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**Language contact in the Huasteca:
The impact of Spanish on Nahuatl and Tének**

PhD dissertation

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*To the memory of my Father,
Witold Sobkowiak (1948-2021)*

Abstract (English)

The aim of this dissertation is to contribute to a better understanding of the role of Spanish as a source of convergence of linguistic features in two Mesoamerican languages: Western Huasteca Nahuatl and Tének (Huastec). Whereas various works have analysed how contact with Spanish resulted in the Hispanisation of several varieties of Nahuatl, no research has addressed this issue in Western Huasteca Nahuatl. There are virtually no materials investigating the impact of Spanish on Tének or comparing the effects of Hispanisation in the two typologically distant but co-territorial languages in a similar socio-political situation and under comparable influence of the dominant official language. In this work I show to what extent contact with Spanish and *mestizo* culture has changed the traditional features of Western Huasteca Nahuatl and Tének. Using my own fieldwork data as well as a number of published sources, I compare the modern use of the two indigenous languages with their traditional varieties as documented in colonial sources.

The study focuses on selected features of nominal and verbal morphology, syntax and the counting system, most of which have been listed as the diagnostic features of the languages of the Mesoamerican linguistic area. I demonstrate an increase in transparency in the nominal morphology of modern Nahuatl and Tének and I show that plural marking in both languages is no longer restricted to animate referents. I also show how contact with *mestizo* culture in Tének has contributed to the marking of culturally significant items, traditionally considered inalienable, as alienably possessed. Moreover, I trace a gradual loss of vigesimal counting and its replacement with the decimal system. With respect to verbal morphology, I show the development of periphrastic causative and applicative, and the loss in productivity of noun incorporation in Nahuatl. I also demonstrate how the domains of the use of middle voice in Tének have expanded to match the semantic contexts in which reflexive passive is used in Spanish. The influence of Spanish on the syntax in Nahuatl and Tének is exemplified by a shift towards SVO word order. I also demonstrate how locational copulas used in both

languages have evolved to match the syntactic contexts in which the Spanish verb *estar* is used. The analysis of possessive constructions shows a replacement of the verbless expression of possession with the Spanish-influenced expression according to the formula '(the) man has (a) dog'. Finally, I demonstrate a shift from the traditionally preferred unmarked phrasal and clausal coordination to the marked strategies that use either native or borrowed Spanish coordinands.

The study contributes to our theoretical and empirical understanding of the impact of a dominant language and culture on vulnerable indigenous languages. It examines the role of Spanish as the source of convergence of Hispanic features within the indigenous Mexican languages and shows how language contact contributes to the simplification of the highly synthetic morphological structure of traditional Nahuatl and Tének. The analysis also demonstrates that many of the discussed changes are not yet completed and there is significant variation in the use of both languages among speakers representing different sociolinguistic profiles. In addition, I interpret the completed and ongoing changes within the framework of metatypy which assumes that the types of innovations in both indigenous languages of the Huasteca stem from widespread bilingualism and the need to reduce the communicative burden for the speakers for whom the dominant language is now often Spanish. This study also informs empirical understanding of language endangerment and revitalisation by pointing at the interconnectedness between cultural and linguistic change.

Abstract (Polish)

Celem niniejszej rozprawy jest przyczynienie się do lepszego zrozumienia roli języka hiszpańskiego jako źródła konwergencji w dwóch językach mezoamerykańskich: zachodnim Huasteca nahuatl i tének (huasteckim). Podczas gdy różne prace analizowały w jaki sposób kontakt z hiszpańskim doprowadził do hispanizacji kilku odmian języka nahuatl, żadne badanie nie zajęło się tym problemem w zachodniej odmianie Huasteca nahuatl. Nie ma prawie żadnych materiałów badających wpływ języka hiszpańskiego na tének lub porównujących skutki hispanizacji w dwóch typologicznie odległych, ale współterytorialnych językach w podobnej sytuacji społeczno-politycznej i pod porównywalnym wpływem dominującego języka urzędowego. W mojej rozprawie pokazuję, w jakim stopniu kontakt z kulturą hiszpańską i metyską zmienił tradycyjne cechy zachodniego Huasteca nahuatl i tének. Wykorzystując moje własne dane z badań terenowych, jak również szereg opublikowanych źródeł, porównuję współczesne użycie tych dwóch rdzennych języków z ich tradycyjnymi odmianami udokumentowanymi w źródłach kolonialnych.

W mojej pracy skupiam się na wybranych cechach morfologii nominalnej i czasownikowej, składni i systemie liczenia, z których większość została zidentyfikowana jako cechy diagnostyczne języków mezoamerykańskiego obszaru językowego. Pokazuję, jak zwiększyła się przejrzystość morfologii nominalnej współczesnego języka nahuatl i tének, jak również to, że oznaczanie liczby mnogiej w obu językach nie ogranicza się już tylko do rzeczowników ożywionych. Pokazuję też, jak kontakt z kulturą metyską w tének przyczynił się do oznaczania przedmiotów kulturowo istotnych, tradycyjnie uważanych za niezbywalne jako zbywalnych. Ponadto śledzę stopniową utratę liczenia dwudziestkowego i zastąpienie go systemem dziesiętnym. W odniesieniu do morfologii czasownikowej, pokazuję rozwój opisowego wyrażania causativus oraz benefactivus w obu językach za pomocą konstrukcji składniowych, jak również utratę produktywności inkorporacji rzeczowników w nahuatl. Analizuję również, jak rozszerzyły się dziedziny użycia strony zwrotnej (medium) w

tének i jak dopasowały się one do kontekstów semantycznych, w których w hiszpańskim używana jest strona bierna. Przykładem wpływu języka hiszpańskiego na składnię w nahuatl i tének jest zmiana szyku zdania na SVO. Moja analiza pokazuje również, w jaki sposób łączniki (copule) lokalizacyjne używane w obu językach ewoluowały, aby dopasować się do kontekstów semantycznych, w jakich stosowany jest hiszpański czasownik *estar*. Analiza konstrukcji wyrażających dzierżawczość dowodzi też, że nastąpiło zastąpienie beczasownikowego wyrażania posiadania inspirowanym przez hiszpański wyrażaniem posiadania według formuły „rzeczownik1 ma/posiada rzeczownik2”. Na koniec pokazuję przejście od tradycyjnie preferowanej nieoznaczonej koordynacji frazowej i zdaniowej na strategię koordynacji oznaczonej, w której używane są bądź natywne, bądź też zapożyczone z hiszpańskiego spójniki.

Moje prace przyczynia się do tak teoretycznego, jak i empirycznego lepszego zrozumienia wpływu dominującego języka i kultury na znajdujące się pod jego presją języki rdzenne. Rozprawa bada rolę języka hiszpańskiego jako źródła konwergencji w lokalnych językach meksykańskich i pokazuje jak kontakt językowy przyczynia się do uproszczenia wysoce syntetycznych struktur morfologicznych nahuatl i tének. Z mojej analizy wynika również, że wiele z omawianych zmian nie zostało jeszcze zakończonych i istnieje znaczne zróżnicowanie w użyciu obu języków wśród użytkowników reprezentujących różne profile socjolingwistyczne. Ponadto wyjaśniam zakończone oraz niezakończone zmiany w ramach teorii metatypii, która zakłada, że typy innowacji w obu językach wynikają z powszechnej dwujęzyczności i potrzeby zmniejszenia obciążenia komunikacyjnego w przypadku użytkowników, dla których językiem dominującym jest hiszpański. Rozprawa ta dostarcza również informacji na temat praktycznego zrozumienia problemu języków zagrożonych wymarciem i zagadnienia rewitalizacji języka, wskazując na wzajemne powiązania między zmianą kulturową oraz językową.

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List of abbreviations

A	ergative person marker ('Set A')
A1.SG	first person singular ergative (etc.)
ABS	absolutive
ABSTR	abstractiviser
ACC	accusative
ACNNR	active action noun
ADVS	adversative
AG	agentive noun
ANTEC	antecessive
ANTIP	antipassive
APPL	applicative
ASP	aspect
AUX	auxiliary
B	absolutive person marker ('Set B')
B1.PL	first person plural absolutive (etc.)
BEN	benefactive
CAUS	causative
CLF	classifier
COMPL	completive
COND	conditional
CONJ	conjunction
COP	copula
DEF	definite
DEM	demonstrative
DER	derivation
DET	determiner
DIM	diminutive
DISJ	disjunction
DISTR	distributive
EMPH	emphasis
ENCL	enclitic
EP	epenthesis
FREQ	frequentive
FUT	future
GENR	generic
HABIT	habitual
HON	honorific
HUM	human
IMP	imperative
INACC	inaccusative

INCOMPL	incompletive
INDEF	indefinite
INERG	inergative
INPURP	inbound purposive
INS	instrumental
INTS	intensifier
INV	inverse
INTERR	interrogative
IOBJ	indirect object
IPFV	imperfective
ITD	introducer
ITP	intrinsic
IRR	irrealis
LIG	ligature
LOC	locational
MV	middle voice
NACT	nonactive
NEG	negative
NFUT	nonfuture
NHUM	nonhuman
NPRS	nonpresent
NPST	nonpast
OBJ	object
OPT	optative
OUTDIR	outbound directional
OUTPURP	outbound purposive
PASS	passive
PFV	perfective
PL	plural
POSS	possessive
PRED	predicate
PREP	preposition
PST	past
PTCP	participal
QUOT	quotative
RDPL	reduplication
RECP	reciprocal
REFL	reflexive
REV	reverential
RTL	relational
SAP	speech act participant
SBJ	subject
SG	singular
SR	subordinator

STAT	stative
TR	transitive
TS	thematic suffix
VR	verbaliser
1	first person
2	second person
3	third person
1SG	first person singular (etc.)
2PL	second person plural (etc.)
Ø	zero marking
-	affix boundary
=	clitic boundary
~	reduplication

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Figure 6.1. Word order in Huasteca Nahuatl.

Introduction

The Huasteca region of Mexico is a linguistically diverse area with a long history of cultural and linguistic contact between various ethnic groups from Mesoamerica, nomadic peoples from northern Mexico and cultures from the southeast of the present-day United States. Today, several languages representing different language families are spoken in the Huasteca Potosina, which is part of the wider Huasteca region and the main focus of this work. The Western Huasteca variety of Nahuatl (ISO 639-3 code: nhw; Glottocode: west2624), a Uto-Aztecan language later in this work simply referred to as Nahuatl, is the indigenous language with the highest number of speakers. Tének (ISO 639-3 code: hus; Glottocode: huas1242), also known as Huastec, Wastek or Teenek, the second most widely used indigenous language of the region, is a Mayan language originating in the highlands of Chiapas in southern Mexico and now spoken in several municipalities of the Huasteca in the states of San Luis Potosí and Veracruz.¹ The third indigenous language of the area is Pame (also called Xi'iuy), an Oto-Manguean language spoken in a small number of communities mostly in the arid Zona Media in the state of San Luis Potosí. The languages of the Huasteca Potosina region form part of the Mesoamerican linguistic area (Campbell et al. 1986), a linguistic convergence area where co-territorial languages belonging to several language families and of distinct typological profiles developed similar morphosyntactic characteristics due to diffusion and not to a common origin.

Following the Spanish conquest of Mexico, Spanish (Indo-European) was also introduced into the linguistic landscape of the area, gradually gained more speakers, and is now the dominant and most prestigious language of the region. As the lingua franca of Mexico, Spanish is the language of politics, education, media and commerce. Almost all native speakers of indigenous languages of the Huasteca are bilingual in their respective heritage languages and Spanish. The position of indigenous languages is generally stronger in more remote communities, where one can occasionally meet

¹ Although many sources refer to this language as 'Huastec' (or *huasteco*, *wasteco* in Spanish), this work will use the term 'Tének', the name of the language applied by the speakers themselves and favoured by them over the name 'Huastec' which itself is a Nahuatl word.

elderly Nahuatl, Tének or Pame monolingual speakers. However, migration of indigenous people to urban centres such as Monterrey, formal education in Spanish, discrimination, access to media of mass communication and increased social mobility are imposing significant pressure on indigenous language speakers, as a result of which they often shift, more or less voluntarily, to Spanish. Many parents decide not to transmit their heritage language to their offspring, who may still learn some Nahuatl, Tének or Pame from their grandparents but, most likely, will not use it as a preferred language of communication in the future. The official status of Spanish in Mexico and the fact that it is used in compulsory education, in local, regional and federal administration, health service, media and many other domains, results in virtually everyone having exposure to spoken and written Spanish. The dominant status of Spanish and a long and intense history of contact between indigenous languages and the colonial language is reflected in a large number of borrowings that Nahuatl, Tének, Pame and other indigenous languages of Mexico adopted from Spanish. These borrowings range from lexical borrowings through the introduction of new morphological categories to borrowed syntactic constructions and discourse structure.

A number of works explore contact phenomena in the Mesoamerican languages including Nahuatl and Tének, the two indigenous languages of the Huasteca this work focuses on. The presence of Spanish lexical borrowings in indigenous languages of post-conquest Mexico was mentioned in various colonial works written by Spanish missionaries such as grammars, vocabularies and Christian doctrines. Spanish contact phenomena are also attested in many administrative documents written in older varieties of Nahuatl between the 16th and 18th centuries, commonly referred to as Classical Nahuatl. Several modern sources focus specifically on the history of Nahuatl, its dialects and the influence of other Mesoamerican languages including members of the Mixe-Zoquean, Totonacan and Mayan language families. A more systematic analysis of contact with Spanish and its repercussions with regard to the lexicon and structure of Nahuatl was undertaken by several scholars who studied colonial Nahuatl and contemporary Nahuatl varieties spoken in the states of Guerrero, Morelos, Tlaxcala, Veracruz and Hidalgo. In comparison with Nahuatl, Tének is a less studied language.

Similarly to Nahuatl, Tének was also used for evangelising and there are a few missionary works written in colonial Tének including Christian doctrines and grammatical notes with short vocabulary lists. Various historical linguists studied the genesis of separation of Tének from the rest of the Mayan family. The presence of Spanish borrowings in Tének has been mentioned in a number of descriptive studies of this language but attention was mostly paid to lexical borrowings and not to structural borrowings.

The topic of the complexity of Mesoamerican and Spanish language contact phenomena and the convergence of features that can be attested in Nahuatl and Tének is understudied and this work aims at filling in many of the gaps that can be identified in this subject. First and foremost, this analysis is a comprehensive comparative study on the results of the Hispanisation of chosen aspects of morphosyntax in these two indigenous Mesoamerican languages. It addresses the issue of Spanish borrowings in Tének which has been almost completely absent from previous studies of language contact. In the case of Nahuatl, although Spanish-contact induced changes have attracted some degree of attention in several varieties of Nahuatl, there are no studies focusing on changes in Western Huasteca Nahuatl. This dissertation also reviews the status of Mesoamerican features in modern varieties of both languages e.g., animacy-based number marking, verbless expression of possession, the vigesimal numeral system and predicate-initial word order.

This study focuses on three areas of linguistic structure including nominal morphology, verbal morphology and syntax. The aspects of nominal morphology that are analysed are plural marking, possessive marking and numerals. I demonstrate how plural marking of nouns is no longer dependent on animacy, and how Spanish has triggered significant changes in possessive marking, including a shift from indexing culturally significant objects as inalienably possessed in traditional Tének to alienably possessed in modern Tének. I also show examples that illustrate a shift from the Mesoamerican vigesimal to decimal counting in both indigenous languages. With respect to verbal morphology, I focus on valency-increasing operations involving the use of causative and applicative suffixes. By analysing these constructions, as well as

noun incorporation in Nahuatl and Tének, I illustrate the reduction in morphological complexity in both languages and a shift towards more analytic constructions. The analysis of middle voice in modern Tének and its innovative use in phrases with reflexive meaning suggests the possibility of modelling these phrases on reflexive passive constructions that are found in Spanish.

This work also provides examples of linguistic convergence stemming from contact with Spanish by exploring selected aspects of syntax. I assess the preferred word order in modern Nahuatl and Tének and I show a strong preference for the SVO order which is also used in Spanish. I also prove that animacy and definiteness of constituents no longer affects word order in modern Tének, as it did in traditional Tének. Through analysis of nominal and locational predicates, as well as possessive constructions in the two languages, I examine the extent of structural calquing inspired by Spanish. For example, I demonstrate that verbless possessive constructions have been replaced with structures in which the verb ‘to have’ is used. Another example of calquing involves the use of locational copulas as predicates in stative constructions describing non-permanent states, which mirrors the use of the Spanish locational verb *estar* ‘to be located’, also applied in this context. Moreover, my study also analyses phrase, clause and sentence linking strategies in Nahuatl and Tének. I show how the traditional unmarked strategies that involved juxtaposition of phrases, clauses and sentences without the use of overt coordinators were mostly replaced with marked strategies, some of which employ borrowed Spanish coordination markers.

Based on the analysis of the above mentioned morphosyntactic features, I describe the typological profiles of modern Nahuatl and Tének with respect to such issues as morphological complexity and the ordering of constituents. I demonstrate how the traditional morphosyntactic traits of those languages have changed as a result of intense contact with Spanish, an Indo-European inflectional and predominantly suffixing language with an SVO word order that makes extensive use of prepositions. I show how Spanish, the new lingua franca of Mesoamerica, is now the language solidifying the Mesoamerican linguistic area through the diffusion of Indo-European features into indigenous languages. To illustrate this claim, I give examples that show how both

indigenous languages have reduced their morphological complexity and changed from highly synthetic languages to languages with more analytic structures. Contact with Spanish also affected word order in Nahuatl and Tének. Both languages shifted from predicate-initial to basic SVO order, following the ordering of constituents in Spanish. Contact with the colonial language also led to the development of periphrastic constructions such as syntactic applicative and causative, which traditionally would be expressed morphologically in both Nahuatl and Tének. Moreover, influence of Spanish also contributed to more frequent use of prepositions, which replaced the relational nouns used in traditional Nahuatl and Tének.

My work also offers a comparison of the impact of Spanish on Nahuatl and Tének and assesses the extent of the convergence of features resulting from contact with the colonial language. I demonstrate that the changes that can be observed in Nahuatl and Tének are comparable despite the typological differences between the two indigenous languages such as contrastive grammatical alignments (nominative-accusative in Nahuatl and ergative-absolutive in Tének). I show that although the typological distance between Spanish and Tének is a factor that made transfer of certain features more difficult, it nevertheless has not blocked the occurrence of significant contact-induced structural changes in this Mayan language. For example, I demonstrate how in Tének the contexts of use of middle voice, a typical morphological category found in many ergative languages, has been extended to similar semantic contexts in which passive reflexive constructions are employed in Spanish.

Another goal of my study is to identify sociolinguistic factors contributing to language change in Nahuatl and Tének. To this end, I link the extent and type of innovative structures that are attested in various speakers' idiolects with such factors as their age, degree of social mobility, place of residence, formal education levels and different attitudes toward their heritage language. My study confirms that the speech of younger, more socially mobile speakers of both languages is more affected by Spanish than that of older, less formally educated speakers who tend to stay in their communities, where the main communication tool is the heritage language and not Spanish. Also, the extent of contact phenomena in the speech of Nahuatl and Tének speakers who present

positive attitudes towards their native language tends to be less advanced, but usually only in the area of the lexicon. My study confirms that native speakers, often including language activists with very positive language attitudes, are typically not inclined to recognise structural borrowings as foreign influence, especially when the vocabulary used in these constructions is native. I also prove that more changes are usually present in spontaneous speech and less in written materials, although syntactic changes and semantic calques can be attested in both spontaneous and written sources. In the application of grammatical correctness tests, more traditional forms are likely to be accepted by the speakers but in natural language recordings these forms or categories may have undergone some modifications.

The study of Western Huasteca Nahuatl and Tének involves the comparison of data from older sources, such as colonial works, with modern language use including my own data collected during fieldwork in Mexico. Older data sources for both Nahuatl and Tének comprise language descriptions, vocabularies and religious texts produced by missionaries during the colonial period. Among more recent sources that are used in this study are missionary publications in Nahuatl and Tének from the second part of the 20th century, which represent the varieties of Nahuatl and Tének as they were spoken a few decades ago. The modern data for Nahuatl and Tének comes from a number of published sources including books of stories, as well as material I collected during fieldwork in the Huasteca between 2014 and 2020, including such material as recordings of natural speech, data collected in elicitation sessions and grammatical correctness tests.

The linguistic corpus that was analysed in this study represents different stages in the development of the indigenous languages in question. The data from the colonial period, after Spanish was introduced in some communicative contexts, reflects initial changes. The data from the 20th century and the first two decades of the 21st century, on the other hand, shows Nahuatl and Tének varieties which have been in contact with Spanish for almost five hundred years and therefore the impact of Spanish on the structures of those languages is more advanced. The fact that the sources of data I use in this work include both more prescriptive (such as books of stories, dictionaries,

grammar books) and more spontaneous material (natural speech recordings) also has a methodological objective. Whereas the lexicon and structures documented in the prescriptive sources show less Spanish influence, the constructions applied in natural speech usually reflect language use that includes more lexical and grammatical borrowings from Spanish. Another methodological goal was to consult speakers that represent different social backgrounds with respect to formal schooling, age, gender, migration history, income range, etc., as well as varied attitudes toward their heritage language in general and toward borrowings from Spanish in particular. These factors are reflected in the forms and constructions used by speakers and their willingness and likelihood to adopt or avoid Spanish loans.

This study is divided into three parts: background information, the analysis itself and conclusions. Chapter 1 provides introductory information about the Huasteca Potosina including its linguistic situation in different periods of the history of the region. Chapter 2 deals with the theory of language contact and change including lexical and structural borrowings. Special attention is paid to the phenomenon of linguistic convergence and the subsequent emergence of linguistic areas, including the Mesoamerican linguistic area. This chapter also lists sources of data used in the present study and explains the methodology that was adopted in the research. The next chapter, chapter 3 provides an overview of Nahuatl and Tének focusing on their phoneme inventories as well as their typical morphological and syntactic characteristics. This chapter also includes a review of previous studies on the influence of Spanish in both Nahuatl and Tének. Chapter 4 analyses contact phenomena in nominal morphology, involving the expression of number and possession, as well as the shift from the vigesimal to the decimal counting system. Chapter 5 deals with contact phenomena reflected in verbal morphology, focusing on valency-changing operations such as causative and applicative in both Nahuatl and Tének, and middle voice in Tének, as well as changes in noun incorporation in Nahuatl. Chapter 6 investigates syntactic change, including innovations in word order, nominal and locational predicates and the emergence of predicative possessive constructions. This chapter also deals with changes in clause linking strategies including the conjunctive, disjunctive and adversative

coordination. Conclusions are presented in chapter 7, which includes a comparison of Spanish-contact induced changes in Nahuatl and Tének, and the interpretation of changes as cases of simplification and typological drift from highly synthetic to more analytic languages. A separate section is devoted to proving that innovation in Nahuatl and Tének can also be interpreted within the framework of metatypy. In addition, I provide reassessment of the features of the languages of the Mesoamerican linguistic area in which Spanish is the new source of the convergence of Hispanicised features. Furthermore, the last chapter also offers suggestions for future research.

Chapter 1: The Huasteca and its linguistic situation

1.1. Introduction

The Huasteca is a geographical and cultural region in the northeastern part of Mexico, between the Gulf of Mexico and the Sierra Madre Oriental mountain range. It includes parts of the state of Hidalgo, southern San Luis Potosí, southern Tamaulipas, northern Veracruz, northern Puebla and eastern Querétaro. The approximate location of the Huasteca is shown in Figure 1.1 below.

