguistic change was often seen as involving a bipartite division of transfer in language contact between fabric and pattern (Grant 2003, c.f. Heath 1984, Nau 1995). *Fabric* comprises the morphs themselves, bound or free (this category includes both lexical

morphemes or lexemes and also free grammatical morphs). The term *pattern* refers to the organisation of morphs in sequences, or the larger structures within which they participate (for instance their semantic realms). Many cases involve the interaction of transfer of pattern and fabric within the same form; the two transfer types are certainly not mutually exclusive (cf Matras and Sakel 2007). Most of the examples in this paper illustrate the transfer of fabric rather than that of pattern, though both are widespread.

#### **4.1 A summary of some modern work on Nawa-Spanish contact.**

Contact between speakers of Nawa and those of Spanish starts in 1519-1521 with the Conquest. The influence born of this contact operates in both directions. Within 50 years Fray Alonso de Molina lists some 60 loans from Spanish in the Nahuatl-Spanish part of his Classical Nahuatl (Central Nawa) dictionary (Molina 1571), out of 1339 morphemes which are listed in the material as a whole (Campbell 1985). He is not the only one to do so in a work of this nature. Indeed, in the dictionary as a whole, over 200 forms are borrowed from Spanish into Nahuatl. An important exploration of the impact of Spanish upon Classical Nahuatl, with lavish illustration of both text and lexicon, can be found in Lockhart and Karttunen (1976).

Some other among the many important studies of Nawa-Spanish contact are given below. The short study by Boas (1930) analysing Spanish content in Nawa texts collected by Franz Boas Benjamin Whorf in Milpa Alta, D.F. (Boas with Arcola 1920, Boas and Haeberlin 1924) points out that nouns and adjectives are borrowed freely, and gives examples of assimilated verbs and borrowed particles.

Bright and Thiel (1965) gives an account of the relative paucity of borrowings from Spanish, based on the data gathered in a linguistic field methods class at the University of California at Los Angeles, where Tlaxcala Nahuatl was the field language. The vocabulary gathered in that enterprise was published as Bright (1967).

Suárez (1977) is a more general article exploring the effects of Spanish on Nawa varieties (especially relating to the borrowing and absorption of Spanish particles). It draws relevant data from several Nawa varieties, including Mexicanero data from the first volume of Preuss ed. Ziehm (1968-1976); all sources in this article are identified by author and dialect.

American scholars Kenneth and Jane Hill collected extensive linguistic and sociolinguistic data on the Central Nawa variety of Malinche in La Huasteca. Studies of theirs which are relevant to this examination are Hill and Hill (1980), examining Swadesh list data in modern Nahuatl varieties, and the book-length treatment of their work, Hill and Hill (1985), again centred on Central Nawa of Malinche. A companion piece to this is Field (2001), part of which is an analysis of the hispanisms in a Malinche Nahuatl corpus of 23272 words collected by Jane and Kenneth Hill, including a list of every loanword (767 lexical forms and 46 function words) with the number of corpus occurrences, and some text samples. Campbell (1987) deals with syntactic change in the Eastern Nawa variety Pipil, which has largely been actuated as the result of contact with Spanish; the material for this very detailed account includes instances of wholesale absorption of Spanish conjunctions for use in dependent clauses. Canger (1990) discusses some morphological developments in Nawa, such as a progressive tense-aspect marker in *-ti-ka?*, which are not also found in Classical Nahuatl and which she suspects may be a calque upon Spanish progressive verbal constructions. Meanwhile Flores Farfán (2008) investigates the impact of Spanish on the Central Nawa variety spoken in Las Balsas, Guerrero, and Flores Farfán (2012) examines the different kinds of bound morphemes which are borrowed in some Central and Eastern Nawa varieties.

## **5. Spanish influence on Mexicanero**

Here we discuss tangible effects of Spanish upon Mexicanero. The concentration is on morphology and lexicon; code-mixing is extensively exemplified in the narrative and

conversation in Canger (23001: 34-58). Little morphology has been borrowed apart from some uses of the diminutive *-ito/-ita*, and a few cases of the agentive suffix *-dor*. Spanish nouns retain their Spanish plural affixes, and there are occasional instances of plural marking on Spanish adjectives (*pobres* ‘poor one’), though these could also be seen as being used as nouns, and a few Spanish nouns such as *la wida* < *la vida* ‘(the) life’ are used with Spanish definite articles. Spanish verbs are conjugated using stems which include both the Spanish *-ar/-er/-ir* and the Nawa verbal infinitive *-oa*: *pensaroa* ‘to think’. This enables them to be conjugated within the Nawa verbal system without the need to use a light verb construction.