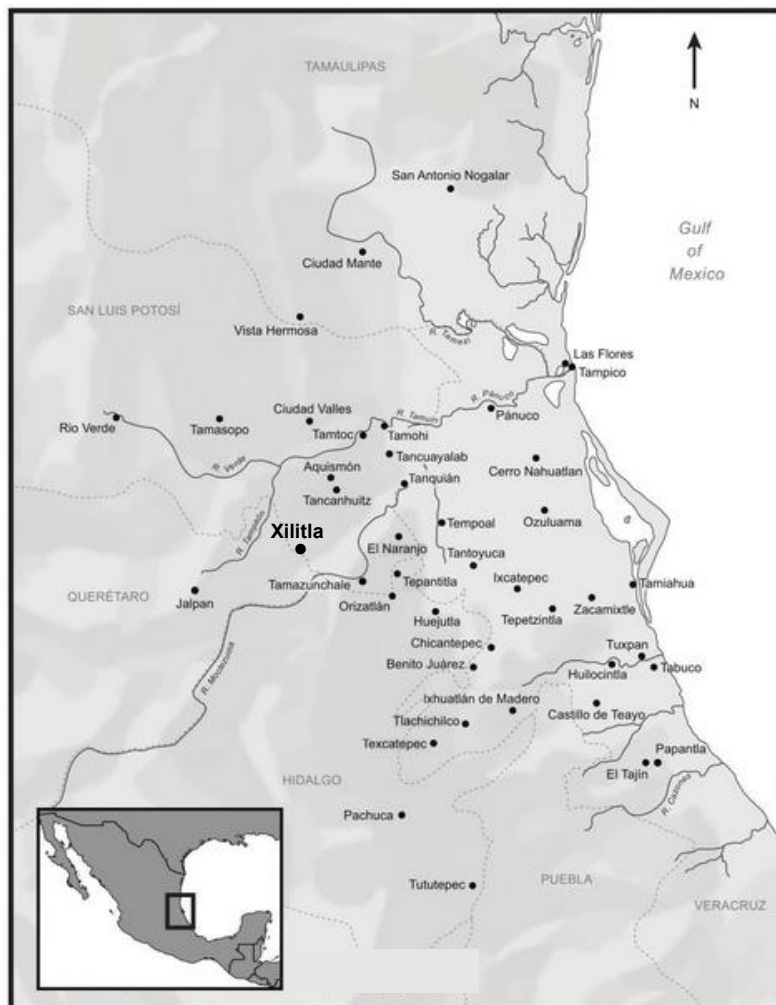


Figure 1.1. The Huasteca (Faust and Richter 2015: 2). Location of Xilitla added.

The biggest population centres of the Huasteca are Ciudad Valles and Tamazunchale in the state of San Luis Potosí, Huejutla in Hidalgo, and Tantoyuca and Chicontepec in Veracruz. The northern and eastern parts of the Huasteca are relatively flat and the rest of the region is mountainous. Mountainous areas are characterised by the presence of many caves and *sótanos* (underground openings up to several hundred metres deep) on the hillsides, water springs, waterfalls and rivers, often in deep canyons. The region is dominated by a tropical cloud forest with a hot and humid climate. The Huasteca is one of the most biodiverse areas of Mexico, with a diversity of wild animals and plants, as well as agricultural crops. Traditional crops of the region are maize, beans, squash and various types of chilli peppers. After the Spanish conquest other crops were also introduced, including coffee, sugarcane, bananas and citrus fruits. The region is also characterised by a considerable ethnolinguistic diversity, as will be explained below.

Located on the crossroads of Mesoamerica and North America, the Huasteca has a complex history of culture and language contact. In this region several ethnolinguistic groups, both sedentary and nomadic, have coexisted for many centuries before the arrival of the Spanish. The respective native languages spoken by these groups were genetically unrelated to each other and included languages from the Mayan, Uto-Aztecan and Oto-Manguean families. The Spanish conquest of Mexico at the beginning of the 16th century introduced into the picture a new culture and language that changed the reality of the indigenous cultures of the Huasteca and the rest of Mesoamerica. Since European contact, the native peoples have been under increasing pressure from the dominant *mestizo* culture and Spanish, the official language of Mexico. This includes speakers of Nahuatl and Tének, the two main indigenous languages of the Huasteca, which have experienced significant changes in their respective linguistic structures as a result of influence of Spanish, as will be shown in the later parts of this work.

This chapter provides background information concerning the history and geography of the Huasteca region and its linguistic situation from the earliest times to the present. Section §1.2 introduces the history of the region and its linguistic situation prior to the Spanish conquest. Section §1.3 describes the Spanish conquest and the

colonial reality in the Huasteca and §1.4 provides an overview of the linguistic situation in the Huasteca today. A summary is provided in §1.5.

1.2. The Huasteca and its ethnolinguistic groups in pre-colonial times

Our knowledge about the Huasteca's prehistoric ethnolinguistic groups and their migration patterns is unfortunately limited due to the paucity of archaeological studies that have been done in the region. The number of historic documents that provide records about the region in pre-Columbian times is extremely scarce. There are no available sources on the history of the Huasteca written by the indigenous people of the region (Kroefges and Schulze 2013: 122). The only descriptions of the pre-colonial Huasteca were made by the Aztecs, who conquered the region in the 15th century and then regularly visited the area in order to collect tributes.

The term 'Huasteca' itself is the legacy of the Aztecs, who referred to the region using a Nahuatl name 'Cuextec', after the legendary leader Cuextecatl (Sahagún 1961a: 192–194). The term 'Huastec' can be understood in a number of ways. It is often used to denote not only a geographic region but also an ethnolinguistic group: the Huastec people (who refer to themselves as Tének). The Huastec people were, however, only one of many ethnic groups living in the Huasteca, alongside other ethnic groups including the Nahuas, and two Oto-Manguanean groups, i.e. the Pame and the Otomí (also called Hñähñú). Another confusion can arise when referring to the pre-Columbian culture of the region as 'the Huastec culture'. In fact, the culture of the region was not homogenous but rather comprised many ancient peoples living in several cultural centres scattered throughout the area. The Huastec culture cannot be therefore seen as a single culture (Dávila Cabrera 2009: 40).

Although initially the Huasteca was considered a peripheral region isolated from the rest of Mesoamerica in pre-Columbian times and, as such, received less attention in archaeological studies, recent works confirm its unique and important role as a nexus of contact between the cultures of the Gulf Coast, the cultures from the desert of northeast

Mexico and the cultures from the southeastern US (Faust and Richer 2015). The convenient location of the Huasteca made it a crossroads between Mesoamerica, northern Mexico and the American Southeast for economic, intercultural and interregional contacts (Ruvalcaba Mercado 2015).

In pre-colonial times the Huasteca was home to a number of ethnolinguistic groups which were involved in cultural exchange and also language contact and consequent language change. According to García Cook and Merino Carrión (1991: 23), around 1000 BCE the Huasteca was populated by an Olmecoid group, which arrived from what is now the state of Tabasco and southern Veracruz. Over time more groups began to occupy the region, one of which was the ancestors of the Tének people who live in the Huasteca today. The Tének were of Maya origin and arrived from what is now the state of Chiapas in the south of Mexico.

There are many proposals regarding the date of separation of the Tének from the rest of the Maya people. Some scholars, including Swadesh (1953), McQuown (1964) and Kaufman (1972), claim that, considering significant differences between Tének and the rest of the languages of the Mayan family, the split must have happened early, some time in the Pre-Classic period (2500 BCE-250 CE). Using the glottochronology method, McQuown (1964: 69) concluded that the split occurred around 1800 BCE, and Swadesh (1953: 226) postulated that it might have happened even several centuries later, around 1200 BCE. Kaufman (1972: 13) estimated that the separation took place between 2200 BCE and 1000 BCE, with a greater likelihood of the earlier date. The presence of a number of loanwords borrowed from Tének by languages spoken near present-day Huasteca, such as extinct but partially documented Yemé or Pajalat or the reconstructed Proto-Oto-Pamean, is for Kaufman and Justeson (2008) another piece of evidence supporting an early separation of Tének from Proto-Mayan. A later separation of Tének from the rest of the Mayan family has been suggested in studies that analysed the presence of innovative phonological and morphological features in Tének. Campbell (1988: 211), for example, points out that Tének shares numerous sound changes with the languages of the Cholan-Tzeltalan group, including *r>y, *q>k, t j >t, and *k>ch. He also shows that Tének applies similar strategies as Cholan and other lowland and

Western Mayan languages in marking plurality with a separate enclitic morpheme, as opposed to suppletive person markers that indicate plural person in Eastern Mayan languages. Studies by Houston et al. (1998, 2000) and Robertson and Houston (2003), imply that Tének must have been in contact with other Mayan languages until the Post-Classic period (900-1521 CE). The authors identified shared traits between languages of the Cholan-Tzeltalan group including comparable phonological changes, parallel morphological operations (e.g. the distribution of passive and mediopassive forms in Tsotsil and Tének), etymological cognates in Tsotsil and Tének, and similarities in the pronominal system in Tzeltal and Tének. These studies showed that the similarities in Tének and the Mayan languages of Chiapas in Mexico are greater than previously thought, and that Tének should be grouped with these languages. An archaeological study by Zaragoza Ocaña (2015) confirms the late arrival of the Tének into the Huasteca. According to this author the Tének came to the Huasteca in the Classic (250-900 CE) or Post-Classic period.

Another debate concerns the place of the separation of the Tének from the rest of the Maya family. Jiménez Moreno (1942), and later also Manrique (1994), postulated that the Maya culture including Tének originated in the area between the north of the present-day Veracruz and the east of the state of Tabasco in the Gulf Coast region. According to Jiménez Moreno and Manrique, the separation of the Tének from the rest of the Maya family occurred after this region was taken over by groups including the Mixe-Zoquean and the Totonacan people who settled in the Gulf Coast region in the Pre-Classic period. Swadesh (1953: 225) claimed that the split occurred around 1200 BCE somewhere close to the present-day Huasteca. According to McQuown (1964), on the other hand, the separation occurred somewhere near the Grijalva river between Chiapas and Guatemala, where the Chikomuseltek language, the closest attested relative of Tének, was spoken. Kaufman (1976), Campbell and Kaufman (1985) and Campbell (1997) postulated the place of origin of the Maya family, including the Tének, to be in the region of the Chuchumatanes in the Guatemalan Highlands around present-day Huehuetenango. Clark (1994), on the other hand, concluded that the separation occurred somewhere between the modern-day Huasteca and the Guatemalan Highlands, in the

southern part of the present-day state of Veracruz and the Tabasco coast. The Tének, according to Clark, were separated there from the rest of the Maya people as a result of the expansion of the Mixe-Zoquean and possibly other groups. Another possibility is that the Tének, like the Nahuas, arrived in the Huasteca in various different waves between the Pre-Classic (2500 BCE - 250 CE) and the Classic period (Ruvalcaba Mercado 2015: 197).

The linguistic situation in the Huasteca in pre-Columbian times was complex and involved a high level of multilingualism. According to Valencia et al. (2001: 185, 206), it was Tének that was the lingua franca of the northern part of the Huasteca. Other languages were also used locally. In addition to settled groups that practised agriculture, the northern and western pre-colonial Huasteca was home to nomadic groups that spoke several different languages (Assadourian 2008: 82). These probably included the same groups that were recorded in the 17th century by Fray Bautista de Molliendo (1557-1628), who listed the following nomadic peoples living in the northern parts of the Huasteca: Alaquines, Coiotes, Mascorros, Caisanes, Guacames, Pames and Jijotes (Velázquez 1987: 14, 17). Other nomadic groups which in all likelihood also lived in the pre-colonial Huasteca included Capanoquies, Xalaluques and Palaluques (Paniagua Pérez 2001: 197, 213). The members of these groups probably spoke distinct languages different from Tének, but due to the lack of reliable sources it cannot be determined exactly what language each group used. It is certain that the Pame people spoke the Pame language, an Oto-Manguean language that is still in use today. Some of the linguistic varieties of the nomadic groups were in fact still spoken until the 19th century (Ramírez Castilla 2007: 62-63, 70-73). It is fair to expect that there must have been some interaction between the nomadic and settled groups through commerce, wars, alliances and other activities (Paniagua Pérez 2001: 172; Stresser-Péan et al. 2001).

Archaeological evidence suggests that the Huasteca was also involved in commercial and cultural exchange with the American Southeast. According to Dávila Cabrera (2009), the contact occurred as a result of sea or river trips and can be proved by similarities in material culture found in the two regions. These include similar types of urbanisation (e.g. mound builders in Tamtok in the Huasteca and in Cahokia in

Illinois), trapezoidal pectorals decorated with ritual scenes, as well as similarities in decoration and patterns used on ceramic objects (Dávila Cabrera 2009). Additional evidence of contacts between the Huasteca and the American Southeast involve stone pipes with some characteristic features of the southeastern US that were found in graves in Cueva Vetada in the state of San Luis Potosí (Delgado 1958, after Dávila Cabrera 2009: 42).

Another ethnolinguistic group present in the region were the Nahuas, a Uto-Aztecan group. They originated in the Southwest of the present-day United States and, after their migration south, settled in many parts of Mexico including the Huasteca. The exact date of the arrival of Nahuatl-speaking people to Mesoamerica and to the Huasteca in particular is not known. According to Campbell and Kaufman (1976), judging by numerous loanwords in Nahuatl that relate to agriculture, the Proto-Nahuatl speakers arrived in Mesoamerica after the domestication of several plants had already been achieved by the Mixe-Zoquean people. Other works, such as Hill (2001), link the domestication of maize with Uto-Aztecan groups as early as 3600 BCE. Traditionally, the emergence of Nahuatl in Mesoamerica has been associated with the Toltec culture and its main culture centre in Tula (Hidalgo) in the Epi-Classic/Early Post-Classic period (ca. 750-1150 CE). The Nahuatl-speaking groups that arrived early were probably followed by Chichimec migrants, who also spoke Nahuatl (Olko and Sullivan 2013). The population shifts that followed caused further differentiation of those two original dialects of Nahuatl, i.e., the Western and Eastern dialects (Canger 1988). The division of the different Nahuatl dialectal groups proposed by Canger (1988) identifies the first one as the ‘Toltec’ Nahuatl of central Mexico and further south, which was used by the ancestors of today’s speakers of the dialects of Nahuatl in the Huasteca, Sierra de Puebla, Isthmus, and Pipil (also called Nawat). The second dialectal group of Nahuatl included the speakers that arrived in Mesoamerica later and spread into the Valley of Mexico, and to the east and south including Tlaxcala, central Puebla, Morelos, and parts of Central Guerrero.

The origin of the Nahuatl speaking people in the Huasteca and their relation to other ethnic groups from the region, including the Tének, is also debated. Kaufman

(2001) argues that the Tének people settled in the Huasteca first and that Nahuatl speakers, arriving later, adopted many Tének names for local flora and fauna. Examples of Tének loans in Nahuatl include e.g., *akich* ‘pricklenut’ (from *akits*), *koxkox* ‘owl species’ (from *kuxkum*), *palach* ‘tom turkey’ (from *palatx*) (Kaufman 2001: 9-11). Kaufman also claims that many parts of the area where Huasteca Nahuatl is currently spoken were probably Tének-speaking a thousand years ago or less (Kaufman 2001: 4). Apart from Tének, Nahuatl also shows considerable influence of other Mesoamerican languages, including languages of the Mixe-Zoquean, Totonacan, and Oto-Manguean language families (Kaufman 2001).

The Huasteca maintained contact with the ruling centres in central Mexico before and after being conquered by the Aztecs. Commercial contacts with Teotihuacán were confirmed by Du Solier et al. (1947) and Toussaint (1948: 49-50). The peoples of the Huasteca were also in contact with the Nahuatl-speaking centres of Toltec Tula (Armillas 1948), Cholula and Tenochtitlán (Durán 1967; Alvarado Tezozomoc 1980). The Huasteca was conquered by the Aztecs during the rule of Moctezuma Ilhuicamina (1440-1469) and the Aztecs, apart from requiring the autochthonous peoples to pay tributes, also imposed their administration. The contacts with the Nahuatl-speaking Toltecs and later with the Aztecs must have strengthened the position of Nahuatl in the Huasteca. Although this language was already spoken in the Huasteca before the arrival of the Aztecs (Kaufman 2001), the conquest of the region and the imposition of Aztec tributes and administration helped to spread Nahuatl as a lingua franca both in the Huasteca and in other parts of Mesoamerica (Lockhart 1992; Dakin 2010). Unfortunately, although primary sources report the specific tributes that were paid to Tenochtitlán following the Aztec conquest of the Huasteca, they do not mention exactly which other languages were spoken in the Huasteca at the time of the conquest. It remains unclear whether it was Tének, Otomí or Totonac. Alvarado Tezozomoc (1980: 315) confirms that the tributaries were not Nahuas and they used translators who spoke Nahuatl in order to communicate with the Aztec conquerors.

In summary, the Huasteca in the pre-conquest period can be described as a multilingual region at the intersection of Mesoamerica, the northern parts of Mexico and

the American Southeast. The two languages that seem to have been most influential in the pre-Columbian Huasteca were first Tének and then Nahuatl. Nahuatl became dominant in the region around the time of the Toltecs. The importance and the influence of Nahuatl in the Huasteca was later consolidated as a result of the growth of the Aztec empire that controlled the Huasteca from the mid-15th century up to the Spanish conquest.

1.3. The Spanish conquest of Mexico and its consequences for indigenous languages

The Spanish conquest of the Huasteca was a turning point in the history of the region. The Spanish quickly recognised a potential economic opportunity in the rich agricultural lands, large population, rich natural resources, trade routes between the south and north and proximity to the sea (Palka 2015). The Spanish exploration of the area started in 1523 when Francisco de Garay started exploring the Huasteca along the Pánuco River (Pérez Zevallos 2010: 47). Hernán Cortés, the principal conquistador of Mexico, took control of the region, annexed it to the rest of New Spain and founded new Spanish settlements such as Santiesteban del Puerto (later known as Villa de Pánuco) (Pérez Zevallos 2010: 49). According to the first census that was ordered by Cortés, the province of Pánuco was densely populated with approximately 152,000 residents living there shortly before the conquest (Borah and Cook 1963, after Pérez Zevallos 2010: 49). This large population, however, quickly started to decline as a result of conflicts with the invaders, exploitation and the European diseases, to which the indigenous people had no resistance. According to Cook and Borah (1979: 34ff.) who studied lists of indigenous tributaries of the region that corresponds to present-day Huasteca, in 1568 the population of the area was approximately 35,300, and in 1646 it dropped to approximately 8,560. Depopulation also occurred as a consequence of slave trafficking. In 1525, during the time when Nuño de Guzmán was the governor of the Pánuco province, as many as 10,000 indigenous people of the Huasteca were sent to the Antilles as slaves in exchange for cattle (Márquez 1986: 203; Pérez Zevallos 2010: 50).

The post-conquest reality of the Huasteca also saw the displacement of native peoples to new places designated by the colonisers, who needed new lands for agriculture and cattle farming. The status of the local population was organised in terms of *encomiendas*, i.e. grants of large portions of land (and indigenous people as slaves) from the Spanish Crown to colonists who, in return, would pay tributes to the Crown (Pérez Zevallos 2010: 55). As a result of exploitation, many indigenous people died and some left their settlements (Pérez Zevallos 2001) leading to displacement of families, communities and entire ethnolinguistic groups, which affected the transmission of cultural practices and languages.

The arrival of the Spanish settlers into the area also began the process of racial mixing (*mestizaje*) between the Spanish and the local indigenous people. According to data gathered by Escobar Ohmstede and Fagoaga Hernández (2004: 232), in the Huasteca Potosina in 1760 97% of the total population was indigenous and only 3% were non-indigenous. Eighteen years later, in 1778, the percentage of indigenous population dropped to 67% and the remaining 33% included the Spanish, and people of mixed Spanish-indigenous race (*mestizos*), as well as other ethnic groups, such as people of the African descent and *mulatos*.

The four indigenous groups that lived in the Huasteca Potosina in the colonial times were the Tének, the Nahuatl, the Pame and the Otomí people. The latter spoke the Otomí language, which is an Oto-Manguean language related to Pame. Whereas some municipalities of the 18th century Huasteca were populated by only the Nahuatl and the Tének as the two indigenous groups (e.g., Coxcatlan, Tancanhuitz, Tampamolón Corona and Huehuetlán), other municipalities were more ethnolinguistically diverse. This was the case with Xilitla, Tamapache and Tansosob, for example. The presence of Otomí and Pame families was recorded in Xilitla in the 16th century (Llamazares Zúñiga 2001: 39ff.), and although Otomí speakers no longer live in Xilitla today, their presence in the municipality of Xilitla is still remembered by some older residents. The presence of the Pame people in parts of present-day municipality of Xilitla is also mentioned by Llamazares Zúñiga (2001: 40) and by Escobar Ohmstede and Fagoaga Hernández (2004: 225).

During colonial times the Tének peoples also experienced a significant reduction of their geographic area. For example, at the time of the Spanish conquest they were present in the region of Huautla, Huazalingo and Yahualica, as mentioned in the colonial report *Visita de Gómez Nieto* (Pérez Zevallos 2001: 107ff.). Those areas have no Tének speakers today. It is possible that with time, many regions where Tének was spoken became Nahuatl-dominant. Huejutla, for example, had at least two languages in use in the 16th century: Nahuatl and Tepehua (Acuña 1985: 247). Tének must have also been spoken around this town at least until early colonial times, given that the Christian doctrine written by De la Cruz (1571) documents precisely the variety of Tének spoken in Huejutla. Now the only indigenous language spoken around Huejutla is Nahuatl. Prior to 1939 there were also groups of Tének people in Tamaulipas and Hidalgo (Gonzalez Bonilla 1939: 29).

As a result of the Spanish conquest and the imposition of the colonial administration, Spanish became the dominant and prestigious language, while the indigenous languages gradually lost their domains of usage. This process was however slow and complex, and involved many intermediary stages. In 1550 the Spanish King Charles V ordered to extend the use of Spanish among the native peoples of newly conquered Mexico, but this goal soon turned out to be impossible to fulfill. Afterwards, in 1578, Phillip II decided that instead of imposing Spanish learning on new vassals in Mexico who were completely unfamiliar with this language, it would be more viable to actually use Nahuatl as a language of administration and evangelisation. Nahuatl was, after all, already a lingua franca in Mexico and was spoken in many areas as a result of the Aztec expansion in Mesoamerica. It must have seemed natural for the Spanish to use the existing language of communication to administer these parts of the colony. Although Nahuatl was not perceived as an equally prestigious language to Spanish, the use of this Mesoamerican lingua franca had a very practical purpose as the official language of the colony. This situation officially changed in 1634 when Phillip IV returned to a policy of Castilianisation i.e., cultural and linguistic assimilation of the population of the Spanish colony, which lasted until the end of the colonial period (Heath 1972; Hernández de León Portilla 1988; Fountain 2015). Nahuatl was however

still used for administrative and religious purposes (Lockhart 1992), as documented by numerous official documents compiled in Nahuatl in the 17th and 18th centuries, including wills, complaints, and also many missionary religious texts. It remains unknown whether Tének, the other indigenous language of the Huasteca, was used in administration although it is certain that it continued to be used for religious purposes and as a local language in the Tének communities.

A number of indigenous languages of New Spain were used in the evangelisation process. These included, apart from Nahuatl, also Yukatek Maya, Otomí and Zapotec (Oto-Manguéan), Totonac (Totonacan), Purépecha (isolate) and also, as mentioned above, Tének. These languages were studied by friars who compiled grammars and dictionaries, and translated many religious books, including the Christian doctrine. These indigenous languages were also employed by the missionaries after 1634. Tének was used for preaching in the Huasteca at least until the mid-18th century, as illustrated by the work of Carlos de Tapia Zenteno (1698-post 1767). He was a priest in Tampamolón in the Huasteca Potosina who spoke Nahuatl and Tének, and in 1767 published a grammar of Tének with a dictionary, a catechism and Christian doctrine (Tapia Zenteno 1767). The aim of this book was to teach Tének to other missionaries so that they could also evangelise in this language. Seberino Bernardo de Quirós² who also evangelised in the Huasteca Potosina (in Tanlajás) published a grammar of Tének in 1711 (De Quirós 2013 [1711]), which confirms that the use of indigenous languages for religious purposes was a common practice in that time.