### 5.1 Segmental and templatic phonology

Mexicanero phonology can be said to add the phonemes and templates of local Spanish (with *seseo*, for example) to those of Western Nawa (so that /t/ is used instead of the famous Classical Nahuatl /ʎ/, for instance). Nawa varieties usually have four vowels /i e a o/, all with phonemically contrasting long-short distinction. Mexicanero has /i e a o u/, all of which are available in inherited words, and there is no trace of contrastive vowel length. Earlier \*o may become /u/ while \*o: remains /o/ for some speakers in the sources, though Preuss’ texts tend to have /u/ here. At least in Una Canger’s records of SBA, though, stressed /o/ is realised as [o] (Canger 2001 *passim*).

Mexicanero also borrows a distinction between voiced and voiceless stops, the former being exclusive to Spanish loans, in addition to acquiring /r rr f/ from Spanish loans (though as we have seen, /r/ occurs in some forms which cannot be traced to Spanish). Nahuatl uses /l/ but did not permit it onset-initially until the language absorbed Spanish loans. Spanish loans in Mexicanero also permit branching syllabic onsets: *blangko* ‘white’. This feature is not found in forms of Nawa origin.

The selection of consonants which can occur in coda position is as in other varieties of Nawa in the case of SPJ (so that voiceless plosives can occur at coda position), although in verbs Canger's 2001 data from SBA suggests that original /-k/ became /-h/. Indeed SBA coda consonants are those found in Mexican Spanish, including the /-h/ which is the local reflex of Spanish /-s/. Paragogic vowels are used in SBA but not in SPJ on coda consonants not used in Spanish, thus SBA has *ati* (Canger 2001: 166) as the citation form for SPJ *at*, Classical Nahuatl *aλ* 'water'. The paragogic vowel cannot be attributed to influence from Southeastern Tepehuán as this permits a wide range of consonants in coda position (Willett and Willet 2013).

## 5.2 Lexicon

No comprehensive dictionary of Mexicanero exists, let alone one listing words from Spanish which occur throughout the materials, but we have records of well over 1000 lexical items attested for modern Mexicanero (more than 10% of these derive from Spanish) in the works by Canger and Castro Medina alone.

Elsa Ziehm's vocabulary of 2339 Mexicanero items, drawing on the material in Preuss' texts and her own fieldwork, remains unpublished, though Castro Medina (2000) examined it. 40% of these items are from Spanish (data from Castro Medina 2000); 96% of the non-Spanish forms are also attested in Classical Nahuatl. No indication is given of the source of the remaining 4% forms.

The Spanish component contains some forms which cover wider semantic ground than their etyma, and it is not always the commonest Spanish word which has been borrowed. *Malo* is 'bad' and also the normal word for 'ill, sick'. *Prieto* is commoner than *negro* for 'black', though both are attested, and both *mero* and *solo* have been taken over as terms for 'only'.

Spanish forms in Mexicanero provides the forms in use for many temporal adverbial and other subordinating conjunctions (*porke* ‘because’, *myentras* ‘while’, *asta ke* ‘until’ < Spanish *porque*, *mientras*, *hasta que*, the first word of the latter being a loan from Arabic), many temporal and phasal adverbs (*todabia* ‘still’, *ya* ‘already’; < *todavía*, *ya*), and coordinating conjunctions (*pero* ‘but’, *ni* ‘neither, nor’, *o* ‘or’, though the last item coexists with original *ose*). There are also some prepositions (*para* ‘for’), discourse particles of various kinds (*lwego* ‘soon’ = Spanish *luego*, *entonses* ‘then’ = *entonces*, *puh* = *pues* ‘so, then, well...’, *bweno* ‘well, OK...’ = *bueno*), and several other adverbs (*mah* = *más* ‘more’). Indeed in most cases these Spanish loans are the way *par excellence* in which such concepts are encoded in Mexicanero.

Spanish/Nawa blends also occur: *se rat(o)* ‘immediately’ < Nawa *se* ‘one’ and Spanish *rato* ‘moment’. This final form uses the Nawa numeral as an indefinite article; the way in which this and the inherited Nawa article (or really focus particle) *in* are used in Mexicanero is much more akin to the way in which articles are used in Spanish than they were in Classical Nahuatl, and Campbell (1987: 272) has made similar observations about Pipil.

There are also numerous adjectives (*agusto* ‘quiet’, *kada* ‘every’), a considerable number of interjections (*ombre de mal!* ‘Bloody hell!’, *kosa* ‘What’s the matter’, literally ‘thing’), and of course much of the vocabulary of modern life. Stolz (2002) indicates that almost all the grammatical hispanisms (mostly phasal adverbs and subordinating conjunctions) which he investigates across a range of Native American languages are recorded in his sources for SPJ Mexicanero, the Nawa variety he used in that study.

As the evidence from the Swadesh list suggests, relexification of Mexicanero from Spanish and the subsequent loss of original Nawa items is also abundantly clear. Duplication of original and borrowed forms is also in evidence within the lexicon. The exponents of some lexical forms are Spanish/Nawa doublets: borrowed *abeha* and original *neyti* are both attested

for ‘bee’ (Canger 2001: 165). Sometimes grammaticalization also takes place in addition to borrowing: both Spanish-derived *i* and the native *wan*, itself grammaticalized from the relational noun *-wan*, are used to express the coordinating conjunction ‘and’. Exactly the same process has happened in Salvadorean Pipil (Campbell 1987).