The Spanish conquest and Christianisation also contributed to a change of cultural practices of the indigenous peoples, many of which were either eradicated or significantly altered. The effort of the missionaries involved, for example, baptising the indigenous people and imposing new names, new saints and a new worldview. The acculturation process not only affected the settled groups, including the Nahuas and the Tének, but also had repercussions on the nomadic groups. Some of these groups that were present in northern parts of the Huasteca were disintegrated as a consequence of wars with the Spanish or were converted to Christianity (Ruvalcaba Mercado 2015:

² The exact dates of De Quirós's birth and death are unknown (Hurch 2013: 15ff.).

197). The Pame people, for instance, as a result of conquest, adopted agriculture and new religious practices but despite this, they still remain culturally distant from other ethnic groups such as the Tének and the Nahuatl in that they have different ceremonies, a contrasting mythology and distinct agricultural practices (Gallardo Arias 2007: 3, 2011: 18-19).

Even though indigenous languages were used in the colonial period in a non-official contexts, excluding evangelisation or administration in the case of Nahuatl, Spanish was gradually gaining ground as the official language of the colony. According to Hidalgo (2001: 59), by the end of the colonial period 35% of the population in New Spain knew how to speak Spanish but only 0.5% knew how to read and write it. The Mexican independence in 1821 brought freedom from the dominance of Spain, but ironically it resulted in strengthening the use of Spanish in Mexico, since Spanish was one of the unifying factors in the building of the new nation. The dominant position of Spanish as the official language of Mexico was further consolidated in the 20th century when it became the language of newly obligatory formal education. Schooling in Spanish was carried out throughout the country, including in remote indigenous communities, which previously had had little exposure to this language. These political changes in the post-colonial history of Mexico were one of the most significant factors that contributed to the decline of indigenous languages.

1.4. Language vitality of Nahuatl and Tének today

The two main ethnolinguistic groups in the Huasteca Potosina region today are the Nahuas and the Tének. The former speak a local variety of Nahuatl, which, along with other varieties of Nahuatl is the most widely spoken indigenous language in Mexico. Other varieties of Nahuatl in the Huasteca are spoken in the states of Veracruz, Hidalgo and in the northern Puebla. Elsewhere in Mexico, Nahuatl speakers are also located in communities in the State of Mexico (*Estado de México*), Puebla, Guerrero, Morelos, Tlaxcala, Oaxaca, Michoacán, Durango and the outskirts of Mexico City (Milpa Alta).

According to the data provided by INEGI (*Instituto Nacional de Estadística y Geografía*, the National Institute of Statistics and Geography), the total number of speakers of Nahuatl in Mexico over three years old in 2020 was reported to be 1,651,958 (INEGI 2020a).³ The biggest concentrations of Nahuatl speakers in the Huasteca are around Huejutla in Hidalgo, Chicontepec in Veracruz, northern Puebla state and in the southern part of the state of San Luis Potosí. The principal municipalities of the state of San Luis Potosí where Nahuatl is spoken are: Tamazunchale, Matlapa, Xilitla, Huehuetlán, Tancanhuitz, Tampacán, Coxcatlán, Axtla de Terrazas, San Martín Chalchicuautla and Tampamolón Corona.

With regard to Tének, the total number of speakers over three years old was reported to be 168,729 (INEGI, 2020a).⁴ Almost 60% of all Tének speakers live in the state of San Luis Potosí in the Huasteca Potosina in the following municipalities: Aquismón, Tancanhuitz, Tanlajás, Xilitla, San Antonio, San Vicente Tancuayalab, Ciudad Valles and Tampamolón Corona. The remaining 40% of Tének speakers live in the state of Veracruz in the municipalities of Tantoyuca, Chontla, Tancoco and Chinampa de Gorostiza.

Parts of the Huasteca are also inhabited by speakers of other ethnolinguistic groups. The Pame people are concentrated in the municipalities of Santa Catarina, Lagunillas and Tamasopo in the state of San Luis Potosí, and in some eastern parts of the state of Querétaro, such as Arroyo Seco. The total number of speakers over three years old was reported to be 11,924 (INEGI 2020a). The Otomí people live in the Eastern Highlands in the southern part of the state of Veracruz and the northern part of the state of Puebla. There are also Totonac and Tepehua speakers, who live in the northern part of the state of Puebla. The present-day locations of speakers of the indigenous languages of the Huasteca are shown in Figure 1.2 below. As a result of migration there are also now Nahuatl, Tének and Pame speakers in urban centres such as Monterrey, Mexico City

³ According to INEGI (2015), the total number of speakers of Nahuatl in 2015 was 1,725,620. Therefore, in the 2020 census the number of people who declared their knowledge of Nahuatl dropped by 73,662, which is about 4% less than in 2015.

⁴ The number of people declaring their knowledge of Tének also was smaller in 2020 than in 2015 (173,765 - INEGI 2015). In 2020 5,036 fewer individuals stated that they spoke Tének, which was almost a 3% drop from 2015.

and Guadalajara in Mexico as well as a considerable number of speakers of those indigenous languages who live in the United States (e.g. in Texas and California).

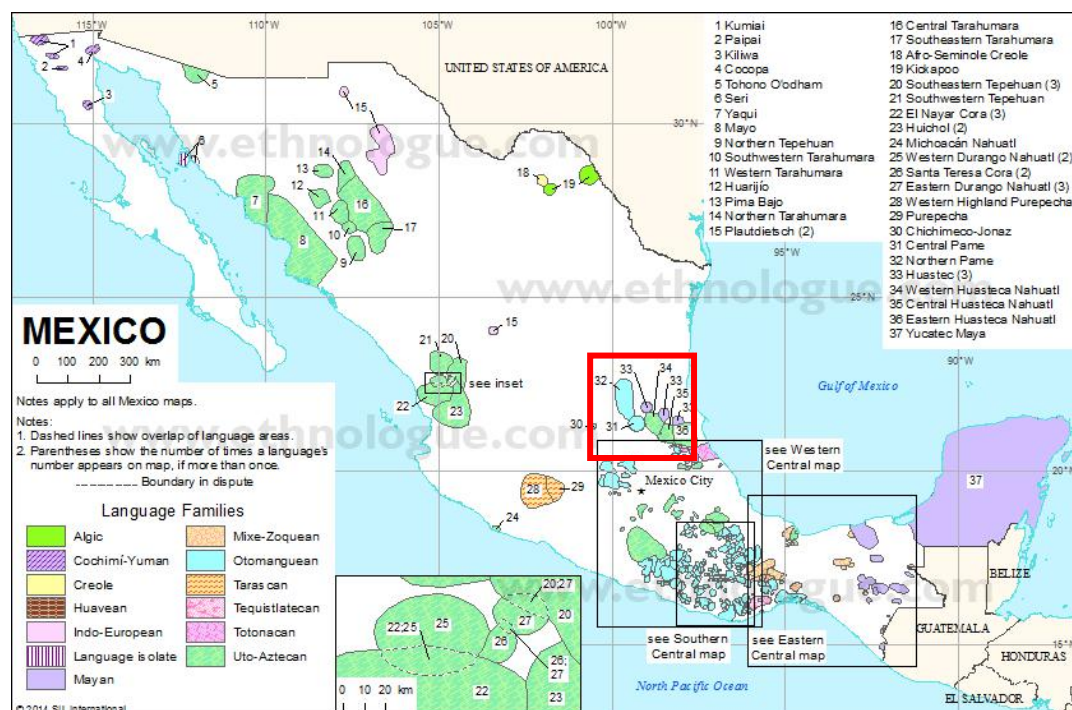


Figure 1.2. Indigenous languages of Mexico (Eberhard et al. 2021).
The red box indicates the approximate location of the Huasteca.

Although the number of speakers of the indigenous languages of the Huasteca appears high, the vitality of all of the indigenous languages of the region is in fact decreasing. This situation is due to several factors including the rise of Spanish as the dominant language of the region and throughout Mexico, lack of sufficient official support for the indigenous languages, and formal education in Spanish. A long history of racism and discrimination have resulted in negative attitudes towards heritage languages and the interruption of transgenerational language transmission. Despite the high number of speakers of indigenous languages reported by the Mexican government, these statistics should not be taken as conclusive since many people report speaking an indigenous language even if they actually do not use this language as the principal means of communication. Sometimes respondents describe themselves as speakers of an indigenous language since this can give them access to various government subsidies or projects. Also, to the advantage of the Mexican government, the data reported by INEGI

inflates the numbers of the users of native languages and makes Mexico look like a plurilingual and pluricultural nation that promotes the indigenous languages and prides itself in its indigenous heritage. Unfortunately, the linguistic situation is far less optimistic, as will be explained below.

The analysis of the current situation of indigenous languages in Mexico that will be provided here is based primarily on observations of the status of Nahuatl and Tének in the municipality of Xilitla, San Luis Potosí, where most data for the current study was collected between 2014 and 2020. The situation in Xilitla is, in most cases, representative of the situation of indigenous languages in the Huasteca Potosina and, to some extent, also in the whole of Mexico.

One of the important characteristics of the current profile of speakers of indigenous languages is that they are mostly bilingual, speaking an indigenous language as well as Spanish. In the Huasteca Potosina in 2005, as many as 92.5% of Nahuatl speakers also spoke Spanish (INEGI 2005: 26). In the case of Tének, the percentage of speakers who were bilingual was slightly smaller, at 86.5% (INEGI 2005: 26). The monolingual speakers who only communicate in an indigenous language are usually people over 65 years old, who did not attend schools with compulsory formal education in Spanish. These figures contrast, for example, with data available for the Tének speakers in Xilitla from 1930, which was reported in González Bonilla (1939: 37). In 1930, out of 532 people who spoke Tének in the municipality of Xilitla, as many as 306 (or 58%) were monolingual. As of 2020, the number of monolingual Tének people is much lower. In the Tének villages where I did my fieldwork I did encounter a few elderly Tének speakers who had difficulties communicating in Spanish, but there were only a few isolated cases of such speakers in the whole community. Occasionally in kindergartens and primary schools there are children who also have difficulties communicating in Spanish, but they gain confidence speaking the official language as they continue formal education in Spanish provided by teachers that do not speak Tének.

According to the most recent data from 2020 (INEGI 2020b), the percentage of indigenous people who are able to communicate in Spanish and their respective heritage language is even higher than in 2005 (INEGI 2005). On average, as many as 95% of

speakers of any of the indigenous languages in the Huasteca Potosina (i.e., Nahuatl, Tének and Pame) are bilingual in Spanish (see Table 1.1).

Table 1.1. Use of indigenous languages and bilingualism in principal municipalities of the Huasteca Potosina for population over 3 years old (INEGI 2020b). Percentages added.

Municipality	Total population	Number of speakers of an indigenous language	Number of bilingual speakers (indigenous language and Spanish)	Bilingual speakers as a percent of indigenous language speakers	Indigenous language speakers as a percent of the population
Aquismón	45,371	31,575	28,171	89%	70%
Axtla de Terrazas	30,892	14,869	14,459	97%	48%
Ciudad Valles	171,646	12,757	12,225	96%	7%
Coxcatlán	14,948	11,592	10,802	93%	78%
Ébano	23,341	168	167	99%	0.7%
Huehuetlán	14,537	9,001	8,631	96%	62%
Lagunillas	5,226	75	74	99%	1.4%
Matlapa	27,412	15,074	14,517	96%	55%
San Antonio	8,949	7,325	6,992	95%	82%
San Martín	17,702	7,255	6,926	95%	41%
Chalchicuatla					
San Vicente	14,330	3,189	3,131	98%	22%
Tancuayalab					
Santa Catarina	11,431	7,163	5,999	83%	63%
Tamasopo	27,733	3,239	3,075	95%	12%
Tamazunchale	89,958	31,673	30,383	96%	35%
Tampacán	13,695	5,525	5,312	96%	40%
Tampamolón Corona	12,913	7,475	7,175	96%	58%
Tamuín	35,302	4,404	4,336	98%	12%
Tancanhuitz	19,313	12,909	12,388	96%	67%
Tanlajás	17,334	13,793	13,085	95%	80%
Tanquián de Escobedo	12,803	2,052	2,012	98%	16%
Xilitla	47,111	18,227	17,706	97%	39%
TOTAL	661,947	219,340	207,566	95%	33%

Compulsory education in Spanish has contributed to a decrease of the vitality of indigenous languages. The introduction of obligatory formal education in the 20th

century was motivated by a plan to improve the levels of literacy and also to facilitate the acculturation of the indigenous people. This was done through the medium of the official language, Spanish. The use of indigenous languages at school was discouraged by the teachers or even forbidden, and some students were physically punished or bullied by their teachers (or their *mestizo* peers) for speaking their heritage language. Bilingual and bicultural models of preschool and primary education were later introduced in some indigenous villages, but the model of education these schools provide is still based on Hispanisation with only a portion of the curriculum provided in an indigenous language for the children who have not yet gained confidence in Spanish. The *de facto* aim of such bilingual schools is not to educate through the indigenous language but to gradually introduce Spanish and prepare the students for further education in the official language. The teachers in these bilingual schools are often not native speakers of the respective indigenous language. Therefore, bilingual schools appear to have more of a symbolic function in the Mexican education system, without actually providing indigenous languages with a functional value as languages of instruction and study. What is more, the discrimination against indigenous students who are not proficient in Spanish continues in schools located in many communities across the Huasteca even until today.

Similarly to bilingual education, other forms of official recognition of indigenous languages in Mexico have also solely a symbolic value. Nahuatl and Tének, as well as other native languages of Mexico, are legally recognised as national languages by the *Ley General de Derechos Lingüísticos de los Pueblos Indígenas* (General Law of Linguistic Rights of the Indigenous People) of 2003. This law states that Mexico is a plurilingual country and confirms that native languages should be protected and promoted, including in official contexts such as schools and government administration. According to the law, no person should be discriminated against for speaking an indigenous language. However, despite the fact that indigenous languages are legally recognised and their use is promoted by law, this is unfortunately not always reflected in everyday life. The official use of indigenous languages in the local government administration in Xilitla, for example, is very limited. Despite the fact that Xilitla is a

municipality with a very high percentage of indigenous people, among whom as many as 43% speak indigenous languages (*Xilitla, Monografía de los Municipios de México, S.L.P.*, 2010), employees in the government administration are not required to speak an indigenous language. The local government is unable to provide service in Nahuatl and requires monolingual Nahuatl or Tének speakers to provide a translator themselves. The department of *Asuntos Indígenas* (indigenous affairs) is an exception to this situation, as its employees do speak Nahuatl (but not Tének). Similarly to local government administration, medical centres, hospitals and courts are also not required by law to have employees who are fluent in an indigenous language.

Nahuatl and Tének are rarely present in the linguistic landscape of Xilitla. There are no official signs in Nahuatl or Tének in the local government buildings or in the streets. The few multilingual signs that have been introduced around the main tourist attractions are in Spanish, English and Braille. Ironically, even the *Casa de la Cultura Nahuatl* ‘House of the Nahuatl Culture’, a cultural centre located on the outskirts of Xilitla, has an information sign in Spanish, English and Braille but not in Nahuatl. Some of the local businesses, including several shops and hotels, have adopted names in Nahuatl, probably for commercial reasons. However, service for customers in those businesses is in Spanish, unless an employee happens to speak Nahuatl or Tének.

The presence of both Nahuatl and Tének in the local media is minimal. There are neither local newspapers nor TV programmes in indigenous languages. There are, however, radio programmes transmitted in Nahuatl, Tének and Pame by the local radio station XEANT *Voz de la Huasteca* (Voice of the Huasteca) operating from Tancanhuitz and funded by the *Instituto Nacional de los Pueblos Indígenas* (INPI, National Institute of Indigenous Peoples). The radio station promotes indigenous culture, music and languages and is widely listened to among the indigenous people of the Huasteca Potosina.

The use of indigenous languages is promoted in Xilitla by some independent and non-governmental initiatives. Nahuatl classes taught by a native speaker are offered for a small fee at the *Instituto Xilitlense de Bellas Artes* (IXBA, Xilitla Institute of Fine Arts), a local cultural institute. The interest in them is, however, very limited. A free

Nahuatl course that was organised by a local Nahuatl speakers' collective and myself in the summer of 2017 also saw limited interest. The biggest Nahuatl-promotion event in Xilitla took place in 2016 and was organised by myself in cooperation with local NGOs and the municipal government. It was a three-day conference promoting indigenous languages and linguistic tourism, and it attracted approximately 50 participants including language activists, Nahuatl teachers and young Nahuatl speakers from the region of the Huasteca. Nahuatl is also occasionally used (along with Spanish) during workshops or events organised by local non-profit organisations operating in the indigenous villages in the municipality (e.g. Sedepac Huasteca, COCIHP and World Vision). Sedepac Huasteca, for example, employs both permanent and temporary Nahuatl speaking staff to organise workshops on gender equity, human rights and sustainable technology. The instruction during those workshops is given in Spanish or in Nahuatl depending on the language proficiency of the participants.

Local indigenous villages are the primary spaces where Nahuatl and Tének is spoken, but even there Spanish is being used as the first language by a growing number of indigenous people. In certain villages the indigenous language is still used in official community gatherings called *asambleas*, and also in some other meetings and workshops. In many households Nahuatl or Tének is used for everyday communication but there is an increase in the number of households where Nahuatl is only spoken by the older members of the family. Many parents, despite being brought up speaking Nahuatl or Tének themselves, decide not to pass on their heritage languages to their children and speak to them in Spanish instead. The children sometimes pick up some Nahuatl or Tének listening to conversations between the adults, or because their grandparents speak to them in an indigenous language, but generally they do not use this language as their preferred means of communication with their parents, friends or teachers. Family members themselves often discourage children from speaking Nahuatl or Tének. Sometimes the parents do not recognise their own agency in not transmitting the heritage language to their children and blame the children instead, saying that they simply did not want to learn to speak it.

Nowadays Spanish has consolidated its status as the preferred means of communication for most young members of the Tének and Nahuatl ethnic groups. Spanish is the language of education, local and national politics and commerce. Spanish is also the language of the news, trendy TV programmes, Facebook and WhatsApp. The overall message that the Nahuatl and the Tének youth receive is that Spanish is a more useful, more prestigious language. Spanish is associated with the urban centres and with *mestizo* culture that represents a more prosperous and more desired lifestyle for many indigenous communities that have suffered centuries of discrimination and marginalisation.

The spectrum of declared language attitudes towards both Nahuatl and Tének is very broad. Usually when adults are asked about their opinion about their heritage language they declare that they consider it to be of much value, but these often are the same people who did not pass on the indigenous language to their children. These declarations have, therefore, no confirmation in reality. Children and adolescents, on the other hand, when asked whether they speak or understand an indigenous language, often deny any knowledge of Nahuatl or Tének, even though they confidently use it whispering to each other in class or chatting with their classmates at breaks. It is also not uncommon to hear people (both indigenous and non-indigenous) referring to local languages as *dialectos* ‘dialects’, which in Mexico is used as a derogatory term that implies that an indigenous language is worth less than Spanish. I have also heard many Nahuatl speakers disapprovingly calling their language *revuelto* ‘mixed, messy’, referring to a large number of Spanish loanwords, which, in their eyes, make their language less authentic and not capable of conveying all the necessary concepts and therefore of less value than Spanish.

Another factor contributing to the reduction of vitality of indigenous languages is migration. The lack of employment in the Huasteca and the desire to raise living standards have led many people, especially young people, to migrate outside their communities to urban zones, such as Monterrey, Mexico City, or the US. Although some of them only go away temporarily to work, most migrants decide to settle in a place where they can have a guaranteed source of income. Once they are away from the

Huasteca, many abandon their heritage language as a result of reduced contacts with other speakers of the same variety, or because they no longer consider speaking an indigenous language useful or necessary. Most migrant parents, despite speaking or understanding Nahuatl or Tének, do not pass on their heritage language to their offspring. One of the consequences of migration is the fact that in the Huasteca there are at present many Nahuatl or Tének speaking grandparents who cannot communicate with their Spanish-only speaking grandchildren, who were raised in Monterrey or other urban centres outside of the Huasteca.

As mentioned before, the role of evangelisation in the acculturation of indigenous people and indigenous language conservation in Mexico is complex. Similarly to the missionaries who were preaching in indigenous languages in colonial times, missionary work in the Huasteca today is also partly done using indigenous languages. There are Catholic and Evangelical congregations that provide religious services in Nahuatl. Jehovah's Witnesses, who are very active in the region, distribute parts of their reading materials in Nahuatl and Tének as well. The missionaries of the Summer Institute of Linguistics (SIL) have also developed many materials on Huasteca Nahuatl (Beller [N.] and [Cowan de] Beller 1979, 1984, 1985) and Tének (Larsen 1946, 1947, 1955, 1972), as well as a translation of the New Testament in both languages.

Due to bilingualism and exposure to Spanish, the indigenous languages of the Huasteca have acquired many Spanish borrowings on all levels of their structures. It is very common to hear Spanish lexical loans in Nahuatl or Tének discourse. Whereas some speakers make a more conscious effort to avoid lexical borrowings from Spanish, other speakers, especially younger ones, are not concerned about this. Those speakers not only use older Spanish borrowings but also replace Nahuatl native vocabulary with Spanish equivalents. Whereas the speech of older monolingual Nahuatl and Tének users living in remote indigenous communities tends to show more limited Spanish influence, the speech of bilingual people, who have more contact with *mestizo* community or work in an urban centre outside the Huasteca, is influenced by Spanish to a greater extent.

Finally, in the case of some communities or families, the knowledge of Nahuatl or Tének has already been lost or is disappearing. It is hard to predict the fate of those

indigenous languages, but taking into consideration the factors that have been described in this section, it seems likely that Nahuatl and Tének will keep losing ground to Spanish. Spanish is now spoken in domains in which local indigenous languages were previously used such as family or community life. Spanish has become the preferred language of communication not only for *mestizo* people in Mexico, but also for many people of Nahua or Tének origin who have abandoned their heritage language in favour of a more prestigious and, as they are convinced, more useful Spanish.

1.5. Concluding remarks

Although the Huasteca has been at the crossroads between Mesoamerica and the American Southeast, and has had a long and rich history of cultural exchange between numerous ethnolinguistic groups, the topic of language contact in this part of the world is understudied. The limited evidence for contact among the indigenous languages used in the Huasteca before the arrival of the Spanish includes many shared vocabulary items referring to local flora and fauna attested in Tének and Nahuatl, the two main indigenous languages spoken in the region today. The arrival of Spanish to the Huasteca in the 16th century has had a profound impact on the indigenous languages of the region. Since the Spanish conquest, the position of the colonial language has slowly grown from being a language used only by the Spanish and *mestizo* elites to being the preferred language of communication even for most Nahua and Tének people today. Although both Nahuatl and Tének are still used in many indigenous communities, almost all of the speakers of the two languages are bilingual in Spanish and many use their respective heritage language only in very restricted contexts of family and community life. The dominant position of Spanish is visible on a linguistic level also, and manifests itself in a great number of lexical and structural borrowings that stem from the intense and long contact with the colonial language. Before I move on to the study of language contact phenomena that can be observed in Nahuatl and Tének, I first provide background information on the theory of language contact and change in the chapter that follows.

Chapter 2: Language contact and contact-induced change: theoretical background

2.1. Introduction

Before I move on to analysing the influence of Spanish on the morphology and syntax of Nahuatl and Tének, I present a theoretical background to the topic of language contact and language change that stems from contact. In the following sections I provide a definition of language contact and discuss types of language contact phenomena at both the individual and the societal-level. In particular, I focus on bilingualism as a principal concept in language contact studies. I also discuss the range of sociolinguistic factors that affect language change, and I focus on two pairs of language contact outcomes which consider these factors: language complexification vs. language simplification and language maintenance vs. language shift. I deal with different outcomes of language contact including borrowing and other related phenomena such as cross-linguistic influence and code-switching. A part of this chapter is also dedicated to types of lexical borrowings and structural borrowings. Furthermore, I provide a short review of the so-called borrowability scales which have been proposed by various scholars. Taking into account that the two indigenous languages focused on in this work form part of the Mesoamerican linguistic area, I also discuss the topic of linguistic convergence and the diffusion of features within the linguistic area in question.

The structure of this chapter is as follows. Section §2.2 deals with the typology of language contact phenomena on the individual and societal levels. Section §2.3 provides a definition of borrowing and discusses lexical borrowings, their adaptation to the receiving language and the motivation for acquiring foreign lexical elements. Structural borrowings and a summary of the proposed hierarchies of borrowings are also dealt with in this section. Section §2.4 focuses on the topic of convergence and linguistic

areas, with special attention paid to the Mesoamerican linguistic area. General remarks on the methodology of language contact studies are presented in §2.5, and the methodological principles as well as the sources of data for this study are described in §2.6. Concluding remarks are given in §2.7.

2.2. Types of language contact phenomena

2.2.1. Introduction

Language contact is associated with a number of individual and societal-level phenomena, of which bilingualism is perhaps one of the most crucial concepts. Depending on the age at which a language is acquired and the manner of its acquisition, different outcomes regarding language performance may be expected. Moreover, societal factors, including relations of power between speech communities, also affect the outcomes of language contact. Depending on such characteristics as the size of a community and the type of social networks within it, language contact can result in the complexification or simplification of a language at different levels of its structure. Different social conditions can also lead to two contrastive scenarios of language contact, namely language maintenance and language shift. These two scenarios were developed in a model by Thomason and Kaufman (1988), which I also briefly discuss in this part of the chapter.

2.2.2. Bilingualism

Language contact, which can be defined as “the use of more than one language in the same place at the same time” (Thomason 2001: 1), most often occurs in face-to-face interactions among groups of speakers who are involved in shared commercial, political, cultural or social activities including trade and migration, as well as conquest and

colonisation.⁵ Although language contact, like language itself, is a social phenomenon, it is a bilingual individual that is at the origin of language contact. Weinreich (1968 [1953]: 1), who defined bilingualism as “the practice of alternately using two languages”, claimed that “[t]he language-using individuals are [...] the locus of the contact”.

An important issue to consider when considering bilingualism and language change is in what manner and at what age languages are learned by a bilingual individual. One scenario involves a child becoming bilingual by acquiring two languages from a very early age such that both of these languages become their native, or first languages (i.e. 2L1). This type of bilingualism is referred to as ‘natural or primary bilingualism’ by Houston (1972) or ‘simultaneous bilingualism’ by Tabors (1997).⁶ In contrast, when someone’s second language is not their native language and it is learned through instruction, i.e. becomes their L2 apart from their native L1, then this situation is a case of ‘secondary or sequential bilingualism’ (Baetens Beardsmore 1982: 8).

Whether a person acquires two or more languages simultaneously or in sequence determines their competence in those languages and possible language contact phenomena. According to Meisel (1989), De Houwer (1990), and Paradis and Genesee (1996), children who are brought up as simultaneous bilinguals are capable of separating their two grammars from birth. In such a situation, language contact phenomena will be different from the phenomena that can be observed in the case of secondary bilinguals, for whom their L1 is a precursor to learning their L2. Secondary bilingualism typically results in a phenomenon called ‘linguistic interference’ (Weinreich 1968 [1953]), in which someone’s competence in L1 affects their performance in L2 (see §2.3.2.1). Moreover, adult and post-adolescent second-language acquisition is also related to the relative inability to learn new languages perfectly (Trudgill 2009: 99-100) because of having passed the critical threshold for language

⁵ Language contact can also take place via the medium of written sources or the media of mass communication such as radio, television, newspapers, social networks, phone, text messaging services and the internet.

⁶ Natural bilingualism implies a situation in which both languages are acquired by a child either at home or by moving to a community in which a person has to speak more than one language (Baetens Beardsmore 1982: 8).

acquisition (Lenneberg 1967). This type of bilingualism often results in language simplification, as I explain below.

2.2.3. Social factors in language contact

Apart from the age and manner of language acquisition by bilinguals, the characteristics of the community in which they live also determine the outcomes of language contact. Some of the social factors that influence diffusion of features are: community size, degree of contact with other groups, type of social networks (loose vs. dense), degree of social stability and amount of shared information (Trudgill 2011). Thus, language change is typically slower in small, tightly-knit societies, in which members are bound together by either linguistic or other types of solidarity.⁷ This contrasts with large, loosely-knit communities, which are linguistically and ethnically more diverse. Such communities are usually more open to social and economic interactions with neighbouring groups and, as a result, are more prone to language change.

Relations within a community and hierarchies of prestige groups, as well as relations of dominance among languages or dialects, determine the effects of language contact and the direction of the transfer of features. Usually, a more prestigious language (superstrate, i.e. a minority group with high status) influences the one with less prestige (substrate, i.e. a majority group with low status) (Hickey 2010: 7). The speakers of the majority low-status language gradually acquire the language of the minority, eventually abandoning their native variety (Hickey 2010: 20). In Mexico for example, Spanish, the superstrate language of the colonisers who were initially in the minority, gradually gained dominance over local languages (such as Nahuatl), which were at first spoken by the majority of the population. The influence of Spanish resulted in Nahuatl becoming less prestigious and led many people of Nahua origin to shift to speaking Spanish. An opposite situation involves a lower status variety influencing a language with more prestige, as can be observed in the case of Chicano English which

⁷ According to Milroy and Milroy (1985), this may be due to the fact that norms are more likely to be preserved and passed on to new generations in this kind of reduced-size communities.

influenced the use of English in the southwestern United States by its native speakers (see §2.3.2.1).

Societal bilingualism may also involve a situation in which two (or more) languages coexist in a more stable situation. This phenomenon, which Ferguson (1959) called ‘diglossia’, refers to a setting in which two linguistic varieties are used by a single language community, each in specific domains.⁸ That is, a particular community, apart from their everyday ‘low’ variety used for ordinary conversations, uses a second, ‘high’ variety in certain other situations, including in written form or in formal education (Ferguson 1959). The ‘high’ variety is used with different degrees of competence by speakers of the ‘low’ variety.

An important parameter that determines the potential outcomes of contact between languages are speakers’ attitudes towards certain languages, as well as their attitudes towards the adoption of foreign elements into their native language. While speakers of some languages are more keen to accept foreign lexical material, others may be more resistant to loanwords. The more positive attitudes are towards a language, the more likely it is that this language will be a source of borrowing.⁹ A different scenario involves a situation in which speakers of certain varieties engage in deliberate language change. Examples of such language change, apart from instances of language planning, include situations in which a group of speakers alter their language in some way in order to mark their distinct identity from the same language spoken by a neighbouring group. Thomason (2006: 348) mentions the example of Lambayeque Quechua, whose speakers changed certain vowel-consonant sequences in their linguistic variety and

⁸ Whereas for Ferguson (1959) linguistic varieties involved in diglossia have to be closely related, such as e.g. standardised Arabic and local Arabic vernaculars, for Fishman (1967) unrelated languages can also act as ‘high’ and ‘low’ varieties.

⁹ This relationship between language attitudes and borrowings in a language was shown, e.g. by Dozier (1956) who analysed Spanish borrowings in the Rio Grande Tewa language (Tanoan) spoken in New Mexico, US, and the Yaqui language (Uto-Aztecan) spoken in Sonora, Mexico and Arizona in the US. Dozier discovered that Tewa is more resistant to acculturation compared to Yaqui. Whereas Yaqui speakers tend to borrow freely, Tewa speakers prefer not to accept loans and create words using native grammatical and lexical resources to describe new objects and concepts instead. Reluctance to borrow words from English or French appears to be also an areal feature in the Pacific Northwest. Both Montana Salish (Salishan) and Nez Perce (Plateau Penutian), and other languages of the region prefer to create words from native resources to designate new items. For example, ‘automobile’ in Montana Salish is *p’ip’ úy šn*, which literally translates as ‘it has wrinkled feet’ (Thomason 2006: 344).

replaced, e.g., *yawar* with *yawra* ‘sorghum’.¹⁰ Moreover, intentional language change may also involve its deliberate simplification in order to discourage outsiders from learning the “true” language. The Delaware Native Americans, for example, purposefully spoke a distorted language to European missionaries and traders, as recorded in 1628 by the Dutch missionary Michaëlius (Thomason 2006: 343).

2.2.4. Simplification and complexification

Language contact typically results in language change that can involve lexical, phonetic and/or morphosyntactic innovations which can be classified in a number of ways. Apart from purely linguistic models of language change, predictions about how a language can evolve have also been made based on the type of societies that are involved in a contact situation, as I mentioned above. One such estimation envisages two scenarios: complexification or simplification. Complexification tends to occur in low-contact, small, tightly-knit communities with high social stability, dense social networks and large amounts of communally shared information (Trudgill 2009, 2011).¹¹ Such communities typically have “stable, long-term, co-territorial, contact situations involving childhood - and therefore *pre-threshold* and proficient - bilingualism” (Trudgill 2009: 101). Givón (1979: 297) referred to these linguistic groups as ‘societies of intimates’, “where all generic information is shared” and contrasted them with ‘societies of strangers’. An example of complexification is the emergence of evidentials (specification of the source of information), which is a grammatical category confined to languages spoken by small traditional societies, e.g. the speakers of Tariana (Arawakan) from the Amazon (Aikhenvald 2004: 117ff.). Simplification, on the other hand, is more likely to occur in the case of large societies with loose social networks,

¹⁰ Other cases of deliberate language change include creation of a secret language so that it cannot be understood by the outsiders. Lunfardo, a secret jargon originally created among the criminals of Buenos Aires, distorts the Spanish lexicon by adding loanwords from Italian (e.g. *gamba* ‘leg’) or reversing the order of syllables within standard Spanish words, as in *lorca* ‘heat’ (from *calor* ‘heat’) (Gobello and Olivieri 2005).

¹¹ Trudgill (2009) also considers cases of ‘spontaneous’ complexification, which he contrasts with ‘additive’ complexification. Spontaneous complexification can occur in low-contact varieties of ‘big’ languages such as English. He provides examples for the development of irregularities and redundancy in several dialects of English, including Norfolk English.

low stability and a small amount of shared information. Adult language contact and adult language learning mainly occur in this kind of society.

Complexification and simplification can affect different levels of linguistic structure. The results of complexification include an increase in irregularities, as illustrated in the development of the irregular preterite form *shew* of the verb *show* in the Traditional Dialect of the English county of Norfolk (Trudgill 2009: 105). Decrease in morphological transparency, on the other hand, is exemplified by the replacement of the universal singular neuter pronoun *it* used in both the subjective and the objective form in Standard English with the subject form *that* used in stressed position and *it* used elsewhere in the dialect of Norfolk (Trudgill 2009: 106). Complexification can also manifest itself as an increase in both syntagmatic redundancy (i.e. repetition of information in grammatical agreement) and paradigmatic redundancy (i.e. morphological expression of grammatical categories, declensions) (Trudgill 2009: 107-108). As a result of complexification, a language can increase its phoneme inventory, or develop a fusional or synthetic morphology. It can also become polysynthetic, and add new grammatical categories such as evidentiality and complex pronominal systems. These complex linguistic phenomena were referred to by Dahl (2004) as ‘mature phenomena’ that develop in one of the later stages of the ‘maturation process’.

In simplification, on the other hand, irregularities typically become reduced, as exemplified by the replacement of *kine* with *cows* as the plural form of the noun *cow* in English (Trudgill 2016: 160). Lexical and morphological forms become more transparent. The substitution of the form *holp* with *helped* in English is an example of a more morphologically transparent preterite form of the verb *help* (Trudgill 2016: 160). The loss of syntagmatic and paradigmatic redundancy is also typical of simplification, which tends to occur in high-contact, large societies with ‘sub-optimal transmission’ (Dahl 2004: 274) and adult language contact. It usually involves imperfect language learning by adults and adolescents.

An extreme case of simplification involves the creation of pidgin languages. One of the contexts in which his type of languages developed involved contact between

non-standard colonial varieties of such European languages as English, Spanish or French, and several non-European languages spoken in the Indian, the Pacific and the Atlantic Oceans, mostly during the 17th to the 19th centuries (Mufwene 2015: 133). A pidgin language was defined by Holm (2010: 253-254) as “a reduced language that resulted from extended contact between groups of people with no language in common. It evolved because they needed some means of verbal communication, e.g. for trade, but no group learned the native language”.¹² According to Holm (2010: 254), a pidgin is typically created when people with less power, i.e. the speakers of the substrate language, learn the vocabulary used by the people with more power, i.e. the speakers of the superstrate language. Whereas the superstrate variety contributes vocabulary, the grammar comes from the substrate variety.¹³ As noted by Trudgill (2009: 99), pidginisation is one of the processes that typically occur in post-threshold language acquisition, i.e. among adolescents and adults.¹⁴ Examples of languages that originated as pidgins include Tok Pisin, the pidgin English of Papua New Guinea (Hall 1966; Faraclas 2007).

Some pidgin languages can undergo subsequent complexification and become creole languages.¹⁵ According to Holm (2010: 256) creoles are nativised pidgins spoken natively by the whole speech population of people who were displaced geographically and lost ties with their original language and sociocultural identity.¹⁶ Creolisation typically also involves reorganisation of the grammar, in which, e.g. a coherent verbal system or complex structures such as embedding are created (Holm

¹² Romaine describes pidgin languages in the following way “[a] pidgin represents a language which has been stripped of everything but the bare essentials necessary for communication“ (1988: 24).

¹³ This vocabulary becomes first adapted in terms of pronunciation, grammar and semantics and later the superstrate speakers adopt those changes made by the substrate speakers and no longer speak the language as they would within their own group (Holm 2010: 254). Common features of a pidgin include dropping inflections (as in e.g. *two wife* instead of *two wives*), reducing the amount of different words and extending the meaning of the remaining words, as well as the use of circumlocutions (Holm 2010: 254).

¹⁴ According to Bickerton “pidginization is second-language learning with restricted input” (1977: 49).

¹⁵ Some scholars, including e.g. Mufwene (2015: 134), argue that pidgins and creoles are created independently under different circumstances and that creoles not always evolve from pidgins. See Mufwene (2015) for further discussion and examples.

¹⁶ Many creoles were created when children born to the African slaves in the European colonies in the Americas found pidgin languages spoken by their parents more useful than their native African languages. An example of such a linguistic variety is Haitian Creole based on French.

2010: 256-257).¹⁷ Although the list of processes related to language creation can also include other phenomena, such as semi-creoles or mixed languages, these are not discussed here in greater detail since they are not directly linked with the subject of the present work.¹⁸

2.2.5. Language maintenance and language shift

The most well-known and widely cited sociolinguistic model of language contact and its effects on languages was proposed by Thomason and Kaufman (1988). The two scenarios considered in this model are ‘language maintenance’ and ‘language shift’. In a language maintenance situation foreign features, i.e. borrowings, are incorporated into the receiving language but the speakers continue to use their native language. The effect of language contact reflected in the phonology and morphosyntax of the receiving language in this situation is weak to moderate. The second scenario, i.e. language shift, involves structural (shift-induced) interference and is closely related to imperfect post-threshold language learning. As Thomason and Kaufman explain:

¹⁷ Among processes typical to creolisation there are acquisition of phonological rules not found in pidgins or expanding the vocabulary to cover more aspects of life. Semi-creole language varieties include some non-standard varieties of European languages spoken in post-colonial countries such as Caribbean Spanish or Angolan Portuguese (Holm 2010).

¹⁸ Apart from pidginisation and creolisation, other processes linked to language creation include semi-creolisation, koineisation and indigenisation. Semi-creoles emerge in similar ways to creoles but, unlike in the case of creoles, nonnative speakers of semi-creoles had more access to native speakers of a superstrate language. As a result, these nonnative speakers had more chance to learn more native morphology and syntax, e.g. inflections, of the superstrate language (Holm 2010: 258). Immigrant koines result from contact between regional dialects of a language in a location to which speakers of such dialects migrated and not where the dialects originated (e.g. overseas Hindi). An example of an indigenised variety is Singapore English (Siegel 1997), a colloquial nativised variety of English, which includes the use of Chinese particles and an aspectual rather than a tense system. Another language contact variety similar to pidgins and creole languages is bilingual mixed language. However, unlike pidgins and creoles which take the lexicon from one language and the grammar from another language (or languages), bilingual mixed languages show a clear distinction between one or more of their grammatical subsystems, which contrasts with the rest of the language (Thomason 2006: 341). For example, Michif, a mixture of French and Cree (Algonquian) spoken mainly in Manitoba in Canada and North Dakota in the US, constructs noun phrases based on French using the French lexicon, phonology, morphology and syntax. The rest of the Michif structure (excluding noun phrases) uses the lexicon, phonology and morphosyntax from Cree (Thomason 2006: 341).

in this kind of interference a group of speakers shifting to a target language fails to learn the target language (TL) perfectly. The errors made by members of the shifting group in speaking the TL then spread to the TL as a whole when they are imitated by original speakers of that language.

(Thomason and Kaufman 1988: 39)

Whereas the maintenance, i.e. borrowing, scenario begins with the adoption of foreign vocabulary, the shift, i.e. interference, scenario involves the importation of the sounds and syntax found in L1 to L2. Language shift typically occurs in places where a local language (substratum) is under pressure from a colonial language (superstratum), and the interference from the source (substratum) language leads to the replacement of structures and core vocabulary in the target (superstratum) language. Although adstratum interference usually leads to language shift, this scenario is not always inevitable, as shown by the example of Indian English for example. Despite numerous interference features in this variety of English, the interference process did not cause its speakers to shift from their respective indigenous Indian languages to the exclusive use of Indian English (Thomason 2001: 74).

The process of language shift can be paced differently in different situations. Most often the shift is gradual and the speakers steadily replace the features of their native language with the features from the dominant language, to which they are shifting. Eventually they abandon their native lexicon and structures with no replacement in a process known as 'language attrition' (Seliger and Vago 1991). Language shift can, however, be also more abrupt and in some cases it can even lead to language death (Dorian 1989; Crystal 2000; Nettle and Romaine 2000). The model proposed by Thomason and Kaufman also predicts a situation of language creation, in which pidgin languages, and later also creole languages, emerge. The scenarios proposed by Thomason and Kaufman and related processes are visualised in Figure 2.1 below.

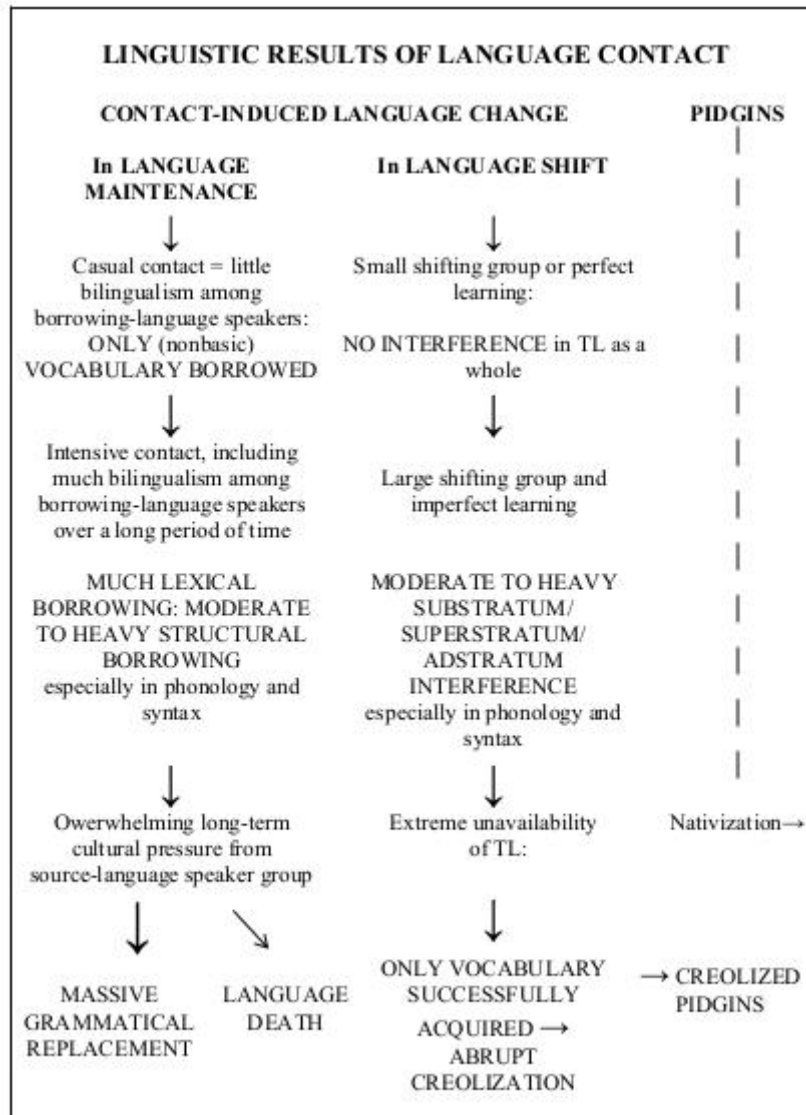


Figure 2.1. Linguistic results of language contact (Thomason and Kaufman 1988: 50).

Although the two basic terms used by Thomason and Kaufman, i.e. ‘borrowing’ and ‘interference’, are used widely across contact linguistic literature, they are not always used with the same meaning by different authors. A particularly wide range of definitions has been applied to the term ‘borrowing’. In the next section I provide a brief review of various uses of this term in contact linguistics works.

2.3. Borrowing

2.3.1. Introduction

This part of the chapter deals with one of the most basic concepts in contact linguistics studies, i.e. ‘borrowing’. After a brief review of how this term was understood by various scholars, I proceed to contrast borrowing with related but distinct outcomes of language contact, namely cross-linguistic influence and code-switching. One of the most obvious results of language contact is borrowing within the lexicon of a recipient language. These can include such outcomes as direct loanwords, loan shifts, loan blends or native creations. Loanwords usually undergo assimilation thanks to which they can become fully functional elements of the receiving system. Apart from lexical borrowings, languages can also acquire foreign structural patterns such as word order for example. I also discuss instances of structural borrowings and reasons behind the adoption of new structures. I consider several proposals regarding probabilities and constraints in the borrowing of linguistic patterns. The section concludes with a list of proposed borrowability hierarchies that I regard as relevant to the topic of this work.

2.3.2. Defining borrowing

Contact between languages typically results in the adoption of linguistic features from one language into another language and there are a number of terms that designate this process. The most widely used term is ‘borrowing’. Traditionally this term was applied as an umbrella term to refer to any type of linguistic appropriation on any level. Bloomfield, for example, defined borrowing as “[t]he adoption of features which differ from those of the main tradition” (1933: 444), where the tradition refers to a specific speech community. Apart from ‘borrowing’, other alternative terms have been also applied across language contact studies to designate the effects of language contact including ‘transfer’ (Wilkins 1996; Myers-Scotton 2002), ‘adoption’ (Van Coetsem 2000; Winford 2005), ‘copying’ (Johanson 2008) or ‘interference’ (Thomason and Kaufman 1988).

Since different cognitive processes can be involved in contact-induced language change, the term ‘borrowing’, as well as other alternative terms mentioned above, can be overly general in naming these distinct processes. As an example, the transfer of features that stems from imperfect L2 language learning involves a different mental process than direct borrowing of lexical items by a bilingual who speaks two languages natively. A number of language contact and change models recognise this contrast and distinct terminology has been developed to designate different types of contact-induced changes. Thus, in Thomason and Kaufman’s (1988) social scenario model described above, borrowing occurs only in the language maintenance situation. Thomason and Kaufman use the term ‘borrowing’ in a more restricted way than Bloomfield, and they define it as “the incorporation of foreign features into a group’s native language by speakers of that language” (1988: 37). In contrast, they refer to the transfer of linguistic features resulting from imperfect learning as ‘interference’.