Spanish terms for some of the colours and several body parts have been borrowed, although Nawa colour terms have also been retained in some cases; these borrowed colour terms account for three loans on the Swadesh 100-item list. Nawa terms are exclusively used for ‘red’ (*čičiltik*) and ‘yellow’ (*kostik*), but ‘blue/green’ is Spanish *berde*, ‘white’ is Spanish *blangko* or outmoded Nawa *istak*, and ‘black’ can be Spanish *prieto/negro* or Nawa *tiltek*. Note that Nawa, like many Mesoamerican languages, is a ‘grue’ language which expresses ‘blue’ and ‘green’ by the same word.

### 5.2.1 The Swadesh list in Mexicanero (Swadesh 1955, Comrie and Smith 1977)

Morris Swadesh’s lexicostatistical lists, comprising 100, 200 or 215 forms in their various recensions, are used as indicators and sample of vocabulary items which are supposed to be most unlikely to be borrowed and most likely to be perpetuated from earlier stages of the language or from proto-languages. The Mexicanero version of this is almost complete (translation equivalents of 95+% of the glosses have been found). At least 56 forms which are the general Mexicanero equivalent of a Swadesh list form derive from Spanish, including numerals above 3 (the numerals 4 and 5 are found in both Nawa and Spanish forms, but numerals above 5 are expressed with Spanish words). At least 19 of the items on the 100-item Swadesh list can or must be expressed by words of Spanish origin. This appears to be a much higher proportion of loans than is found for the Central Nawa varieties investigated by Hill and Hill (1980). However, this study concentrated on Central Nawa speakers’ ability to recall Nawa

equivalents for Spanish lexical cues. In Pipil (Campbell 1985) about 9% of the items on the Swadesh list are borrowed; this proportion rises to just over 10% on the 215-item list because of the borrowing of all numerals above ‘6’ from Spanish.

### **5.2.2 A note on lexical acculturation.**

Native American languages have for a long time found ways of naming and encoding labels for items which they first encountered after the conquest of the Americas. Brown (1997) presents a list of 77 concepts, most but not all of them post-Conquest, for which he had assembled acculturational data in at least 192 languages (or 298 varieties) of the Americas.

I have found Mexicanero equivalents for 45 out of Brown’s 77 terms in the data from Preuss onwards. 39 of these forms are from Spanish; the remainder (e.g. *totolin* ‘chicken’, *pitsot* ‘pig’) are of Nawa origin and are names of items which had similar referents in the culture before the Spanish invasion. Similar data are available for other Nawa varieties; Brown’s study shows that these range from 42% in Spanish loans for the Eastern Nawa of Huazalinguillo, Hidalgo, with equivalents for 38 items on the list, to 79% for Salvadorean Pipil, which has equivalents for 53 forms in the lists. The proportion of loans in Classical Nahuatl is 39% and that for Tetelcingo Nahuatl is 78%. Fuller data for Mexicanero would seem likely to result in a higher percentage of Spanish loans.

## **6. Areal relationships: Nawa, Mexicanero and the Mesoamerican Sprachbund**

Nawa participates in the Mesoamerican Sprachbund (Kaufman 1973; Campbell, Kaufman and Smith-Stark 1986, Smith-Stark 1994, and especially Brown 2011). It appears to have absorbed many of these features from Mixe-Zoquean and Totonacan.

These studies find five features typical of Mesoamerica as a Sprachbund:

- a) non-verb final word order,
- b) relational nouns,
- c) vigesimal numeral system,
- d) certain semantic calques,
- e) ‘his-dog the man’ NP-NP possession.

Mexicanero unsurprisingly also exhibits some of the features of the Mesoamerican Sprachbund. The vigesimal numeral system has given way to one largely derived from Spanish, and limitations in our sources do not enable us to say much about the range of Mesoamerican semantic calques that remain, or the spread of relational nouns (some of which have been replaced by Spanish preposition, though others remain). Major constituent orders in Mexicanero are VSO and SVO.

One construction is of especial interest here, the fifth areal feature, NP-NP possession. This is a special part of the grammar of possession, where there are similarities and variations. Personal possession is expressed similarly throughout Nawa, as all Nawa varieties use possessive affixation when the possessor is not a full nominal. Mexicanero has the following (surface phonemic transcriptions are followed by morphophonemic analyses):

(1) *Ni-kabayo*

3SG-horse

‘her/his horse’ (Canger 2001: 151, example 513).

Surface phonemic transcriptions are followed by morphophonemic analyses and the transcriptional system used by Canger is modified by replacing <č ç> with <ch ts>.

When both possessor and possessum are full NPs, matters are open to variation. ‘The dog’s tail’ (Possessor-Possessum) is expressed in Aztecan, Mayan and many other Mesoamerican languages by constructions which translate as ‘its-tail the dog’. This is a Mesoamerican trait which Aztecan acquired; Campbell, Kaufman and Smith-Stark (1986: 545) suggest that it replaced the ‘the tail-ACCUSATIVE the dog’ construction which is found in many other Uto-Aztecan languages and which is still used in Corachol languages.

The Mesoamerican areal construction is unsurprisingly found in many Nawa varieties as the general form of NP-NP possession. For instance, Classical Nahuatl (Newman 1967) uses this structure, as does Pipil (Campbell 1985: 258):

(2) *i-tapahsul ne wi:lu-tsin mareño.*

its-nest the bird-DIMIN mareño

‘the little mareño bird’s nest.’

However, other exponents for this construction are possible. Data from Western Nawa as spoken in Michoacán, and from a Central Nawa variety of Hidalgo are presented, together with corresponding Mexicanero data which parallels the Hidalguense data.

In Michoacán Nahuatl, Spanish *de* is optionally used in NP-NP constructions, though not when the possessor is a proper name:

(3a-b) *i- tsotsomahli (de) mo-tah-tsin / mo- tah -tsin i-tsotsomahli*

3SG-clothes of your-father-HONORIFIC / your father-HON 3SG-clothes

‘your father’s clothes’ / ‘your father’s clothes’

(4) *i-lahketili de Ricarda*

3SG-loom of Ricarda

'Ricarda's loom' (Sischo 1979: 341).

Both Mexicanero and Hidalgo varieties of Nawa, here illustrated from questionnaires from the Archivo de Lenguas Indígenas de México (responses to questions 512-521), preserve affixal personal possessive markers. Now Hidalgo Nawa sometimes uses Spanish *de* to reinforce or double-mark the construction:

- (5) *N i-tlapachih-ka                      de n    i-kal                      o-      Ø-      wets*  
       the 3SG-roof-ABS                      of the 3SG-house                      PRET-Ø-      fall  
       the 3sg-cover-Nominalisation                      of the 3sg-house  
       'The roof of the house fell in.' (Lastra 1980: 119)

But generally it does not:

- (6) *N      i-    kawayo in    xwan o-                      Ø-                      mik*  
       The      3sg-horse    the John PRET- 3SG- died (Lastra 1980: 118)  
       'John's horse died'.

Possessive constructions involving two full NPs (rather than NP *de* NP constructions using borrowed Spanish *de* where this has the sense of 'made of', and where one or both nouns may but need not be of Spanish origin) are rather infrequent in the texts in Preuss ed. Ziehm (1967-1976). Such examples as I have found use the traditional Mesoamerican construction. Modern Mexicanero uses *de* more consistently for this kind of construction.

(7) *i-techo de in kal uwets(i)*

*i-techo de in kal u-wets(i)*

3SG-roof of the house fell in

‘The house’s roof fell in’

(8) *Umih ni-kabayo de in xwan.*

*u-Ø-miki ni-kabayo de in xwan*

PRET-3SG-died 3SG-horse of the John (Canger 2001: 151)

‘John’s horse died’.

Canger’s example #512 is an exception to this principle and is a rare example of the construction of NP-NP through recursion:

(9a, b) Mexicanero: *i-tenko in komál tapan-ki*

Hidalgo: *i-tenko in komal-e, λapan-ki.* (-e marks absolutive) (Lastra 1980: 118)

Both: 3SG-rim the griddle it.broke-adjectiviser.

‘the rim of the griddle is broken’. (Canger 2001: 151; these instantiate example 512)

Multiple or recursive possession is illustrated in Canger (2001: 151, example 516), and Lastra 1980. Two variants are offered, with glosses (morphophonemic forms are same as surface forms here):

(10a, b) *In techo de in kal de no-ta-tsi u-Ø-wetsi*

The roof of the house of 1SG-father-DIM PRET-3SG-fall



employ an equivalent to the subjunctive tenses used in the Spanish versions of sentences 14-17, using indicative mood and future tense instead.

(12) *niyah porke amo nitekipanotih*

*ni-ya-s porke amo ni-tekpiano-s*

1SG-go-FUT because NEG 1SG-work-FUT

‘I will go away because I am not working’ (Canger 2001: 159, example 563).

(13) *lo ke unka nuyuk motxe muresiwir*

*Lo ke unka nu-yuk mo-če mo-resiwir*

DET which there it.was he.took he.received

‘He took all that remained’ (Preuss ed. Ziehm 1968: 323).