The notion of borrowing versus (shift-induced) interference partially overlaps with another terminological pair developed by Van Coetsem (1988): ‘borrowing’ and ‘imposition’. Unlike Thomason and Kaufman, for whom the starting point was different social scenarios, Van Coetsem based his model on the notion that a multilingual speaker is usually dominant in one language and the speaker’s dominant language is the agent of contact-induced change. Thus, borrowing is the result of recipient language agentivity, in which the direction of transfer is from the source language to the recipient language. The opposite situation, i.e. imposition, involves agentivity on the part of the source language.

Various terminological sets have also been proposed to distinguish between two ways in which the grammar of a recipient language can be affected by a source language. The two contrastive types involve either: 1) adoption of some concrete material, or 2) calquing of some abstract patterns. This contrast is reflected, among others, in the terminology introduced by Matras and Sakel (2007) ,who coined the terms ‘matter borrowing’ and ‘pattern borrowing’.¹⁹ Matras and Sakel (2007: 1) use the term

¹⁹ The difference between borrowing of forms and borrowing of patterns had been recognised by other scholars who used contrastive terms for the two types. The first type, i.e. transfer of forms (sounds or

‘borrowing’ in a much broader sense: “as a cover-term for the adoption of a structural feature into a language as a result of some level of bilingualism in the history of the relevant speech community”. In their model, matter borrowing refers to the borrowing of actual phonological material, as exemplified by the Latin lexical borrowings in English, e.g. *alumnus* or *phenomenon*. In contrast, pattern borrowing refers to the replication of a strategy or a structure (or, ‘pattern’) from another language and affects the grammatical, semantic and distributional domains of language. Examples of pattern borrowing include the development of periphrastic causative in Nahuatl as a result of contact with Spanish (see §5.2.3). Matras and Sakel’s model of matter borrowing is relatively compatible with the concept of borrowing based on language maintenance or recipient language agentivity mentioned above. Pattern borrowing, on the other hand, can be related to shift-induced interference and imposition (source language agentivity) (see Table 2.1 below).

Table 2.1. Comparison of language contact accounts by Thomason and Kaufman (1988), Van Coetsem (1988) and Matras and Sakel (2007).

Thomason and Kaufman 1988		Van Coetsem 1988		Matras and Sakel 2007
Scenario	Process	Agent of transfer	Process	Borrowing type
language maintenance	borrowing	recipient language	borrowing	matter borrowing
language shift	interference	source language	imposition	pattern borrowing

Identifying whether a particular contact-induced change emerged as a result of source or receiving language agentivity may sometimes be as equally challenging as choosing an appropriate name for it. Moreover, borrowing (understood broadly) is not the only possible result of language contact. Alternative outcomes may involve, for instance, code-switching, which is different from borrowing, despite having a strong resemblance to it in many contexts. Before I turn to describe code-switching in more detail in

combination of sounds) had been referred to as, among other names, ‘transfer of elements’ by Weinreich (1968 [1953]), ‘direct diffusion’ by Heath (1978), ‘direct transfer’ by Heath (1984), ‘transfer of fabric’ by Grant (2002) or ‘global copying’ by Johanson (2002). Calquing of patterns, on the other hand, had been named: ‘calque’ by Haugen (1950), ‘replication’ by Weinreich (1968 [1953]), ‘indirect diffusion’ by Heath (1978), ‘structural convergence’ by Heath (1984), ‘indirect transfer’ by Silva-Corvalán (1994) or ‘selective copying’ by Johanson (2002).

§2.3.2.2, I first deal with interference (i.e. cross-linguistic influence) that stems from imperfect L2 learning.

2.3.2.1. Borrowing vs. cross-linguistic influence

Post-threshold language learning, i.e. the secondary bilingualism mentioned above, may result in a situation in which L2 learners transfer phonological and syntactic features, such as word order for example, from their L1 onto the language they are learning. This language acquisition phenomenon is called ‘cross-linguistic influence’, also known as ‘interference’, ‘synchronic interference’, ‘L1 interference’ or ‘transfer’. The term ‘interference’ used in this context is different from ‘interference’ used as a cover term for all effects of language contact, including lexical and structural borrowings as applied by some authors, e.g. Thomason and Kaufman (1988). It is also distinct from ‘shift-induced interference’, the mechanism in the language shift scenario described above. Whereas shift-induced interference is treated as a diachronic process, the interference discussed in this section is understood in a synchronic sense. To avoid confusion, I use the term ‘cross-linguistic influence’ when referring to the synchronic effects of language contact and ‘shift-induced interference’ when referring to the diachronic outcomes of language contact.

Cross-linguistic influence is closely related to language transfer which can be understood in a number of ways. Behaviourist psychologists define language transfer as “the automatic, uncontrolled, and subconscious use of past learned behaviors in the attempt to produce new responses” (Dulay et al. 1982: 101). In applied linguistics, on the other hand, language transfer refers to a situation in which foreign language learners carry over the knowledge of their native language to their performance in their L2 (Corder 1973; Crystal 2008). The tendency to transfer features from L1 to L2 (or, L1 to L3, etc.) can be advantageous if the two languages are similar. This kind of transfer is referred to as ‘positive transfer’ or ‘facilitation’. An example of positive transfer is the use of cognate month names by Spanish students of English, for example. A less advantageous situation involves transfer of features between languages when the

patterns between L1 and L2 do not correspond.²⁰ An example of such a situation can be observed when Spanish students studying English try to tell the time in English and use definite articles before the numerals, according to the Spanish pattern, e.g. *a la una* ‘at one o’clock’ incorrectly translated to English as **at the one o’clock*.

There has been no consensus among linguists regarding the effects of cross-linguistic influence. Several decades ago it was perceived as a substandard use of language. Weinreich (1968 [1953]: 1), for instance, defines cross-linguistic influence as “deviations from the norm of either language which occur in the speech of bilinguals as a result of their familiarity with more than one language”. More recently, however, cross-linguistic influence started to be regarded as a natural and normal product of multilingual language use. For Matras (2009: 74), for example, cross-linguistic influence “is a process by which the speaker makes or attempts to make creative communicative use of elements of the combined, full repertoire of linguistic structures in a context that requires selection from just a subset of that repertoire, i.e. from the appropriate ‘language’”.

One of the crucial factors conditioning language transfer, apart from proficiency of speakers, their age and the nature of the conversational setting, is the typological distance between languages involved in contact. According to Weinreich (1968 [1953]: 1), the greater the typological distance between L1 and L2, “the greater is the learning problem and the potential area of interference”. Weinreich claimed that structural similarities are more likely to cause positive transfer and structural differences are more likely to cause negative transfer. However, a contrastive prediction was made by Arabski (2006), according to whom the probability of both positive and negative transfer is higher in the case of related languages since many features in L1 and L2 are similar.

Cross-linguistic influence can affect a number of linguistic subsystems. Weinreich (1968 [1953]: 1) noted that transfer typically occurs in structural features and involves “the rearrangement of patterns that result from introduction of foreign elements into the

²⁰ Transfer is more likely at the beginning of the process of L2 acquisition, when a learner’s lexicon and grammar of the foreign language are less developed. Transfer usually decreases when a learner gains more competence in their L2 (Lee 2016). For further discussion see e.g. Corder (1973) or Crystal (2008).

more highly structured domains of language”. Transfer typically affects phonology, morphology and syntax, and such restricted areas of lexicon as e.g. kinship terms or colours. According to Odlin (2003), it can also occur in semantics, pragmatics and orthography. However, it is the transfer of phonological features that is the most noticeable type of cross-linguistic influence since almost all foreign language learners, including more advanced ones, retain their L1-based accent (Ortega 2008). Thus, whereas in the case of borrowing the patterns found in the receiving language remain unchanged, a typical characteristic of cross-linguistic influence involves alternation of patterns in L2 (Weinreich 1968 [1953]: 1).

Cross-linguistic influence typically results in production errors, including substitution, calques, overdifferentiation or underdifferentiation and hypercorrection.²¹ Substitution refers to a situation when a speaker replaces a structure or a word within the L2 with a structure or word from their native L1.²² A calque, on the other hand, is a direct loan translation, in which “the morphemic constituents of the borrowed word or phrase are translated item by item into equivalent morphemes in the new language” (Crystal 2008: 64).²³ Another type, overdifferentiation, refers to an error that involves carrying distinctions from the L1 to the L2.²⁴ The opposite error, i.e. underdifferentiation, occurs when learners are not able to make distinctions in the L2 because such distinctions are not present in their native language.²⁵ Finally, hypercorrection applies to a situation in which in the process of L2 learning the students recognise regularities but ignore restrictions and exception to the rules in L2 (Bussmann 1996: 525).²⁶

²¹ For further discussion see e.g. Richards (ed.) 1974 or Corder (1981).

²² An example of such substitution is when a Nahuatl native speaker who is learning Spanish replaces the Spanish noun *pájaros* ‘birds’ with a Nahuatl equivalent *totomeh* in the sentence *Veo diez totomeh* ‘I see ten birds’.

²³ A calque in Polish is the noun phrase *główne danie*, which is a translation of the English phrase *the main course*.

²⁴ Overdifferentiation occurs when Tének or Nahuatl native speakers learn Spanish as their L2 and they apply different vowel lengths found in their native languages (e.g. /e/ and /e:/) when speaking Spanish.

²⁵ Some Nahuatl speakers have difficulties pronouncing the close back vowel /u/ and the close-mid vowel /o/ correctly in Spanish, since these are not separate phonemes in their native language. Thus, it is not uncommon to hear the Spanish word *comunidad* ‘village, community’ pronounced as /kumuni’dad/ instead of /komuni’dad/.

²⁶ An example of a hypercorrection would be an erroneous use of the past tense form **readed* (from *read*) by someone learning English who applies the rule that past tense verb forms in English end in *-ed* and does not apply exceptions to this rule.

In situations of intense language contact between native and post-threshold learners of the same language, certain transfer features can extend from non-native speakers and affect the speech of native speakers. This scenario can be observed in a number of Hispanic-majority communities in the southwestern United States, where English spoken by native speakers has been influenced by speakers of Chicano English, whose L1 is Spanish.²⁷

Cross-linguistic influence may not always be easily distinguishable from not only borrowing but also from other related language contact phenomena including, e.g. code-switching, which is the focus of the next section.

2.3.2.2. Borrowing vs. code-switching

Borrowing needs to be distinguished from code-switching. Gumperz (1982: 59) emphasised the social function of code-switching and defined it as “juxtaposition within the same speech exchange of passages of speech belonging to two different grammatical systems or subsystems”. Lehiste (1988: 22) pointed out that code-switching must be realised by the same speaker and defined it as the “...alternate use of two languages by the same speaker during the same speech event”. Since code-switching can involve switching not only between different languages but also between different language varieties, the neutral term ‘code’ is used to avoid the language/dialect ambiguity.²⁸

²⁷ English used in East Los Angeles, California has developed an innovative use of the adverb *barely* to indicate that something has just happened, as in *I barely got out of the hospital*. Such use of this adverb is an example of cross-linguistic influence of Mexican Spanish in which the word *apenas* ‘barely, hardly’ is also used to indicate the perfect aspect of events (cf. Mexican Spanish *Apenas sali del hospital*) (Fought 2003).

²⁸ Code-switching is not only similar to borrowings, but it may also be hard to distinguish from other language contact-related phenomenon including code-mixing and diglossia. Although many scholars do not distinguish between code-switching and code-mixing, there were several proposals defining these two phenomena in a different way. Hill and Hill explained that whereas code-switching is a more orderly use of two or more language varieties consistent with the syntax and phonology of each variety, code-mixing involves a more disorderly use of different language varieties (Hill and Hill 1986: 348). According to Hill and Hill, code-mixing tends to “occur in the usage of speakers who are unskilled in the bilingual system and will be considered to push syncretic practice beyond tolerable bounds” (Hill and Hill 1986: 348). However, a different definition of code-mixing was suggested by Maschler (1998: 125), for whom code-mixing involves “[u]sing two languages such that a third, new code emerges, in which the elements from the two languages are incorporated into a structural definable pattern”. Code-mixing understood in this way is therefore a new hybrid code that arises as a result of code-switching between two languages and has structural characteristics particular to that new code. Code-switching also needs to be also distinguished from diglossia. Whereas diglossia involves the use of distinct languages in specific situations on a community level, code-switching occurs when separate codes are used in the same

Although code-switching can lead to borrowing, code-switching and borrowings are different phenomena and many possible criteria can be applied to distinguish one from the other (e.g. Poplack and Sankoff 1984; Heath 1989). First of all, whereas borrowing typically occurs out of necessity to fill some gaps in a language (e.g. to name a new concept or object), code-switching, in turn, arises out of stylistic purposes. Secondly, borrowings are usually phonologically or morphologically integrated (Haugen 1950: 216-218). Syntactic integration has also been proposed as a distinguishing feature of borrowing and not of code-switching.²⁹ Next, whereas code-switching is only possible when speakers are fluent in both languages, use of a lexical borrowing does not require competence in the source language. Another characteristic of borrowing is its community-wide acceptance as opposed to code-switching which is more individual and idiosyncratic. Furthermore, whereas borrowing is an under-clause phenomenon which mostly affects the lexicon of a language, code-switching fulfills a conversational function and “has the ordinary, supra-lexical, productive properties of syntax” (Muysken 1995: 191). The differences between code-switching and borrowing are summarised in Table 2.2 below.

Table 2.2. Borrowing vs. code-switching (after Muysken 1995: 190-191).

	Borrowing	Code-switching
No more than one word	+	-
Adaptation	+/-	+/-
phonological	+	-
morphological	+	-
syntactic	+	-
Frequent use	+	-
Replaces own word	+	-
Recognised as own word	+	-
Semantic change	+	-

conversation on an individual level. Thus, alternate use of Spanish and Tének or Nahuatl within the same speech event is an example of code-switching (or code-mixing, see above), a consistent use of Spanish in communication with e.g. municipal authorities and use of Tének at home is an example of diglossia.

²⁹ Syntactic adaptation as a feature of code-switching has been rejected by e.g. Myers-Scotton (1988).

Poplack and Sankoff (1988), as well as Poplack et al. (1987) suggested that the preference for borrowing versus code-switching may be typologically determined. They distinguished between ‘smooth (intrasentential)’ and ‘flagged (functionally marked) code-switching’, and they contrasted these types of code-switching with borrowings, which, in turn, can span over the continuum between ‘established’ and ‘nonce borrowing’ (see Figure 2.2).

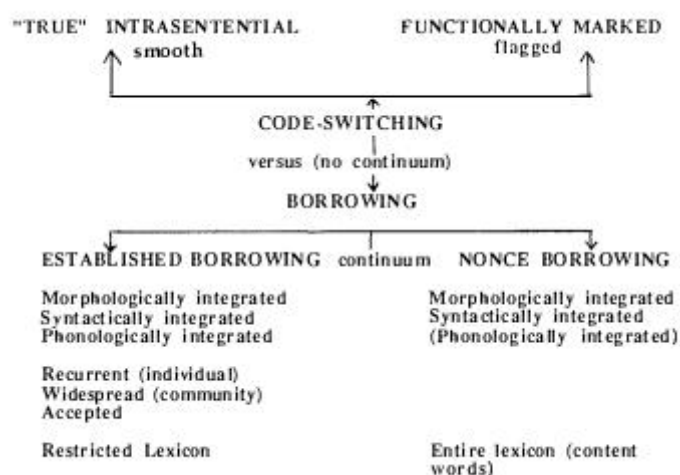


Figure 2.2. Characterisation of code-switching and borrowing (Poplack et al. 1987: 403).

According to Poplack et al. (1987: 404), if languages involved in contact have similar typological profiles, then the result of contact is (equivalence-based) code-switching. In contrast, if the typological profiles are in conflict, then typically nonce borrowings appear.

Code-switching can occur on a number of levels. Poplack (1980) distinguishes between three types of switching: intersentential, intrasentential and tag switching. The first type, i.e. intersentential code-switching, involves switching at a clause or sentence level. An example of such type of code-switching between Nahuatl and Spanish is presented in (2.1), where the question posed in Nahuatl receives a response in Spanish (in bold).

- (2.1) Intersentential code-switching
 A: *¿Tiitztoc cualli?* {How are you?}
 B: ***Muy bien, gracias.*** {Very well, thank you.}

Intrasentential code-switching occurs within a clause or sentence boundary. Example (2.2) illustrates Nahuatl-Spanish code-switching, in which the main clause is expressed in Nahuatl and the dependent clause (in bold) appears in Spanish.

- (2.2) Intrasentential code-switching
*Niyaz altepeco **para ver mi amiga Silveria.***
'I'm going to the town to see my friend Silveria.'

The third type, tag-switching, involves insertion of either a tag phrase or a word in another language, as illustrated in (2.3), in which a clause in Spanish is followed by an English tag (in bold).

- (2.3) Tag-switching
*Martín es un hombre muy engañoso, **you know.***
'Martin is a very deceptive man, you know.'

Myers-Scotton (1989) included an additional type of code-switching, i.e. intra-word switching, which can occur within one word at a morpheme boundary. This type can be illustrated by the Spanish-English code-switching in (2.4), where the English verb *hang* (in bold) is combined with Spanish verbal inflection.

- (2.4) Intra-word code-switching (Stefanich et al. 2019: 3, ex. (c))
*Voy a **hangear** con mis amigos.*
'I'm going to hang with my friends.'

An important issue to consider in studies of code-switching is what type of constraints, if any, can be mentioned regarding this type of language contact phenomena. Although some researchers claimed that there are no syntactic restrictions on code-switching (e.g. Lance 1975), most agree that both grammatical factors as well as syntactic rules impose

certain constraints.³⁰ Based on his research on Hindi-English code-switching, Kachru (1978) argued that although two conjoined clauses from two different languages are possible, a coordinating conjunction from a guest language cannot be used to join two host language noun phrases or verb phrases.³¹ This restriction is referred to as the ‘Complementiser Constraint’. Example (2.5a) illustrates a switch that would break this rule since the English conjunction *and* (in bold) would join two clauses in Spanish. Example (2.5b), on the other hand, confirms the Complementiser Constraint rule, in which the English conjunction *and* triggers a switch to English (in bold) from Spanish.³²

(2.5) Complementiser Constraint in code-switching

- a. **Mi amigo Pablo **and** Ramiro vinieron al festival.*
‘My friend Pablo and Ramiro came to the festival.’
- b. *Marcos, **vente pa’ acá and download the file for me, please.***
‘Marcos, come here and download the file for me, please.’

According to the ‘Free Morpheme Constraint’, code-switching is not allowed between a free morpheme and a bound morpheme or across morpheme boundaries within a word (Poplack 1980: 585-586). Thus, forms such as **eatiendo* ‘eating’ (mixing the English free morpheme *eat* and the Spanish present progressive suffix *-iendo*) are not allowed (Poplack 1980: 586). A switch may however occur if the lexical form has been phonologically integrated into the language of the bound morpheme, as in the form *flipeando* ‘flipping’ or *hangear* ‘to hang’ (see example 2.4 above).³³ Switching is not allowed when the syntactic rules of the languages involved in code-switching do not match at a potential point of switch. Poplack (1980) refers to this constraint as the ‘Equivalence Constraint’. The switch is impossible when two adjacent constituents are

³⁰ Taking into account numerous counterexamples that have been found to all of the above mentioned constraints, many scholars express their doubt about the universal application of syntactic constraints in code-switching (see e.g. Bokamba 1989; Pandharipande 1990).

³¹ The unequal participation of languages involved in code-switching has been recognised by several scholars. Joshi (1985) and Myers-Scotton (2006: 243ff.) refer to the frame-building language as the ‘matrix language’ and the other participating language as the ‘embedded language’. For Mahootian (2006), the language which provides the grammatical structure and system morphemes is the ‘host language’, and the language which provides content morphemes is the ‘guest or embedded language’.

³² Several counterexamples were, however, found to this rule, including the ones presented by Bentahila and Davies (1983) in the speech of Arabic-French bilinguals.

³³ However, several scholars have provided counterexamples to show that switching between free and bound morphemes exists, including Bokamba (1989) who researched code-switching in Swahili (Bantu) and English.

ordered in a different way in the two languages involved in code-switching, e.g. prepositional or postpositional phrases. Thus, it is unlikely that code-switching between Spanish and English will occur in the nominal phrase **la casa white* ‘the white house’. This is because adjectives in Spanish noun phrases follow nouns (*la casa blanca*), and in English the order is reversed, i.e. adjectives come before nouns (*the white house*).³⁴

A number of researchers have tried to explain restrictions on code-switching at a more abstract level than solely the linear structure. These included seeking constraints within the syntactic theory of government and binding (e.g. DiSciullo et al. 1986; Belazi et al. 1994) or Chomsky’s Minimalist Program (e.g. Toribio and Rubin 1996; MacSwan 2000). For example, according to the ‘Government Constraint’, switching is prohibited between the governor and its complement, e.g. between a verb and its object or a preposition and a noun phrase in a prepositional phrase. However, the predictions made by the Government Constraint have been contradicted in a number of studies, e.g. by Klavans (1985). The sentence in (2.6) is a clear example of code-switching that occurs between a verb and its object, in which the verb in Spanish is followed by an object in English (in bold).

(2.6) Code-switching between verb and its object (Klavans 1985: 217)

*Los hombres comieron **the sandwiches**.*

‘The men ate the sandwiches.’

There have also been suggestions that code-switching cannot occur between functional heads and their complements. The ‘Functional Head Constraint’, which was proposed by Belazi et al. (1994), allows switching only when functional heads such as determiners, complementisers or inflections match their complements such as a noun phrase, verb phrase or sentence. For instance, whereas the code-switching in (2.7a) is possible, the switching in (2.7b) violates the Functional Head Constraint since the

³⁴ There are many counterexamples to this constraint, e.g. the phrase *building high-rise* which follows French and not English word order (Myers-Scotton 2006: 252).

switch occurs between the functional head (the Spanish conjunction *que* ‘that’) and its complement which appears in English (in bold).³⁵

(2.7) Code-switching between functional heads and their complements

a. *La cocina is very dirty.*

‘The kitchen is very dirty.’

b. **Me marcó por el cel y me dijo que I’m stupid.*

‘He called me over the phone and told me that I’m stupid.’

Apart from the attempts to find restrictions on code-switching, scholars have also tried to determine what linguistic items trigger switching between languages. Clyne (1987: 744), for example, claims that code-switching can be activated by “[a]n item of ambiguous affiliation (that is one belonging to a speaker’s two systems)”, and he lists the following trigger-words: lexical transfers (loanwords), bilingual homophones (e.g. *in* in English and German), proper names and ‘compromise forms’ between two languages. Although the English *come* [kʌm] and German *kam* [ka:m] are not homophonous in the respective standard languages, they are phonologically similar for some speakers who use [kam] both for German past tense and English present and past tense (Clyne 2003: 164). Thus, in (2.8) the form [kam] replaces the German form [ka:m] and triggers switching to English (in bold).

(2.8) Code-switching triggered by compromise forms (Clyne 2003: 164)

Keine Apfelsinen. Wir haben se gehabt, but oh, großes Feuer [kam] through and killed the trees.

‘No oranges, we had them, but oh, big fire come through and killed all the trees.’

There are numerous reasons why speakers switch codes in a particular interaction. Gumperz (1982: 75-84), for example, proposed six main functions of code-switching: (1) quotation marking, (2) addressee specification, (3) interjection, (4) reiteration, (5) message qualification and (6) ‘personalisation versus objectivisation’. The first of these functions refers to a situation in which code-switching can appear as a direct quotation

³⁵ For counterexamples to the ‘Functional Head Constraint’ see e.g. Bhatt (1997).

or as reported speech. In (2.9) the switch between the base language (Spanish) and English (in bold) occurs when quoting what someone said in English.

- (2.9) Code-switching with direct speech
*La partera dijo: “**I’m on my way!**”*
“The midwife said: ‘I’m on my way!’”

The next function, addressee specification, refers to code-switching which serves the purpose of directing the message to one of a number of possible addressees. Example (2.10) illustrates code-switching in a scenario in which two friends (A and B) talk to each other in English and one of them (B) switches to Spanish (in bold) to address her husband (C) when he enters the room.

- (2.10) Code-switching in addressee specification
A: *I used to go to buy apples at that market but then I started ordering fruit and veg on-line.*
B: *I don’t like internet shopping, especially buying fresh produce. You never know what will arrive.*
A: *Hmmm... Can be.*
B: (speaking to C, who just entered the room): *¡**Hola!** ¡**Ya regresaste!*** {Hey! You’re back!}

Thirdly, code-switching can be used to mark an interjection or sentence filler. This function is illustrated in the Spanish-English switch in (2.11), in which Chicano professionals say goodbye (in English and Spanish, the latter in bold) after they have been introduced by a third participant.

- (2.11) Code-switching as a sentence filler (Gumperz 1982: 77)
A: *Well, I’m glad I met you.*
B: ***Andale pues*** {O.K., well}. *And do come again. Mm?*

The fourth function, reiteration, refers to a scenario in which a message in one code is repeated (literally or slightly modified) in the other code as a way of clarification or in order to emphasise an idea. An illustration of this function is presented in example

(2.12), in which a Chicano professional switches between English and Spanish (the latter in bold).

- (2.12) Code-switching as a clarification tool (Gumperz 1982: 78)
*The three old ones spoke nothing but Spanish. Nothing but Spanish. **No hablaban inglés** {they did not speak English}.*

Next, message qualification, involves switches consisting of “qualifying constructions such as sentence and verb complements or predicates following a copula” (Gumperz 1982: 79). Sentence (2.13) illustrates this function of code-switching between English and Spanish (the latter in bold).

- (2.13) Code-switching in message qualification (Gumperz 1982: 79)
*The oldest one, **la grande la de once años** {the big one who is eleven years old}.*

Lastly, the ‘personalisation versus objectivisation’ function is explained by Gumperz (1982: 80) as “the distinction between talk about action and talk as action, the degree of speaker involvement in, or distance from, a message, whether a statement reflects personal opinion or knowledge, whether it refers to specific instances or has the authority of generally known fact”. An illustration of this use of code-switching is a conversation presented in (2.14), in which Spanish statements (in bold) are more personalised whereas statements in English convey more distance, when e.g. a person talks about a problem in English but acts out the problem in Spanish.

- (2.14) Code-switching as a personalisation tool (Gumperz 1982: 81)
A: *...I'd smoke the rest of the pack myself in the other two weeks.*
B: *That's all you smoke?*
A: *That's all I smoked.*
B: *And how about now?*
A: ***Estos... me los hallé... estos Pall Malls me los hallaron** {these... I found these Pall Malls they... these were found for me}. No, I mean that's all the cigarettes... that's all. They're the ones I buy.*

To sum up, code-switching is one of many bilingual interactive strategies used to express various rhetorical and social meanings. The above described typical functions of code-switching, as well as methods used to distinguish this contact phenomenon from other phenomena can, however, serve only as a guideline. It is typical for language contact phenomena to be interrelated and used one next to another in a single portion of discourse so that clear boundaries between them may be extremely difficult to set. Therefore, discovering the motivations behind the inclusion of foreign-origin elements in discourse is usually very helpful in their correct classification. The types of lexical borrowings and the reasons behind adopting nonnative vocabulary is dealt with next.

2.3.3. Lexical borrowing

When adopting new concepts and words from another language, speakers of a recipient language have several options. Hilts (2003: 59) lists four possible ways in which a language can acquire names for new concepts (aside from simply ignoring and leaving new concepts with no names due to their cultural insignificance):

- 1) Use of native resources to create words for new objects or concepts,
- 2) Modification of existing native resources by either adding new meaning to them or by changing their referent completely,
- 3) Learning the word, or its approximate form, from the language used by another culture,
- 4) Applying a combination of the first and third strategies.

Approaches (2), (3) and (4) refer to situations typical to lexical borrowing. Even though the first approach does not involve the borrowing of foreign lexical material, since it is also involved in the creation of new lexical elements, it is considered in this section.

Different scholars use different terminology to refer to the lexical outcomes of language and culture contact that involve creating names for new concepts. Table 2.3 provides a brief summary of the terms used in five influential works along with the corresponding strategies for naming new concepts listed above. It should be noted that the terminology proposed by Haugen (1950, 1953) served as a foundation for other

authors. The description of the types of lexical borrowings which is provided below also follows Haugen's (1950) influential loan taxonomy.

Table 2.3. Terminology of lexical results of language and culture contact (Hilts 2003: 60).

Haugen 1950, 1953	Type	Hock 1991, Hock and Joseph 1996	Romaine 1988	Weinreich 1968 [1953]
LOANWORDS	3	loanwords	loanwords	loanwords
LOAN SHIFTS	2	loan shifts	loan shift/semantic transference	semantic extension
loan homonyms	2			homonymy
loan synonyms				polysemy
semantic displacement	2	semantic shift	semantic extension	
semantic confusion	2	loan shift	semantic extension	
loan translations (calques)	4	loan translations (calques)	loan translations (calques)	loan translations (exact), loan renditions, loan creations (loan mapping)
LOAN BLEND		loan blend	loan blend	hybrid compound
stem	4			
derivative	4			
compound	4			
CREATIONS				
induced	1		part of loan translations	loan creations
creations (non-borrowings)	4		loanblend	
hybrid creations				

The first category in Haugen's loan taxonomy are (pure or direct) loanwords, defined as "morphemic importation without substitution" (Haugen 1950: 214). Loanwords can be further divided according to the degree of their phonemic substitution into three types: none, partial or complete. Loanwords are subject to regular grammatical processes in the recipient language, including taking possessive or plural forms, or receiving other required native morphology such as verbal affixes. For instance, the Nahuatl borrowing in Spanish *aguacates* 'avocadoes' (from *ahuacatl* 'avocado') received the Spanish plural suffix *-s*.

A subcategory of loanwords is loan blends, which are hybrid lexical borrowings made up of partly borrowed and partly native phonological forms and/or meanings. The structural properties of foreign elements in loan blends are also borrowed. Haugen distinguishes three types of loan blends depending on what segments are blended together:

- blended stems, in which the stem is borrowed but the affix is native, as in the American Norwegian noun *kårna* ‘corner’, blended from English *corner* and Norwegian *hyrna* ‘corner’ (Haugen 1950: 218-219),

- blended derivatives, which include native derivational elements attached to foreign bases, as in the Pennsylvania German adjective *fönnig* ‘funny’, in which the German suffix *-ig* substitutes the English suffix *-y* (Haugen 1950: 219),

- blended compounds, in which one of the stems is substituted (Haugen 1950: 219), as in the compound Nahuatl noun *bruho-yo-tl* (witch-pertinent-ABS.SG) ‘witchcraft’, composed of the Spanish loan *brujo* ‘witchdoctor, shaman’) and the native Nahuatl patientive noun *yotl*.

Loan shifts involve semantic changes in the usage of native words in the recipient language as a result of language and culture contact.³⁶ The morphemic composition of loan shifts is fully native but their meaning has its origin at least partly in the source language. Possible types of loan shifts include loan homonyms and loan synonyms. Loan homonyms have similar forms in the source and the recipient language but there is no semantic resemblance with the native word in the recipient language.³⁷ Loan synonyms, or ‘polysemy’ in Weinreich’s (1968 [1953]) taxonomy, involve “a certain amount of semantic overlapping between the new and old meanings” (Haugen 1950: 219). Two subtypes of loan synonyms include semantic displacement and semantic confusion. In the process of semantic displacement, or ‘semantic shift’ for Hock (1991) and Hock and Joseph (1996), a native word is used to refer to a new cultural

³⁶ Hock (1991: 398) defines loan shifts as “...shift in meaning of an established native word, so as to accommodate the meaning of a foreign word. That is, a foreign concept is borrowed without its corresponding linguistic form and without the introduction of a new word into the borrowing language.

³⁷ An example of a loan homonym includes the American Portuguese word *grosseria* ‘rude remark’, which Portuguese-English bilinguals associate with the meaning ‘grocery’ because of the similarity of forms of the two words (Haugen 1950: 219).

phenomenon which resembles in some respect an old concept in the recipient language. Semantic displacement is common in the process of giving names to natural phenomena, tools or terms of measure, etc.³⁸ Semantic confusion, on the other hand, refers to a process in which additional meanings are added to native morphemes and “native distinctions are obliterated through the influence of partial interlingual synonymity” (Haugen 1950: 219).³⁹

Another type of loan shifts are loan translations (or calques), which show morphemic substitution without importation (Haugen 1950: 220) and involve the replication of a foreign word formation model by the recipient language.⁴⁰ A canonical example of a calque in Spanish is the word *rascacielos*, which replicates the English word *skyscraper*.⁴¹ Apart from single words, calques may also include fixed phrasal expressions such as the Mexican Spanish *la manzana de Adán* (calqued from the English noun *Adam's apple*). Loan translations frequently appear in proper names and geographical terms, e.g. the English name of the explorer *Christopher Columbus* (calqued from Italian *Cristoforo Colombo*), the name of the island *Easter Island* (from *Isla de Pascua* in Spanish), or *Przylądek Dobrej Nadziei* in Polish (from *Cape of Good Hope* in English).

A separate category of lexical outcomes of language contact in Haugen's taxonomy is native creations (or neologisms). These are not exactly a result of the borrowing process and “are not strictly loans at all” (Haugen 1950: 220), but are, nevertheless, formed because of culture contact and, as such, are considered in his classification.⁴² Examples of native creations include the German word *Umwelt* Um-welt

³⁸ Semantic displacement in Nahuatl is illustrated by the word *mazatl* ‘deer’, which after the Spanish conquest started to be used also to refer to a horse, a new species of animal brought from Europe.

³⁹ Semantic confusion can be illustrated by the American Portuguese noun *livraria* ‘bookstore, home library’, that under the influence of English now includes also the meaning ‘library’ (which in Portuguese is *biblioteca*).

⁴⁰ Haspelmath defines a loan translation as “a complex lexical unit (either a single word or a fixed phrasal expression) that was created by an item-by-item translation of the (complex) source unit” (2009: 39).

⁴¹ It should be noted that the two forms: *skyscraper* and *rascacielos* have distinct compositions. The Spanish calque does not use the agentive suffix which is present in English. If the Spanish replicated the English form, the calque would have the form *rascador del cielo* (Hilts 2003: 78). Since the form *rascacielos* is not free of derivational elements, it is more like a calque blend (Hilts 2003: 78). In Weinreich's taxonomy of loanwords this type is called ‘loan rendition’ (1968 [1953]).

⁴² Haspelmath (2009: 39) defines them as “formations that were inspired by a foreign concept but whose structure is not patterned on its expression in any way”.

(around-world), which was coined to resemble the French word *milieu* mi-lieu (mid-place) ‘environment’ (Haspelmath 2009: 39).⁴³ Haugen (1950: 220) further classifies native creations into pure (or induced) creations, as in Pima (Uto-Aztecan) *wuhlo ki'iwia* ‘oats’, lit. ‘burro eats’ (Saxton and Saxton 1969), and hybrid creations, as in Yaqui (Uto-Aztecan) *lios-nooka* ‘pray’ (from Spanish *dios* ‘god’ and Yaqui *nooka* ‘to speak’). Hybrid creations are similar to loan blends, except for the fact that they have not yet been completely integrated into the recipient language to the point that they are no longer perceived as a foreign word (Hilts 2003: 79).

2.3.4. Loanword adaptation

The source words in which loanwords originate have phonological, morphosyntactic and orthographic properties of the source language and these properties rarely fit into the system of the recipient language. A loanword must therefore undergo adaptation (also referred to as integration, accommodation, assimilation or nativisation) to function in the recipient language. This process involves the adjustment of a loanword to the native phonology and morphosyntax of the recipient language, sometimes to such an extent that it is no longer possible for the speakers to recognise loans as foreign elements in their native language.

Loan adaptation in the area of phonology typically involves the substitution of a foreign sound with a close native equivalent in terms of place or manner of articulation. This situation arises because the phoneme inventories of the source and recipient languages rarely match. The adaptation of a word from a language that has fewer consonants and vowels in its phonological inventory and has a simple syllable structure may be easier than the adaptation of a word from a language with a rich phoneme inventory and complex syllables (see Hockett 1955). Phonemic adaptation of loanwords can be illustrated by the nativisation of early Spanish loans in colonial Nahuatl. Since

⁴³ In Nahuatl native creations are exemplified by words containing the stem *tepoz* (from *tepoztlī* ‘metal’) and referring to objects of modern technology, e.g. *tepoztotōtl* *tepoz-toto-tl* (metal-bird-ABS.SG) ‘plane’ (lit. ‘bird made of metal’). A similar strategy can be observed in Tének, in which the native word for metal *pat'ál* also serves as the base for numerous neologisms, as in *pat'ál wat'bon káw* ‘radio’ (lit. ‘metal that emits sound’) or *jumnal pat'ál* (fly metal) ‘plane’, (lit. ‘flying metal’).

the traditional Nahuatl phoneme inventory lacks many of the phonetic features of Spanish, such as the lack of distinctive voicing in consonants, lack of labiodental fricative /f/ and the liquid /r/ (see §3.2.3), Spanish lexical items were subject to numerous substitutions. For example, Spanish /f/ was replaced with native Nahuatl bilabial plosive /p/, as in *pilman* ‘signature’ (from Spanish *firma*) or the Spanish voiced alveolar plosive /d/ was replaced with its voiceless equivalent /t/, as in *alcalte* ‘mayor’ (from Spanish *alcalde*).

Apart from individual sound changes, loanwords from Spanish in Nahuatl were also subject to phonotactic changes due to discrepancies in syllable structure and stress patterns in the source and recipient languages. Whereas in Spanish stand-alone syllables can have the structure CCVC (Green 2009), Nahuatl allows only syllables with maximally one initial and one final consonant. Consonant clusters in Nahuatl are only possible at syllable boundaries. Adaptation of Spanish loans in Nahuatl involved such operations as consonant deletion, as in e.g. *opidal* ‘hospital’ (from Spanish *hospital*); vowel deletion, as in *memori* ‘memory’ (from Spanish *memoria*); consonant epenthesis as in *sintiyon* ‘site’ (from Spanish *sitio*); and vowel epenthesis as in *terigo* ‘wheat’ (from Spanish *trigo*).⁴⁴ Another type of adaptation of Spanish loanwords was accent shift, which in Nahuatl consistently falls on the penultimate syllable and in Spanish is more flexible.

Loanwords may also be adapted to the syntax and morphology of the receiving language. In Haugen’s words:

If loanwords are to be incorporated into the utterances of a new language, they must be fitted into its grammatical structure. This means that they must be assigned by the borrower to the various grammatical classes which are distinguished by his own language. Insofar as these are different from those of the model language, an analysis and adjustment will be necessary here as in the case of phonology, and we observe the same predominance of substitution in the early phases, which later yields to a certain degree of importation. The broadest kind of form classes are those that are traditionally known as the ‘parts of speech’. (Haugen 1950: 217)

⁴⁴ See e.g. Olko (2020: 41-42) for more information on phonological adaptation of Spanish borrowings in Nahuatl.

An illustration of a morphosyntactic adjustment is assigning a loanword to a grammatical gender or to a noun class.⁴⁵ Nahuatl loanwords in Spanish, such as e.g. *aguacate* ‘avocado’ and *tomate* ‘tomato’, were assigned masculine grammatical gender in Spanish. Another type of a morphological adaptation of nouns can involve adding required nominal morphology, e.g. absolutive suffixes or possessive prefixes. The Spanish noun *panal* ‘beehive’ received the absolutive suffix *-li* upon its adoption by Nahuatl and became *panalli* (for more information on nominal morphology in Nahuatl see §3.2.4). It is also typical for loan verbs to undergo the adaptation process by receiving, for example, certain inflection affixes. Verbs in Nahuatl which are borrowed from Spanish typically receive the verbalising suffix *-oa*, which is added to the infinitive form of the Spanish verb, as in *caminaroa* ‘to walk’ (from Spanish *caminar*). Moreover, borrowed items must also follow the (morpho)syntactic rules of the recipient language, such as its word order. Whereas the nouns that function as direct objects in Spanish follow verbs (as in, e.g. *hacer pan* ‘to make bread’, where *pan* ‘bread’ is the object), Spanish nominal borrowings in Nahuatl that function as objects may become incorporated into verb complexes and precede the verbal stem, as in *Ø-pan-namaca* (SBJ.3SG-bread-sell) ‘he/she sells bread’. In modern Nahuatl, however, due to heavy Spanish-induced language change, the degree of both phonological and morphosyntactic adaptation of Spanish loans appears less intense than in more traditional Nahuatl, as I show in the following chapters of this work.

The degree of assimilation can vary and is conditioned by a number of factors including how old a loanword is, the level of knowledge of the source language and the attitudes towards it (Haspelmath 2009: 42). If the speakers of the recipient language are familiar with the source language and the loanword was adapted into the language recently, then the pronunciation of the loanword may not be adapted. This is the case with recent Spanish borrowings into Nahuatl and Tének, which often retain the original Spanish pronunciation. Orthographic adaptation of recent loanwords from Spanish is

⁴⁵ In Wolof, a Niger-Congo language of Senegal and the Gambia, which assigns its noun into classes, foreign words are allocated to the default ‘b’ noun class (Sobkowiak 2009).

likewise not necessary as the Nahua people are familiar with the spelling conventions of Spanish which they learn at school.

Another issue to consider regarding loanword adaptation is whether a loanword is recognised to be foreign or is thought of as a full member of the lexicon of the recipient system. In general, loanwords which are not adapted into the native system are easier to recognise as foreign words and are referred to as ‘foreignisms’ (Von Polenz 1967; Krier 1980). In situations in which a language borrows many words from a single source language, the need to adapt those words to the recipient language typically decreases. Instead, the phonological or structural patterns of the source language are imported with the loanwords (Haspelmath 2009: 43). As an example of this phenomenon, many recent nominal loanwords from Spanish into Nahuatl and Tének are borrowed along with their respective Spanish definite articles *la/las* (with singular/plural feminine nouns) and *el/los* (with singular/plural masculine nouns), as in *las autoridades* ‘the authorities’.

The degree of adaptation of loanwords in the recipient language may be related not only to how many borrowings the recipient language adopted from the source language, but also to the reasons why these loans were adopted in the first place. The topic of motivations for borrowings is explored next.

2.3.5. Motivation for borrowing

The borrowing of lexical forms can be motivated by a number of reasons including both internal and external causes. According to Winter (1973: 138), “[t]he unifying factor underlying all borrowing is that of projected gain”. One example of such gains can involve acquiring names for new concepts which the recipient language lacks, such as new food items or religious terms. These borrowings are called ‘cultural borrowings’ (Bloomfield 1933: 444ff.). Despite the fact that all languages have their own resources for creating novel expressions so that instead of borrowing a foreign word they can simply create a new word, the borrowing of lexical items appears to be an easy way to fill in the gaps in the native vocabulary.⁴⁶ Both socially dominant and subordinate

⁴⁶ Perhaps one of the best explanations for such a situation was given by Weinreich who said that “[f]ew users of language are poets” (1968 [1953: 57]).

languages borrow for this reason. Nahuatl, for example, borrowed such words as *arroz* ‘rice’, *cahuayo* ‘horse’ and *enero* ‘January’ from Spanish in order to refer to cultural objects and concepts that were introduced in the Americas after the Spanish conquest. Spanish, in turn, borrowed numerous lexical items from Nahuatl to give names to the new objects that were brought to Europe from Mexico, e.g. *chocolate* ‘chocolate’, *aguacate* ‘avocado’ and *tomate* ‘tomato’. Many of these words were subsequently adopted into other European languages via Spanish.

Aside from cultural borrowings, there are also socially motivated borrowings. The reasons behind borrowing of this kind can involve prestige, snobbery or fashion, for example. These borrowings are referred to as ‘core borrowings’ and they usually involve the foreign equivalents of basic vocabulary for which native words already exist (Myers-Scotton 2006: 215).⁴⁷ These lexical items are usually adopted by the speakers of the recipient language because they want to be associated with the more prestigious linguistic variety (Haspelmath and Tadmor 2009: 48). As an example, French borrowed *blanc* ‘white’ from Franconian despite the fact that the Latin equivalent *albus* ‘white’ was available. English, on the other hand, borrowed the noun *window* from Old Norse to replace the Old English equivalent word *eagbyrel* (Haspelmath 2009: 35). In the speech of young Nahua and Tének people, Spanish borrowings sometimes replace basic native vocabulary such as kinship terms, lower numerals and names of everyday objects. Core borrowings in these two languages include not only nouns, but also basic verbs. In Nahuatl for instance, the Spanish noun *cerro* ‘hill’ is used instead of the native term *tepetl* (Olko 2020: 39), or the verb loan *caminaoa* (from Spanish *caminar* ‘to walk’ with the native verbing suffix *-oa*) is used instead of the native Nahuatl verb *nehnemi* ‘to walk’.

There are also situations in which languages perceived as more prestigious borrow words from less prestigious languages. Typical borrowings of this kind include place names, names for indigenous flora or fauna, as well as concepts in native life and culture. In post-conquest Mexico the Spanish colonisers not only adopted the Nahuatl

⁴⁷ Sometimes the borrowed and native words can, however, comprise different registers, as the Germanic-French-Latin set of synonymous verbs: *ask-question-interrogate* (see McMahon 1994: 202).

names for the local flora and fauna, but they also used local toponyms from the indigenous Mexican languages, such as *Tepoztlán* and *Xalapa* (in Nahuatl), or *Tampico* (in Tének).⁴⁸

Languages may also borrow items because of intrasystemic i.e., internally induced, reasons. One such reason involves borrowing of words in order to resolve the problem of homonymy. For example, as a way to avoid ambiguity due to the loss of phonetic distinctiveness, Old English abandoned third person plural pronouns *hīe*, *heora* and *him*, and replaced them with the forms *they*, *their* and *them* borrowed from the Old Norse equivalents *þeir* ‘they’, *þeira* ‘their’ and *þeim* ‘them’ (Roseborough 1970: 70-71; Curzan 1996: 302). Stylistic contrasts may constitute another reason for acquiring lexical ‘duplicates’. Varella (2019: 58) points out that speakers may look for “replacement in their second language for words that seem to be losing their expressive force, have become obscure, and are infrequently used”.⁴⁹ As an example, Polish borrowed the adjective *cool* from English despite having in its own vocabulary native word *odjazdowy* ‘fabulous’.

External and internal motivation for borrowing need not be mutually exclusive. In fact, many borrowings were adopted as a result of a mixture of external and internal causes (cf. the notion of ‘multiple causation’ by Thomason and Kaufman 1988: 57). As an example, the Spanish loanword *radio* ‘broadcaster, radio’ used in Nahuatl can be attributed to both external and internal causes. This noun was adopted by Nahuatl not only to name a new concept using a word from Spanish, the prestigious language, but also because of the linguistic properties of this lexical item. It is a simple and short word with a clear referent unlike the native creation in (2.15).

⁴⁸ Apart from toponyms, the indigenous terms for local topography can also be applied. This occurred when English acquired such words from Gaelic as *glen*, *ben*, *loch* and *craig* (cf. McMahon 1994: 203-204).

⁴⁹ According to Weinreich (1968 [1953]: 58), “[i]n such semantic fields as ‘talking’, ‘beating’, ‘sleeping’, ‘tallness’, or ‘ugliness’, there is in many languages a constant NEED FOR SYNONYMS, an onomastic low pressure, as it were”. The reason for this kind of borrowing may be due to the fact that “[I]inguistic elements may be attractive for speakers because of particular patterning, relatively simple, regular and transparent structures or other properties that make them easy to use and understand” (Johanson 2002: 309).