(14) *...para niyas niktxiuas kargo de totolme*

*...para ni-ya-s ni-k-čiwa-s kargo de totol-me*

...So.that 1SG-go-FUT 1SG-3SG.OBJ-make-FUT load of turkey-PL

‘...so that I can prepare a consignment of roosters’ (Preuss ed. Ziehm 1968: 319)

(15) *in xwan kočih asta ke tiasih*

*In xwan Ø-koči-s asta ke ti-asi-s*

The John 3SG-sleep-FUT until that 2SG-arrive-FUT

‘John will sleep until you turn up’ (Canger 2001: 160, example 570)

(16) *niyah awnke kyawih*

*ni-ya-s awnke Ø-kiyawih-s*

1SG-go-FUT although 3SG-rain-FUT

‘I will go even though it may/will rain’ (Canger 2001: 158, example 558; note the use of the future to parallel the Spanish subjunctive).

As example (14)’s use of partitive *de* shows, we see that *de*, much used as it is in nominal morphosyntax, has also been borrowed into Mexicanero for purposes other than expressing possession, and that it is used with elements of Nawa or Spanish origin. For instance, Mexicanero has absorbed some compound prepositions directly from Spanish, such as *delante de* ‘before, in front of’ and *serka de* ‘near, beside’ (from Spanish *cerca de*), in addition to Nawa-Spanish blends such as *tepotsko de* ‘behind’ (which is calqued on Spanish *atrás de*).

There are also a couple of constructions noted by Canger 2001 in her fieldwork on SBA to express relativisation. Both use Spanish elements; one of these involves the development of a construction which has developed within Mexicanero. Marking of relative clauses is generally carried out using particles which are extrinsic to the verb; Mexicanero has borrowed Spanish *que* in its role as a relativiser but seems to use it infrequently, though it is used to form headless relatives, as example 14 indicates. An example of a relative clause using borrowed *ke*, where the relative clause refers to the direct object of the main clause, is given below.

(17) *unikih*                                      *in takah*      *ke tawantiká*  
 u-ni-ki-ita                                      in taka-t      ke Ø-tawani-ti-ka-á

PRET-1SG-3SG.OBJ-see the man-SG REL 3SG-get,drunk-LIGATURE-to.be-IMPF

‘I saw the man who was drunk’ (Canger 2001: 147, example 486)

Sometimes the Spanish particle *de* is used with a fully-inflected Mexicanero verb to express relativization. Here are a couple of examples. In (18) the relative clause follows the direct object but in (20) it follows the subject.

- (18) *Pi nokal nihpi se mačete del amo de nel*  
*Pa-in no-kal ni-ki-piya se mačete de-yel amo de nel*

In-the 1SG-house 1SG-3OBJ-have one machete of.it not of 1SG

‘In the house I have a machete which isn’t mine’ (Canger 2001: 80, example 80).

- (19) *in takah del ukis yel del nikišmáh*  
*In taka-t del u—kisa yel del ni-ki-ismati*

The man-ABS REL PRET-3SG-leave 3SG REL 1SG-3SG.OBJ-know

‘The man who left is the one I know’ (Canger 2001: 94-95, example 159)

But *ke* rather than *de* marks the comparandum in comparative constructions, in which a form of Spanish *más* is also used to create the comparative construction:

- (20) *yel mah kwahtih kel mopiltsi*  
*Yel mas kwahtik ke mo-pil-tsi*

3SG more 3SG-tall than 2SG-child-DIM

‘He is taller than your child’ (Canger 2001: 153, example 528)

## 8. Mexicanero viewed from a reading of Thomason and Kaufman (1988: 74-76)

Having studied dozens of case studies of contact-induced linguistic change Thomason and Kaufman had proposed a cumulative and implicationally-organised five-point borrowing scale,

with Level 5 showing most influence. The following information encapsulates some of the final two levels of the scale from Thomason and Kaufman (1988: 74-76). Massive lexical transfer, which has occurred in Stages 1 to 3, is presupposed in these final stages.

Level 4 involves strong cultural pressure. This results in moderate structural borrowing, which includes major structural features that cause relatively little typological change. Phonological borrowing at this stage includes introduction of new distinction features in contrastive sets that are represented in native vocabulary and perhaps loss of some contrasts; new syllable structure constraints, also found in native vocabulary. Syntactic changes causing little categorial alteration occur at this stage. Level 5 involves very strong cultural pressure: heavy structural borrowing includes major structural features that cause significant typological disruption, such as loss of phonemic contrasts, and categorial as well as more extensive ordering changes in morphosyntax.

Features listed above can be found in Mexicanero data: reshaping the vocalic system with the addition of an extra back vowel and the loss of phonemic vowel length, and changes in syntax which indicate the spread of coordinating conjunctions and also dependent clauses. These occur partly through the replacement of original Nawa conjunctions (for example with ‘because’ being expressed by Spanish *porke* rather than reflexes of Classical Nahuatl *ipampa*) and partly through the absorption of new kinds of clauses through the adoption of Spanish subordinating conjunctions.

Although not all differences between Mexicanero varieties and other Nawa varieties can be attributed to the effects of Spanish, it appears that Spanish influence upon the language has reached Level 4 and even the highest stage, Level 5. (Thomason 2001 collapses levels 4 and 5 into a single stage.) The presence of features at Level 5 may include the loss of contrastive vowel length and the (maybe independent) redesigning of the vocalic system, plus

the marked preference, as discussed in section 7, for the use of the Spanish particle *de* to indicate NP-NP possession over inherited possessive constructions.

### **9 Mexicanero and Salvadorean Pipil: the comparative evidence of Spanish influence.**

The highly endangered language Pipil of El Salvador, like Mexicanero, has borrowed very extensively from Spanish over the past five centuries. As with Mexicanero, the Pipil speech community is a group of fragments of what was earlier a more solid, extensive and cohesive whole (genocide in 1932 devastated Pipil), and as in Mexicanero, both transfer of fabric and transfer of pattern have occurred in great quantity.

Campbell (1985, 1987) are the sources for Pipil; as mentioned above, Campbell (1987) is a close analysis of several syntactic features (including transfer of pattern and instances of grammaticalization in addition to straightforward borrowing) which reflect influence upon Pipil from Spanish, in which all the speakers with whom Campbell worked were fluent. Though Pipil was previously spoken in several Central American countries, it survived longest in El Salvador, where the few remaining speakers live.

Pipil and Mexicanero share some parallel transfers of pattern or fabric from Spanish. Both form 'and' from a relational noun, and both borrow 'but' and the comparative marker and subordinate adverbial clause markers from Spanish. Differences, however, are striking. Mexicanero borrowed *que* as a relative clause marker; Pipil did not. Pipil uses past participles as adjectives far more than Mexicanero does. Pipil uses its verb 'go' as a future auxiliary and a verb meaning 'be/live' as a progressive aspect marker (like Spanish *ir* and *estar* respectively) and its verb meaning 'do' as a light verb marker to integrate Spanish loan verbs. Mexicanero does none of this, nor does it follow Pipil in using a 3pl verb form to create a passive

construction. Yet barely 10% of the long Pipil Swadesh list derives from Spanish whereas 25%+ of Mexicanero's does.

## 10. Conclusions

Almost five centuries of exposure to Spanish, with extensive societal bilingualism, and with minimal connection with other Nawa varieties, have wrought great changes on Mexicanero, especially in lexicon, but also in terms of what has been added to or subtracted from Mexicanero phonology and morphosyntax (especially syntax). There are also some differences between the realization of these borrowed or transferred features in SPJ and SBA. Mexicanero further shows the results of the combination of Spanish and Nawa elements into unitary constructions, as with adverbs such as *di unkan* 'from there'.

Many but not all these features are also found in other Nawa varieties, including Pipil, as far as our data permit us to judge, though such statements are conditional, as absence of evidence is not evidence of absence. Some such constructions coexist with means of expression not calqued on Spanish. There is also evidence for language-internal innovation in the use of some Spanish-derived elements in Mexicanero, not least with the use of *de* to form relative clauses. Mexicanero is one of the most intense examples (if obscure) of profound contact-induced change at every level of structure so far encountered in linguistic literature, from the 25% of Swadesh-list items taken from Spanish to the erosion of vowel length and the development of a five-vowel system on a Spanish model. Even so, it took many routes of contact-induced change avoided by Pipil (also influenced by Spanish for 500 years).

What is also striking is the degree to which so many structurally complex original features (not least in the verbal system and the morphophonemic system, as shown in the interlinear glosses) have been preserved. Further fieldwork (difficult in 2019) and the full integration of the materials which we have within the framework of a dictionary and

grammatical description, with due attention paid to variation (including the choice of Spanish and Nawa exponents for certain items) are needed. They would enable us to know more about this fascinating language, pointing us in the direction of important areas for further investigation while it is still possible.

### References.

Alcocer, Paulina. 2005. Elsa Ziehm y la edición de los textos nahuas de San Pedro Jícora registrados por Konrad Th. Preuss. *Dimensión Antropológica* 34, May-August, 147-166.

Boas, Franz. 1930. Spanish elements in modern Nahuatl. *Todd Memorial Volume Philological Studies 1*, ed. J D FitzGerald and Pauline Taylor, 85-89. (New York: Columbia UP.)

Boas, Franz with José María Arcola. 1920. Cuentos mexicanos de Milpa Alta. *Journal of American Folklore* 30: 1-25.

Boas, Franz, and Herman Haeberlin. 1924. Ten folktales in modern Nahuatl. *Journal of American Folklore* 37: 345-370.

Bright, William. 1967. Un vocabulario náhuatl del Estado de Tlaxcala. *Estudios de Cultura Náhuatl* 7: 233-253.

Bright, William. 1990. 'With One Lip, with Two Lips': Parallelism in Nahuatl. *Language* 66: 437-452.