- (2.15) Neologism in Nahuatl (Ignacio Hernández González, p.c., 26 August 2015)
huehca-pa-tla-tepoz-noh~notza-lo-ni
far-from-OBJ.NHUM-machine-FREQ~call-NACT-HABIT[INS]
'broadcaster, radio' (lit. 'a machine that is an instrument for calling from afar')

Although the latter option is used by some Nahuatl language activists who consciously avoid Spanish loans, it is not common to hear this neologism in everyday speech since most Nahuatl users prefer to use the more practical loan *radio*.

2.3.6. Structural borrowing

One of the outcomes of language contact and a key focus of this work is structural borrowing which was defined by Harris and Campbell (1995: 122) as “a change in which a foreign syntactic pattern (either a duplication of the foreign pattern or at least a formally quite similar construction) is incorporated into the borrowing language through the influence of a donor pattern found in a contact language”. According to Haspelmath (2009: 38-39), structural borrowing may involve not only the copying of syntactic patterns, such as word order, but also morphological or semantic patterns, including e.g. case-marking patterns and kinship term system. Although initially many scholars analysing language change expressed resistance towards structural borrowing (e.g. Meillet 1914; Sapir 1921; Sommerfelt 1960a, Sommerfelt 1960b; Vachek 1972; Gerritsen 1984), more recent works recognise this kind of borrowing as a frequent phenomenon that occurs as a result of contact between languages. Structural borrowing is, however, considered harder to adopt than lexical borrowing (see §2.3.7 for hierarchies of borrowings).

Many scholars postulated that structural borrowing can only occur if certain conditions are met, including typological compatibility of the source and receiving languages. This was the claim made by e.g. Meillet (1914: 86-87) and Allen (1980: 380). Jakobson (1938: 54) suggested that a language would not accept foreign structures unless they were compatible with their “tendencies of development”. Similarly, for Vogt (1954: 372) structural borrowing was only likely if the affected element fits into the “innovation possibilities offered by the receiving system”. The requirement of

typological similarity as the condition facilitating structural borrowing was, however, proven incorrect in numerous studies including those which focus on Spanish-contact induced changes in the indigenous languages of the Americas. Muysken (1981), for example, showed that *Media Lengua*, a variety of Quechua spoken in Ecuador, exhibits considerable syntactic change due to Spanish influence, including introduction of prepositions, coordinators, complementisers and word order changes. Campbell (1987), on the other hand, demonstrated how relational nouns in Pipil have evolved to function as prepositions, a category not compatible with the typological profile of Pipil, which traditionally lacked this word class.⁵⁰

While typological similarity has been rejected as a required condition for structural borrowing, other prerequisites to this type of language contact outcome have also been proposed. Some authors believe that grammatical borrowings are almost always mediated by other language contact processes. Winford (2003: 61), for example, claimed that “despite the many claims concerning the ‘borrowing’ of phonology, morphology, and even syntax, there has been no convincing demonstration that such structural change occurs without mediation by some other medium or process”. For Winford (2003), as well as for e.g. Moravcsik (1978), structural borrowings are most often mediated by lexical borrowings in such a way that structural elements enter the recipient language along with lexical borrowings and may eventually become part of the system of the recipient language.⁵¹

Certain authors were not only sceptical about the possibility of direct transfer of patterns, but also claimed that structural transfer is unlikely to result in the creation of new categories. Weinreich (1968 [1953]: 31-37), for example, noted that borrowed morphemes tend to replace original morphemes in the recipient language without adding new morphological categories. Appel and Muysken (1987: 159) observed that borrowed structures tend to involve the types of constructions which already exist in a language.

⁵⁰ Parallel changes in which relational nouns started to function as prepositions were also reported for Central Mexican Nahuatl (Suárez 1977; Hill and Hill 1986).

⁵¹ As an example of ‘structural transfer through lexical mediation’ Winford (2003: 69) demonstrates how intense borrowing of the English prepositions caused a shift in the Prince Edward Island French prepositional system.

Although scholars may not agree on what factors condition structural borrowings, they mostly acknowledge that structures tend to be transferred from one language to another for a reason. The most often given rationale is that languages borrow grammatical elements because they lack categories or constructions in their system. According to Campbell (1987: 278), Pipil reinterpreted its relational nouns (e.g. *huan*, which traditionally expressed company) as conjunctions in order to gain more efficient resources to indicate coordination and subordination. Prepositions replaced such less salient traditional Pipil resources as juxtaposition for coordinate clauses, the relational noun *ihuan* for the coordination of nominals and *ne* for several kinds of subordinate clauses (see §6.5.3). Secondly, structural changes may involve reduction of allomorphy (Weinreich 1968 [1953]: 41; Heath 1978: 72). Thus, if language A has a single allomorph of some particular morpheme while language B with which language A is in contact has multiple allomorphs for the same morpheme, then the single allomorph of language A tends to replace the multiple allomorphs of language B. Another typical structural outcome of language contact that leads to simplification is the replacement of synthetic structures with analytic constructions (Maher 1991: 68). Often when typologically distinct languages are in contact, the one with the most isolating and non-flexional typological structure becomes the source of influence on languages which are more synthetic. Numerous examples of structural borrowings that confirm this tendency come from linguistic convergence areas, including e.g. Spanish-contact induced morphosyntactic simplification of the languages of Mesoamerica as is shown in chapters 4, 5 and 6 of this work.

Many other possible typologies of changes have also been suggested. Thomason and Kaufman (1988) proposed a basic classification in which they divide structural borrowings into slight, moderate and heavy. Their classification depends on how intense and long the contact between languages is. Aikhenvald (2010: 4), in turn, divided contact-induced changes into ‘system-altering changes’ and ‘system-preserving changes.’ System-altering changes involve introducing new categories in order to either replicate the categories present in other languages in the area or to restructure the ones that already exist (such as changing relational nouns into prepositions in Nahuatl).

System-preserving changes, on the other hand, involve adding a new term to native categories, or grammaticalising some morphemes to preserve certain endangered categories. Structural changes can also be categorised into completed, continuous and discontinuous (Tsitsipis 1998). Completed changes are changes that do not show synchronic variation and the speakers are not aware of the fact that a certain feature was adopted (Tsitsipis 1998: 34). Continuous changes, on the other hand, are changes in progress, such that the level of linguistic adaptation depends on the speaker's linguistic competence and possibly also on sociolinguistic factors, such as their degree of participation in the life of the community (Aikhenvald 2010: 5). Discontinuous changes are deviations that are characteristic of individual speakers with less proficiency which is caused by language attrition (Aikhenvald 2010: 5). Examples of both system-preserving and system-altering changes, as well examples of completed, continuous and discontinuous changes are presented in chapters 4, 5 and 6.

To sum up, the copying of phonological, morphosyntactic and semantic patterns is considered a typical consequence of language contact, which can be conditioned by both linguistic and extralinguistic factors. Intensity and duration of contact between languages appear to be the leading factors in predicting what and at what stage of the contact situation will most likely be borrowed. Although every situation is unique and there are no absolute universals or constraints regarding borrowings, several scholars have proposed the most likely orders in which lexical or structural borrowings are acquired in language contact situations. The next section explores some of these proposed hierarchies of borrowings.

2.3.7. Hierarchies of borrowing

Many efforts have been made to propose hierarchies and constraints regarding borrowing of linguistic features. The 'borrowability' of linguistic forms and patterns can be affected by numerous factors such as the typological profiles of languages in contact, as well as the 'ease of borrowing' of the potential features, how regular or irregular the forms are (i.e., their universal markedness) and their degree of integration

within a linguistic system. Sapir (1921: 160), for example, believed that “[l]anguage moves down time in a current of its own making. It has a drift”. The notion of a drift that guides the language along specific ‘paths of development’ was also explored by other scholars, including Myers-Scotton (1998: 291) and Heine and Kuteva (2005, 2006), who postulated that innovations are related to universal principles of grammaticalisation.⁵² Although much evidence has been found to confirm the claim made by Thomason (2001: 71) that “anything goes” and that all linguistic subsystems can be subject to borrowing or transfer if language contact is intense and long enough, certain tendencies can nevertheless be observed regarding what word classes, types of vocabulary, categories and structures are more likely to be borrowed than others.

Some of the initially proposed hierarchies of borrowings dealt with the probability of borrowing of different items depending on what word class they represent. Whitney (1881: 19) was one of the first linguists to notice that nouns are easier to borrow than verbs. Based on his study of borrowed items in the speech of Norwegian immigrants in the US, Haugen (1950: 224) confirmed Whitney’s observation, and also demonstrated that verbs are easier to borrow than adjectives, followed by adverbs, prepositions and interjections (Figure 2.3).

Nouns > verbs > adjectives > adverbs, prepositions, interjections

Figure 2.3. Hierarchy of borrowings (Haugen 1950).

The greater borrowability of nouns over verbs was explained by Weinreich (1968 [1953]: 36-37), who claimed that verbs are harder to borrow than nouns because languages are more likely to borrow a word which refers to a concrete object than a word which refers to an action. According to Heath (1978: 105), verbs are difficult to diffuse because of the ‘haziness of boundaries’ between the stem and inflectional morphemes.

⁵² For example, one of the predictions made by the universal principle of grammaticalisation is that the numeral ‘one’ is more likely to be grammaticalised as an indefinite article than a definite article (Heine and Kuteva 2010: 100).

However, since not all languages have the word classes or grammatical categories that were included in the above mentioned hierarchies, modified borrowability scales were proposed later. Van Hout and Muysken (1994: 41), for example, suggested a scale in which nouns still remain the easiest and most frequently borrowed elements followed by ‘other parts of speech’, then suffixes, then inflections and then sounds (Figure 2.4). Their scale thus makes predictions about the likelihood of borrowing not only within the lexicon, but also in morphology and phonology.

Nouns > other parts of speech > suffixes > inflections > sounds

Figure 2.4. Hierarchy of borrowing (Van Hout and Muysken 1994).

Matras (2010: 82) proposed a contextualised borrowability hierarchy for lexical borrowings, which, apart from anticipating what parts of speech will be borrowed first, also makes predictions regarding the semantics of lexical borrowings. This scale (Figure 2.5) is based on a study of the dialects of Romani by Elšík and Matras (2006) and a sample of languages analysed in Matras (2007).

- a. unique referents > general/core vocabulary
- b. nouns > non-nouns
- c. numerals in formal contexts > numerals in informal contexts
- d. higher cardinal numerals > lower cardinal numerals
- e. days of the week > times of the day
- f. peripheral local relations > core local relations
- g. remote kin > close kin

Figure 2.5. Hierarchy of borrowing (Matras 2007).

According to this scale, vocabulary for unique referents is more likely to be borrowed than core vocabulary and nouns are more likely to be borrowed than non-nouns, which confirms what was observed in previous studies (Haugen 1950; Weinreich 1968 [1953]; Van Hout and Muysken 1994). Furthermore, the use of borrowed numerals in formal contexts is more likely than in informal contexts and higher cardinal numerals are typically borrowed before lower cardinal numerals. Names of days of the week are also

borrowed before names of times of the day. In relation to the contact situations studied in this work, this scale appears to be mostly accurate for Nahuatl, which, for example, has borrowed the names of the week from Spanish but still uses native vocabulary to refer to times of the day. Nahuatl has also replaced more remote kinship terms with Spanish equivalents than close kinship terms. The only point in which the scale is inaccurate concerns the likelihood of borrowing numbers in formal and in informal contexts. In Nahuatl, Spanish numerals are used in informal contexts with a similar frequency as in formal contexts.

Another important factor that can affect the ease of borrowing is the degree of adaptation that is required for a borrowing to be received into the grammatical system of a recipient language. Johanson (2002) and Field (2002) pointed out semantic transparency and a consistent form-meaning relationship as important factors that contribute to the ease of borrowing. Thus, the more structurally neutral an item is and the more transparent its meaning, the easier it is to integrate into another language. In Field's (2002: 38) hierarchy (Figure 2.6), the most transparent items are content words, followed by function words and then agglutinating affixes. Fusional affixes are at the opposite end and are considered the most difficult to borrow since they accumulate several grammatical functions (e.g. person, number, gender, aspect, etc.) and are usually not segmentable.⁵³

Content item > function word > agglutinating affix > fusional affix

Figure 2.6. Hierarchy of borrowing (Field 2002: 38).

Another factor that affects the ease of borrowing of features is universal markedness or ease of learning. Universally marked traits are considered harder to learn and unmarked features are easier to learn (Thomason 2010: 43). For example, the phoneme /t/ is

⁵³ Predictions about the borrowability of affixes were also proposed by Harris and Campbell (1995: 135-136). In their view, affixes with clear semantic content (most derivational affixes, as well as some inflections such as number marking on nouns) are more easily borrowed than semantically weak or redundant affixes (such as TAM, i.e. tense-aspect-mood markers on verbs). Apart from their clearer semantic content, derivational affixes are also easier to borrow since they are often non-paradigmatic. In contrast, inflectional affixes are usually found only in tightly constrained paradigms and are more difficult to transfer between languages.

almost universal, easier to learn and less marked than the phoneme /θ/, which is cross-linguistically less universal, more marked and more difficult to learn. As Thomason (2010: 43) notes, markedness plays an important role in shift-induced interference as the shifting group is more likely to learn unmarked source-language features than marked ones.

Several scales of borrowing relate the borrowability of linguistic features with the intensity and duration of language contact. One of the first proposals of such a scale was made by Thomason and Kaufman (1988: 69-71). In their view, casual contact (category 1 in Table 2.4 below) results solely in the borrowing of content words, mostly nouns but occasionally also verbs and no structural borrowings. Slightly more intense contact (category 2) causes the borrowing of function words and content words excluding basic vocabulary, and also results in minor structural borrowings including new phonemes in loanwords and new functions for existing syntactic features. In more intense contact situations (category 3), more function words are typically borrowed as well as basic vocabulary, e.g. closed-class items such as pronouns, low numbers and derivational affixes. More structural changes are also expected in this category, which can include the loss of some native phonemes, changes in prosodic features such as stress patterns, changes in word order and the syntax of coordination or subordination, and the addition of inflectional affixes and new categories if they fit well with the previous patterns. Very intense contact (category 4) will bring heavy lexical borrowing as well as a significant typological disruption, including the loss or addition of entire phonological categories and changes in syntactic features including, e.g. negation, relative clauses and subordination.

Table 2.4. Intensity of language contact and language change (Thomason 2001: 69-71).

	Casual contact	—————→		Intense contact
	Category 1	Category 2	Category 3	Category 4
Lexicon	Content words, mostly nouns	Function words, content words, nonbasic vocabulary	Basic vocabulary, function words, closed-class items, low numerals, derivational affixes	Heavy borrowing
Structure	None	Minor borrowings	Borrowing of significant structural features in phonology, morphology and syntax	Major typological changes in phonology, morphology and syntax

Although the scale proposed by Thomason and Kaufman (1988) and Thomason (2001) includes predictions about how results of language contact are affected by the typological distance between languages, it does not link typological distance to specific parameters. Moreover, languages can be typologically distant with respect to some features and typologically similar with respect to other features. Bakker et al. (2008: 177) recognised this and proposed a multidimensional scale that predicts the likelihood of change for a given linguistic element in a recipient language not only based on intensity of contact and degree of bilingualism, but also based on the element's place on the spectrum of pragmatics-semantics-morphosyntax/phonology, its frequency of use and the typological distance with regard to relevant parameters in the source and recipient languages. Based on these parameters, Bakker et al. (2008: 178) predicted the likelihood of changes in the areas of (1) pragmatics, (2) lexicon and morphosyntax and (3) syntactic complexity (Figure 2.7).

1. Pragmatically outstanding elements are more likely to be borrowed than non-outstanding elements
 - 1.1. Discourse marker > Topic marker
2. Lexical elements > Grammatical elements
 - 2.1 Open class > Half open class > Closed class
 - 2.1.1 Noun > Verb > Adjective > Adverb > Adposition
 - 2.1.2 Adposition > ... > Auxiliary > ... > Article
 - 2.2 Free form > Clitic > Bound form
 - 2.2.1 Adposition > Case affix
3. Syntactically simple elements > Structures
 - 3.1 Free lexical element > Fixed collocation > Noun phrase > Construction

Figure 2.7. Borrowability scale proposed by Bakker et al. (2008).

For the most part this scale confirms predictions made in previous works, such as the higher likelihood of the borrowing of lexical elements over grammatical elements or the borrowing of syntactically simpler elements over more complex ones, yet it also provides more detailed predictions about specific items. It anticipates, for example, that discourse markers, which are more ‘pragmatically outstanding’, are more likely to be borrowed than topic markers.

Several principles have also been proposed regarding structural borrowings. One of the most cited sets of such principles was suggested by Moravcsik (1978: 110ff.), who listed the following five principles, which can be summarised as follows:

- 1) Structural borrowings are always preceded by lexical borrowings,
- 2) Bound morphemes (such as clitics, affixes) are borrowed after free forms containing these bound morphemes have been borrowed (e.g. the suffix *-ette* of *kitchenette* exists only because the forms *cigarette* and *statuette* have also been borrowed),
- 3) Languages do not borrow the symbolic association of a verbal form and verbal meanings; “a lexical item whose meaning is verbal can never be included in a set of borrowed properties” (Moravcsik 1978: 111),
- 4) Inflectional affixes are borrowed from a language after derivational affixes have first been borrowed,

5) Grammatical items (e.g. conjunctions and adpositions) are only borrowed in accordance with their original word order arrangements, e.g. a language which borrows a preposition uses it as a preposition and not as a postposition. Languages with contrastive word orders cannot borrow forms from one another or can do it only if they oppose their original word orders.

Although the principles proposed by Moravcsik have been confirmed in many language contact situations, numerous counterexamples have also been found. For instance, the first principle (lexical > structural), which was also strongly supported by Winford (2003: 61), is contradicted in numerous cases of language contact between Spanish and the indigenous languages of Latin America, in which Spanish conjunctions (grammatical morphemes) were borrowed before lexical borrowings. Moravcsik's second principle (free > bound) has also been refuted by several counterexamples including the borrowing of clitics from Finnish into various dialects of Sámi (Uralic), such as the emphatic enclitic *-pal-pa* or the negative clitic *-ka* (Harris and Campbell 1995: 134). The viability of the third principle can be questioned by looking at the Nahuatl example in which the verb loan from Spanish *paxaloo* 'to have fun' displays a symbolic association of its form and meaning with the Spanish source verb *pasear* (Harris and Campbell 1995: 135). Finally, counterexamples to the fourth principle (derivational > inflectional) include an example from Bolivian Quechua in which the Spanish inflectional plural marker *-s* has been borrowed, but apparently without any borrowed Spanish derivational affixes (Harris and Campbell 1995: 135).

An entirely distinct hierarchy of borrowings is proposed within the framework of 'metatypy' proposed by Ross (2001: 149). In this framework language change does not begin with lexical borrowings but with semantic reorganisation, which occurs without affecting the morphosyntax. Syntactic restructuring, which follows semantic reorganisation, occurs when speakers try to express the same message in both source ('outgroup lect' in Ross's terminology) and recipient languages ('ingroup lect'). This results in the restructuring of the discourse and clause linkage strategies in the recipient language. Phrasal restructuring is the next step followed by changes in word-internal structure. As the derivational morphology becomes reduced in the recipient language,

speakers compensate for the loss of this resource by borrowing lexical forms from the source language. According to Ross's model, changes in the lexicon are therefore the last stage in a language change scenario. The summary of changes proposed by Ross is presented in Figure 2.8.

- (1) the reorganization of the language's semantic patterns and 'ways of saying things';
- (2) the restructuring of its syntax, i.e. the patterns in which morphemes are concatenated to form
 - (i) sentences and clauses,
 - (ii) phrases, and
 - (iii) words.

Figure 2.8. Language change in the metatypy framework (Ross 2001: 145-146).

Ross's framework is especially useful for explaining language change in languages that avoid foreign influence in the shape of lexical borrowings but, nevertheless, show external influence in patterns of syntactic encoding, lexico-grammatical calques, idioms and conventionalised expressions, such as the Tariana language of Amazonia described by Aikhenvald (2010).

Aside from the generic hierarchies of borrowings that try to make universal predictions about language change, there are also hierarchies that are language specific. Muysken (1981), for example, developed a scale of Spanish borrowings in Quechua. Stolz and Stolz (1996), on the other hand, analysed different function words that are borrowed from Spanish into the languages of Central America. According to Stolz and Stolz (1996), if an indigenous language has borrowed the Spanish conjunction *porque* 'because', then it must have also borrowed the conjunction *pero* 'but', and if a language has borrowed more than two function words from Spanish, then *pero* 'but' is definitely among them.

A borrowing scale that makes predictions about Spanish borrowings in Nahuatl was proposed by Field (2002), who analysed language change in Malinche Mexicano, a variety of Nahuatl spoken in the states of Tlaxcala and Puebla. Field (2002: 142) claims that a Spanish element is more likely to appear as a borrowing in Nahuatl if it is less

structural (or less grammaticalised) (Figure 2.9). Also, given that Nahuatl is an agglutinating language, it can also borrow Spanish inflectional affixes, but solely of an agglutinating type, i.e. the ones that have a more clear semantic content such as the plural suffix *-s*.⁵⁴

Content item (independent word, root) > function item (independent word, root) >
inflectional affix (agglutinating-type only)

Figure 2.9. Spanish borrowings in Nahuatl (Field 2002).

In spite of numerous contrasting viewpoints regarding the order in which languages borrow foreign elements, most of the proposed scales as presented above agree that it is usually a matter of time and intensity of contact that facilitates borrowing of almost any lexical or structural element. As has already been confirmed by several scholars and as will be shown in the following parts of this work, there are, however, no universal principles that can be applied to all language contact situations. Although the present work analyses two co-territorial indigenous languages that are under similar levels of intensity and duration of contact with Spanish, and despite the fact that Spanish borrowings present in the two languages are similar in many areas, they, nevertheless, do not follow the same patterns of change.

⁵⁴ Although Malinche Mexicano has borrowed from Spanish the inflectional plural suffix *-s*, as well as a small number of derivational affixes (such as diminutive/reverential *-ito/ita* and the agentive suffix *-tero/ero*), Nahuatl varieties have been reluctant to borrow any of the other Spanish inflectional affixes that cumulatively express several categories. Since the suffix *-s* only expresses one category (plurality), it can be regarded as similar to native Nahuatl agglutinative suffixes, which also fulfill one function. Field (2002: 144) notices that despite long and intense contact with Spanish, there are no occurrences of Spanish fusional affixes in Nahuatl, except for the ones present in such expressions as *creo que* ‘I believe that’ and code-switches from Spanish.

2.4. Convergence and linguistic areas

2.4.1. Introduction

Language contact within a geographically restricted multilingual area can lead to linguistic convergence, which involves diffusion of features across a number of different languages. In this part of the chapter I discuss the processes involved in the creation of a linguistic area and such related issues as the direction of diffusion and the source of linguistic convergence. I deal with cases of unilateral and multilateral diffusion, as well as cases of direct and indirect diffusion. Since the two languages analysed in this work belong to the Mesoamerican linguistic area, I pay most attention to this region. I list the diagnostic features of this area and focus on the languages that are believed to have been responsible for the diffusion of traits within this area. I discuss the role of Nahuatl as the force for convergence across Mesoamerican languages prior to the Spanish conquest and the same role played by Spanish after the conquest.

2.4.2. General features

In a situation in which several languages from at least two language families are spoken in one geographic area some linguistic traits may spread across this area through language contact. The diffusion of linguistic features and the related process of convergence result in the formation of a ‘linguistic area’, which is also called a ‘diffusion area’ or a ‘Sprachbund’ (from German ‘federation of languages’).⁵⁵ The latter term was coined by Trubetzkoy (1928) modelled on the Russian term *языковой союз* (*yazykovoy soyuz* ‘language union’).⁵⁶ Linguistic areas typically arise in a relatively densely populated region with stable multilingualism and frequent contact between languages. Social networks are usually well established in those areas by such interactions as trade, intermarriage between tribes or through repeated movements of

⁵⁵ According to Thomason (2001: 99), “a linguistic area is a geographical region containing a group of three or more languages that share some structural features as a result of contact rather than as a result of accident or inheritance from a common ancestor”.