Bright, William, and Robert Thiel. 1965. Hispanisms in a modern Aztec dialect. *Romance Philology* 18: 444-452.

- Brown, Cecil H. 1997. *Lexical acculturation in Native American languages*. Oxford: OUP.
- Brown, Cecil H. 2011. The role of Nahuatl in the formation of the Mesoamerican linguistic area. *Language Dynamics and Change* 1: 171-204.
- Caballero, Gabriela. 2011. Behind the Mexican Mountains: Recent Developments and New Directions in Research on Uto-Aztecan Languages. *Language and Linguistics Compass* 5/7 (2011): 485–504
- Campbell, Lyle. 1985. *The Pipil Language of El Salvador*. The Hague: Mouton.
- Campbell, Lyle. 1987. Syntactic change in Pipil. *International Journal of American Linguistics* 53: 255-280.
- Campbell, Lyle, Terrence Kaufman and Thomas Smith-Stark. 1986. Meso-America as a linguistic area. *Language* 62: 530-570.
- Campbell, R. Joe. 1985. *A Morphological Dictionary of Classical Nahuatl: A Morpheme Index to the Vocabulario En Lengua Mexicana Y Castellana of Fray Alonso De Molina*. Madison: Hispanic Seminary of Medieval Studies.
- Canger, Una. 1988. Nahuatl dialectology: A survey and some suggestions. *International Journal of American Linguistics* 54.1. 28–72.
- Canger, Una. 1990. Una nueva construcción en náhuatl: un préstamo o cambio fundamental bajo la influencia de español. *Homenaje a Jorge A. Suárez. Lingüística indoeuropeana e hispánica*, ed. Beatriz Garza Cuarón and Paulette Levy, 137-142. (Mexico City: El Colegio de México.)
- Canger, Una. 1995. Artes poco conocidos del náhuatl. *Amérindia* 19-20: 193-190.

Canger, Una. 1998. Náhuatl en Durango-Nayarit. *IV Encuentro Internacional de Lingüística en el Noroeste, Vol. I: Lenguas Indígenas*, ed. Zarina Estrada Fernández et al., 129-150. (Hermosillo, Sonora: Unison)

Canger, Una. 2000. Stress in Durango of Nahuatl: Whose Stress? *Uto-Aztecan: Structural, Temporal, and Geographic Perspectives: Papers in memory of Wick R. Miller*, ed. Eugene H Casad and Thomas R. Willett, 373-386. (Hermosillo: Universidad de Sonora.)

Canger, Una. 2001. *Mexicanero de la Sierra Madre Occidental*. Mexico City: El Colegio de México.

Castro-Medina, Margarita-María. 2000. *Descripción morfológica del sistema verbal del mexicanero de San Pedro Jícora. (Variante dialectal en Durango, México.)* Doctoral dissertation, University of Cologne.

Castro-Medina, Margarita-María 2008. Erste Etappen des Alphabetisierungprojektes unter den Durango-Aztek-Indianern in Mexiko. [www.uni-koeln.de/gbs/Berichte/Castro\\_Durango.pdf](http://www.uni-koeln.de/gbs/Berichte/Castro_Durango.pdf), Accessed 25 August 2016.

Castro-Medina, Margarita María. 2012. *In popot wan Lorenza: La escoba y Lorenza. Lengua mexicana, estados de Durango y Nayarit*. Mexico City: Secretaría de Educación Pública.

Comrie, Bernard and Norval Smith. 1977. Lingua Descriptive Questionnaire. *Lingua* 44: 1-47.

Cortes y Zedeño, Gerónimo Tomás de Aquino. 1765. *Arte, vocabulario y confesionario en el idioma mexicano, como se usa en el Obispado de Guadalaxara*. Puebla de los Ángeles.

Dakin, Karen. 2017. Western and Central Nahuatl dialects: possible influenced from Cora and Huichol. *Language Contact and Change in Mesoamerica and Beyond*, ed. Karen Dakin,

Claudia Parodi and Natalie Operstein, 263-300. (Amsterdam: Benjamins.)

[Studies in Language Companion Series185]

De la Cruz, José Francisco. 1993. *Diccionario mexicano-español: Fonología de la lengua mexicana de Durango* (Colección Chion jua' kam). (Durango: Secretaría de Educación, Cultura y Deporte.)

Field, Fredric W. 2001. *Linguistic borrowing in bilingual contexts*. (Amsterdam and Philadelphia: Benjamins.)

Flores Farfán, José Antonio. 2008. The Hispanicization of modern Nahuatl varieties. *Hispanisation: the impact of Spanish on the lexicon and grammar of the indigenous languages of Austronesia and the Americas*, ed. T. Stolz, D. Bakker & R. Salas Palomo 27-48 (Empirical approaches to language typology, 39). (Berlin: Mouton de Gruyter.)

Flores Farfán, José Antonio. 2012. Another look at Nahuatl-Spanish contact morphology. *More morphologies. Contributions to the festival of languages Bremen, 17 Sept to 7 Oct ,2009*, 33-52. (Bremen: Universitätsverlag.)

Grant, A. P. 2003. Review of Ruth King, *The Lexical Basis of Grammatical Borrowing: A Prince Edward Island Case Study* (Amsterdam: Benjamins, 2000). *Word*, 54, 251–6.

Guerra, Juan. 1692. *Arte de la lengua Mexicana segun la acostumbran hablar los Indois en todo el obispado de Guadiana y del de Mechoacán*. (Reprinted 1900, Guadalajara: Ancira y Hermanos.)

Hill, Jane H and Kenneth. 1986. *Speaking Mexicano: Dynamics of syncretic language in Central Mexico*. (Tucson: University of Arizona Press).

Karttunen, Frances, and James Lockhart. 1976. *Nahuatl in the Middle Years*. (Berkeley and Los Angeles: University of California Publications in Linguistics 85.)

Kaufman, Terrence. 1973. Areal linguistics and Middle America. *Current trends in linguistics volume 11: diachronic, areal and typological linguistics*, ed. Thomas A. Sebeok, 459-483. (The Hague: Mouton.)

Kaufman, Terrence. 2001. The history of the Nawa linguistic group from the earliest times to the sixteenth century: some initial results. Available at: <http://www.albany.edu/pdlma/Nawa.pdf>

Lastra de Suárez, Yolanda. 1980. *El náhuatl de Acaxochitlán, Hidalgo*. (Mexico City: El Colegio de México.)

Lastra de Suárez, Yolanda 1986. *Las áreas dialectales del náhuatl moderno*. (Mexico City: Universidad Nacional Autónoma de México.)

Matras, Y. and J. Sakel 2007. Investigating the mechanisms of pattern replication in language convergence. *Studies in Language* 31 (4), 829-865.

Molina, Alonso de. 1571. *Vocabulario en lengua castellana y mexicana*. Mexico.

Nau, Nicole. 1995. *Möglichkeiten und Mechanismen kontaktbewegten Sprachwandels unter besonderer Berücksichtigung des Finnischen*. (Edition Linguistik 8.) )Munich & Newcastle: Lincom Europa.)

Preuss, Konrad Theodor, edited by Elsa Ziehm. 1968-1976. *Nahua--Texte aus San Pedro Jicora in Durango. Aufgezeichnet von Konrad Theodor Preuss. Aus dem Nachlass übersetzt und herausgegeben von Elsa Ziehm*. Berlin: Geb. Mann.

Romero, Sergio F. To appear. Dialectology and the history of Nahua people in Guatemala. To be published in *The Migrations of Epiclassic to Middle Postclassic Mesoamerica*, ed. Christopher Beekman and William Fowler. (Boulder: University of Colorado Press.)

Sischo, William. 1979. Michoacán Nahuatl. *Studies in Uto-Aztecan Grammar volume 4: Modern Aztec Grammatical Sketches*, edited by Ronald Langacker, 307-380. (Dallas: Summer Institute of Linguistics.)

Sischo, William (Guillermo) and Elena Erickson de Hollenbach (Barbara Elaine Hollenbach) . 2015. *Gramática breve del náhuatl de Michoacán*. Online at: <http://barbaraelenahollenbach.com/PDFs/nclGr1015.pdf>

Smith-Stark, Thomas. 1994 Mesoamerican Calques. In *Investigaciones lingüísticas en Mesoamérica*, ed. Carolyn J. MacKay and Verónica Vázquez, 15-50. (Universidad Nacional Autónoma de México, Mexico.)

Stolz, Thomas. 2002. Les hispanismes grammaticaux dans les langues amérindiennes. *Faits de langues* 20: 163-174.

Suárez, Jorge A. 1977. La influencia del español en la estructura gramatical del náhuatl. *Anuario de Letras. Revista de la Facultad de Filosofía y Letras (Ciudad Universitaria, México, D.F.: Universidad Nacional Autónoma de México, Centro de Lingüística Hispánica)* 15: 115-164.

Swadesh, Morris. 1955. Towards Greater Accuracy in Lexicostatistic Dating. *International Journal of American Linguistics* 21: 121-133.

Thomason, Sarah Grey, and Terrence Kaufman 1988. *Language contact, creolization and genetic linguistics*. (Berkeley and Los Angeles: University of California Press.)

Thomason, Sarah Grey. 2001. *Language contact: an introduction*. (Washington, D.C.: Georgetown University Press.)

Valiñas Coalla, Leopoldo. 1981. *El náhuatl de la perifería occidental y la costa del Pacífico*. Tesis profesional, Escuela Nacional de Antropología e Historia, Mexico. :

Willett, Elizabeth, and Thomas Willett. 2013. *Diccionario tepehuano de Santa María Ocotán, Durango*. (Mexico City: Summer Institute of Linguistics.)