⁵⁶ Although most scholars use the terms ‘linguistic area’ and ‘Sprachbund’ interchangeably, Thomason and Kaufman (1988) employ the term ‘Sprachbund’ for a multilateral language contact situation and ‘linguistic area’ for a non-multilateral one.

small groups to different places within an area. Linguistic areas can also emerge when speakers of an indigenous language shift to the language(s) of the invaders who take over their territory. An important factor in the creation of linguistic areas is natural and political boundaries because they help to set the limitations of a linguistic area and they help to confine the spread of features to languages within the borders (Thomason 2001: 104).

Examples of linguistic areas include the Balkans (Joseph 2010), the Indian subcontinent (Emeneau 1956), Australia (Dixon 2001), Southeast Asia (Schiffman 2010), the Pacific Northwest of North America (Thomason 2014) and Mesoamerica (Campbell et al. 1986).⁵⁷ Often there is a correlation between cultural and linguistic areas, such as in the case of Mesoamerica. In other cases, however, there is no such connection. For instance, the Great Plains of North America is a cultural area but not a linguistic area (Sherzer 1973; Bright and Sherzer 1976), whereas Southeast Asia is a linguistic area but not a cultural area (Aikhenvald and Dixon 2001: 14). Nahuatl and Tének belong to the Mesoamerican linguistic and cultural area and since further parts of this work will frequently refer to shared features of the Mesoamerican languages, a more detailed description of this linguistic area is provided in §2.4.3.

An important issue in the formation of linguistic areas is the direction of diffusion. For Aikhenvald and Dixon (2001: 11), linguistic areas emerge as a result of an equilibrium situation and involve long-term contact between languages with multilateral diffusion without any developed relationship of dominance. They admit, however, that there are cases of linguistic areas that developed as a result of sudden migrations or other ‘punctuations’ involving the dominance of one group over the other such that the diffusion is unilateral. In the case in which one group of language users is dominant over another, the language area may not last (Dixon and Aikhenvald 2001: 13). The direction of diffusion can also change over time. In the Mesoamerican linguistic area, for example, Nahuatl was first under the influence of other languages of this area including the Mixe-Zoquean languages for example (Kaufman 2001), and then it

⁵⁷ For more information on linguistic areas in general see Thomason (2001: 99-ff.) and for more details on linguistic areas in the Americas see Campbell (1997).

became the dominant and model language that influenced other languages spoken in the region (see §2.4.3).

Linguistic convergence occurs when languages of different groups or families start to structurally resemble one another as a result of a prolonged contact, or “genetic heterogeneity is gradually replaced by typological homogeneity” (Lehiste 1988: 59). The areas of linguistic structure that are most affected by convergence are syntax and morphology and, to a much lesser extent, the lexicon. In situations without dominance or with ongoing diglossia between the languages, convergence can result in the adoption of new patterns by all languages that are involved in the diffusion process. Multilateral convergence can lead to the creation of a new shared grammar, which combines features of the languages involved in the contact situation.⁵⁸ Unilateral convergence, on the other hand, involves the adoption of features of the dominant source language and the gradual loss of categories which have no equivalents in the recipient language. As observed by Aikhenvald (2010: 6), this type of convergence can lead to language attrition or morpheme-for-morpheme intertranslatability among the languages in contact.

Diffusion can be subdivided into direct and indirect diffusion. The former type involves diffusion of forms and the latter type involves diffusion of categories or diffusion of terms within a category (Aikhenvald 2010: 4). Indirect diffusion occurs e.g. when a language develops a system of periphrastic causative constructions out of its own resources to match the existing constructions in another language. This occurred in Nahuatl and Tének, which have replaced their morphological expression of causation with syntactic causative modelled on a parallel construction found in Spanish (see §5.2).

As a result of linguistic convergence, the morphosyntax of the languages of a linguistic area is reorganised and a cross-linguistic template grammar is created. According to Ross (2001), who named this process ‘metatypy’ (see §2.3.7), the use of this kind of converging grammatical patterns, such as calques of idiomatic expressions or loan translations, facilitates communication between the speakers of unrelated

⁵⁸ This kind of convergence can be observed in the languages of the Balkan linguistic area, i.e. Greek, Albanian, Macedonian, Bulgarian, Albanian, Romanian, etc., where there were no asymmetrical dominance relations between languages (Joseph 1983; Thomason 2000).

languages by combining two semantic organisations into one. At the same time, the retention of different vocabularies allows the speakers to maintain different sociolinguistic status and ethnolinguistic identity. The eventual outcome of metatypy is convergence as the unilateral process of diffusion is repeated over and over again with different language pairs (Ross 2001: 151). Metatypy bears similarity with calquing but, according to Heine and Kuteva (2001: 402), whereas the term ‘calquing’ tends to be used for the ‘translating’ of lexical items (usually individual words or groups of words), the term ‘metatypy’ refers to ‘loan translation’ on a larger scale. Metatypy affects more general patterns of linguistic expression and eventually leads to changes in the structural type of a language, i.e. results in typological convergence.

2.4.3. Mesoamerican linguistic area

The Mesoamerican linguistic area comprises the languages spoken in the historical and cultural area of Mesoamerica extending from present-day central Mexico through Belize, Guatemala, El Salvador, Honduras, Nicaragua and northern Costa Rica. These languages developed shared syntactic, lexical, phonological and semantic traits as a result of diffusion rather than genetic inheritance. The languages of the area belong to a number of language families including Uto-Aztecan, Mayan, Mixe-Zoquean, Oto-Manguean and Totonacan. Some language isolates such as Seri, Purépecha⁵⁹, Tequistlatec, Cuitlatec, Huave, Xinca and Lenca are also classified by most scholars as belonging to the Mesoamerican linguistic area. The languages of the area were spoken in the region before the Spanish colonisation and many of these languages are still used, despite strong pressure from Spanish, the official language of Mexico and the Central American republics. Figure 2.10 below shows the location of the speakers of different language families belonging to the Mesoamerican linguistic area at the time of the European conquest.

⁵⁹ Several authors, including Chamoreau (in press) question whether Purépecha should be considered one of the languages of the Mesoamerican linguistic area.

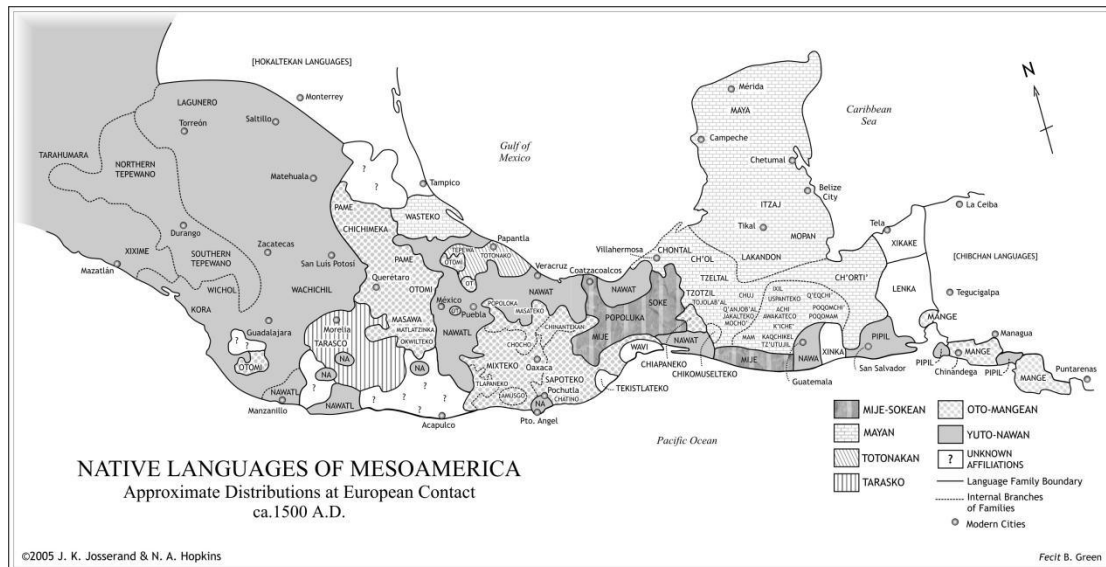


Figure 2.10. Languages of Mesoamerica (Hopkins and Josserand 2005). Note that this map uses alternative names and spelling conventions for the language names of both Nahuatl (“Nawatl”) and Tének (“Wasteko”).

The identification of Mesoamerica as a linguistic area was preceded by its identification as a cultural area. A definition of Mesoamerican cultural area was proposed by Kirchhoff (1943), who noted similarities among various pre-Columbian cultures of Mexico and Central America. Kirchhoff defined the region as a cultural area based on interrelated cultural similarities resulting from cultural diffusion involving inter- and intraregional interactions. The main defining characteristics of the Mesoamerican cultural area include maize-based agriculture, the construction of stepped pyramids, the vigesimal number system, the use of solar and ritual calendars, the use of bark paper and agave for ritual purposes, ritualistic sacrifice including human sacrifice, and pictographic and hieroglyphic writing systems. The existence of shared linguistic traits in Mesoamerica was later confirmed by Campbell, Smith-Stark and Kaufman (1986), who published a paper analysing several linguistic features with wide distribution within the region.

The Mesoamerican linguistic area is defined on the basis of the diffusion of linguistic traits among languages that belong to a variety of language families which include both Nahuatl and Tének. Among numerous phonological and morphosyntactic traits that were identified for the languages of the area, five features were recognised as

the strongest traits and therefore the defining characteristics of the Mesoamerican linguistic area (Campbell et al. 1986: 555). These are: (1) nominal possession construction of the type ‘his-dog the man’, (2) relational nouns, (3) vigesimal numeral systems, (4) non-verb-final basic word order and (5) a number of semantic calques.

Campbell et al. (1986: 537-553) also listed other traits that can serve as secondary features characterising the area.⁶⁰ They observed a number of similarities in the sound systems, including: final devoicing of sonorants and nasals, voicing of obstruents after nasals, vowel harmony, fixed stress patterns, tonal contrasts in some languages, and no contrastive voiced fricatives. Those similarities were, however, not confirmed as traits that have resulted from diffusion (Campbell et al. 1986: 544). In addition to the phonological traits as well as the five defining traits mentioned above, Campbell et al. identified the following morphosyntactic features shared among various languages of the area:

- intimate possession involving body parts and kinship terms, which either do not occur unpossessed or require special morphological markers when possessed;
- locatives derived from nouns for body parts, e.g. a word for ‘stomach’ often is also used for the locational meaning ‘inside’;
- absolutive affixes that appear on nouns that have no other affixes;
- absence of plural markers on nouns or the use of plural markers only in the case of animate nouns;
- numeral classifiers that appear after numbers to indicate features of the referent;
- noun incorporation in which a nominal object may be incorporated into a verb stem;
- body-part incorporation in which a special form of body-part stem is incorporated into a verb stem, most frequently as instrumental;
- directional affixes on verbs that indicate direction, typically ‘toward’ or ‘away’ from the speaker;
- verbal aspect is often more important than tense in some languages;

⁶⁰ According to Campbell et al. (1986), the above secondary traits, although present in many of the Mesoamerican languages, cannot be considered strong areal traits either because they are present in only some languages of the area, or because they are features that are also characteristics of many languages outside Mesoamerica.

- inclusive vs. exclusive first person plural distinction in the pronominal system;
- lack of overt copulas in equative constructions with predicate adjectives or noun complements;
- pronominal copular constructions; and
- absence of a possessive verb ('to have') and the use, instead, of constructions equivalent to 'is', 'there is' or 'exists' combined with a possessed noun.

Many of the Mesoamerican features are also present in the two languages studied in this work. Both Nahuatl and Tének have approximately half of the features proposed by Campbell et al. (1986) (Table 2.5). Some of the traits are shared by both languages (i.e., traits: 1, 2, 3, 4, 5, 6, 7, 8, 13, 17, 19), including all five of the features that have been identified as the defining traits of the area (1-5). The other features present in both languages include: inalienable possession, locatives derived from body parts, absolutive nominal affixes, directional affixes on verbs, pronominal copular constructions and final devoicing of sonorants. According to Campbell et al. (1986: 556), some of the features are only found in Nahuatl but not Tének, including numeral classifiers, noun incorporation, body-part incorporation and the presence of the lateral affricate.⁶¹ Other features, on the other hand, are found in Tének but not in Nahuatl (i.e. absence of plural markers on nouns⁶², aspect marking on verbs that is more prominent than tense, vowel harmony and glottalised consonants).

⁶¹ The claim that Tének does not apply noun incorporation or body-part incorporation is questionable. It is true that these operations are not very productive in this language (as opposed to Nahuatl, for example), but there are examples for both noun incorporation and body-part incorporation in descriptions of Tének, including in Edmonson (1988). I provide examples of noun incorporation in §5.4.4. For examples of body-part incorporation see Edmonson (1988: 491-495).

⁶² This is also a questionable claim. Traditionally in Nahuatl inanimate nouns appear in singular form but with plural referent. The topic of animacy based plural marking in Nahuatl and Tének is explored in more detail in §3.2.4, §3.3.4 and §4.2.

Table 2.5. Mesoamerican linguistic area features in Nahuatl and Tének
(Campbell et al. 1986: 556-557).

No.	Feature	Nahuatl	Tének
1	Nominal possession ('his-N the N')	+	+
2	Relational nouns	+	+
3	Vigesimal numeral system	+	+
4	Basic word order: no SOV order	VSO	VOS
5	Absence of switch-reference	+	+
6	Inalienable possession of body part and kin terms	+	+
7	Locatives derived from body parts	+	+
8	Absolutive nominal affixes	+	+
9	Absence or limited occurrence of plural markers on nouns	-	+
10	Numeral classifiers	+	-
11	Noun incorporation	+	-
12	Body-part incorporation	+	-
13	Verbal directional affixes	+	+
14	Aspect more important than tense	-	+
15	Inclusive vs. exclusive 1st person plural pronominal forms	-	-
16	Zero copula	(-)	-
17	Pronominal copular constructions	+	+
18	Absence of the verb 'to have'	-	-
19	Final devoicing of sonorants	+	+
20	Voicing of obstruents after nasals	-	-
21	Vowel harmony	-	+
22	The stress rule: accent falls on the vowel before rightmost consonant	-	-
23	Contrastive voiced stops	-	-
24	Contrastive voiced fricatives	-	-
25	Presence of the lateral affricate (/tʃ/)	+	-
26	Presence of uvulars (e.g /q/)	-	-
27	Presence of aspirated stops and affricates	-	-
28	Presence of glottalised consonants	-	+
29	Contrastive tones	-	-
30	Presence of retroflexed fricatives (and affricates)	-	-
31	Presence of central vowels (/ɨ/ and /ə/)	-	-

An important shared trait of the Mesoamerican linguistic area is the numerous semantic calques, i.e. compound words shared across the languages of the area as a result of loan translation. Examples of such semantic calques are given in Table 2.6.

Table 2.6. Semantic calques in Mesoamerican languages (Campbell et al. 1986: 553).⁶³

No	Term	Semantic calque	No	Term	Semantic calque
1	door	mouth of house	29	coral snake	mother of driver ant
2	bark	skin/back of tree	30	bladder	house (of) urine
3	knee	head of leg	31	vein	road (of blood)
4	wrist	neck of hand	32	canine tooth	dog-tooth, snake-tooth
5	calf	excrement / belly of leg	33	molar	grindstone (<i>metate</i>)
6	eye	fruit / seed / bean of face	34	edge	mouth
7	bile	bitter	35	thumb	mother of hand
8	finger	child of hand	36	mano (of metate)	hand / child of metate
9	boa constrictor	deer-snake	37	poor	orphan, widow
10	moon	grandmother	38	rainbow	snake, cougar, turtle, squirrel or weasel
11	ring	coyol palm-hand	39	otter	water-dog, water-fox
12	witch	owl, sleep(er)	40	cedar	god tree
13	cramp	(associated in some way with) deer	41	medicine	liquor, poison
14	fiesta	ceremony: (big) day	42	to cure	to suck (to smoke)
15	root	hair of tree	43	pataxtle (non-domesticated cacao)	tiger-cacao (jaguar-cacao)
16	twenty	man	44	town	water-mountain
17	lime	(stone-)ash	45	soot	nose / mucus of tree
18	egg	stone / bone of bird	46	to write	to paint / to stripe
19	wife	intimately possessed 'woman'	47	to read	to look / to count / to shout
20	porcupine	thorn-opposum, thorn-lion, thorn-peccary, thorn-pig	48	alive	awake
21	cougar	red jaguar	49	son and daughter	man's are distinguished, but a single term for woman's
22	anteater	honey sucker, suck-honey	50	head	bottle gourd (<i>tecomate</i>)

⁶³ Whereas some of these calques have more limited distribution within Mesoamerica (such as 'root: hair of tree'), most of them are indeed widely used. According to Brown (2011), the thirteen semantic calques that are most widespread areal borrowings are: 'knee: head of leg', 'boa: deer-snake', 'lime: ash, stone-ash', 'wrist: neck of hand', 'egg: stone of bird, bone of bird', 'vein: road (of blood)', 'molar: grindstone (*metate*)', 'edge: mouth', 'thumb: mother of hand', 'gold or silver: god-excrement, sun-excrement', 'alive: awake', 'town: water-mountain', 'porcupine: thorn-possum'. Although Campbell et al. (1986: 555) considered the wide distribution of the semantic calques throughout Mesoamerica a strong evidence of linguistic diffusion, Brown (2011) questioned the possibility of treating them as areal traits. According to him, five out of the thirteen semantic calques: 'boa', 'lime', 'egg', 'gold/silver' and 'town' originated in only one language of the area and then diffused to all other Mesoamerican languages (Brown 2011: 182). Interestingly for this study, the analysis by Brown (2011: 175) confirms that eleven of the thirteen semantic calques (all except 'molar' and 'alive') are attested in Classical Nahuatl but only two ('lime' and 'thumb') are present in Tének. Perhaps this discrepancy could be a hint that Tének is a 'less' Mesoamerican language (i.e. a more peripheral Mesoamerican language).

23	to kiss	to suck	51	thirst	water-die
24	to smoke	to suck	52	need	want, be wanted
25	branch	arm (of tree)	53	enter	house-enter
26	to marry	to join / to find	54	cockroach	contains the root for 'house', often compounded with 'in' or an equivalent
27	gold/silver	excrement of sun / god	55	feather	fur
28	eclipse	eat the sun / moon; the sun / moon dies; sun / moon to rot			

The main focus of more recent studies on Mesoamerican languages was to establish which languages of the area acted as donors in the spread of traits and when the diffusion of particular features occurred. Several works (e.g. Brown 2011; Hill 2012) point to Nahuatl, the lingua franca of Mesoamerica for several centuries before and after the Spanish conquest, as the language that played a key role in the development of this linguistic area. The geographic distribution of Nahuatl as a lingua franca before 1521 is shown in Figure 2.11.

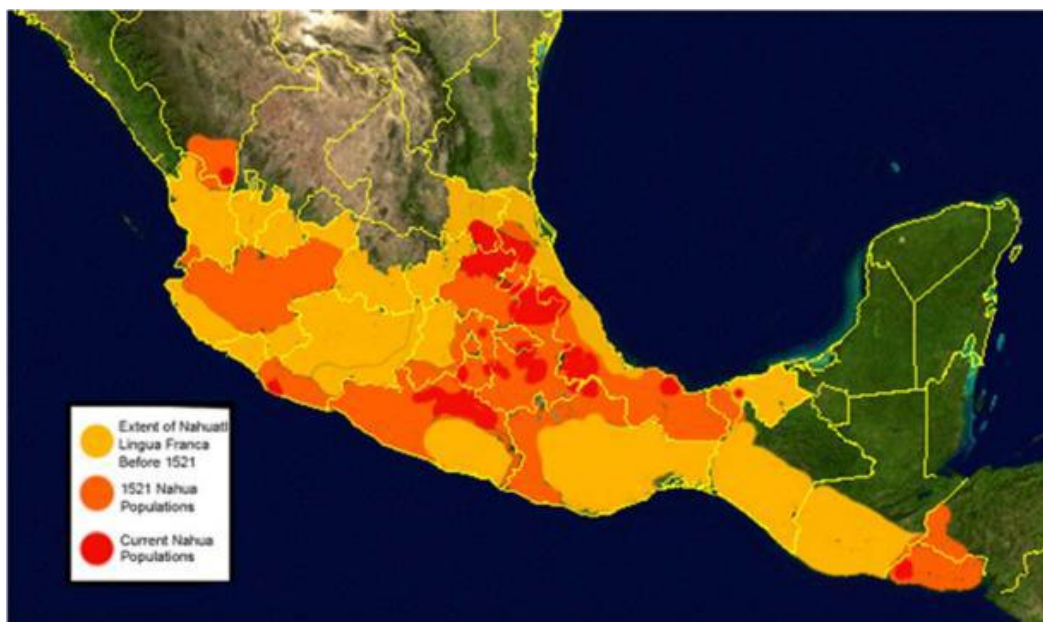


Figure 2.11. Nahuatl in Mesoamerica (Strom 2018).⁶⁴

⁶⁴ According to this map, Nahuatl was not spoken in e.g. today's Nicaragua, which is not accurate. We know from sources (e.g. the literary drama *El Güegüense* written in the Nahuatl variety spoken in Nicaragua in the 16th century and edited by Brinton in 1883) that Nahuatl was indeed spoken that far south.

The direction of influence between Nahuatl and other Mesoamerican languages is crucial for understanding the development of the Mesoamerican linguistic area. At first, it was Nahuatl that was under the influence of other Mesoamerican languages. Several of the Proto-Uto-Aztecan features of Nahuatl were altered as a consequence of contact with other Mesoamerican languages (Kaufman 2001). These altered features include head-marking in nominal possession, relational nouns and non-verb final word order (Campbell et al. 1986: 545-547). With time, however, Nahuatl became an important agent in the diffusion of features among the Mesoamerican languages. According to Brown (2011) and Hill (2012), Nahuatl was the language responsible for the creation of a number of the areal traits and not merely a language that arrived late to the area and was transformed afterwards as a result of contact with other Mesoamerican languages. Although other Mesoamerican languages, such as Mixtec, Zapotec and Purépecha were also used as local *lingua francas* (Dakin 2010: 166-167), Nahuatl was used in interethnic communication on a much larger scale. It is possible that Nahuatl began to serve as a *lingua franca* in Mesoamerica long before the Aztec empire (Dakin 1981: 55), probably as early as the beginning of the Post-Classic period, i.e. ca. 900 CE (Brown 2011: 197; Canger 1988: 31-32) along with the emergence of the Toltecs, who almost certainly also spoke Nahuatl (Canger 1988: 63; Kaufman 2001). The Toltecs were responsible for the spread of their culture (and possibly also their language) to the Yucatán Peninsula, Guatemala and southern Mexico.⁶⁵

The status of Nahuatl as a *lingua franca* in Mesoamerica continued even after the Spanish conquest (Canger 1988: 32–33; Karttunen and Lockhart 1976). Nahuatl was used for administrative purposes and in the evangelisation process, which helped to spread Nahuatl further across Mesoamerica and increase Nahuatl bilingualism among speakers of other indigenous languages (Dakin 2010). Some researchers attribute the presence of several lexical borrowings from Nahuatl in other indigenous languages to the use of Nahuatl as a second language, such as in the case of Yukatek Maya, which borrowed personal names, titles, plant names and animal names from Nahuatl

⁶⁵ It is also possible that this ethnolinguistic group diffused the semantic calques discussed above, since the distribution of the languages with those calques corresponds with the languages that were located in the areas that were under the cultural influence of the Toltecs (Brown 2011: 187).

(Karttunen 1985: 7-14). According to Miller (1990), Nahuatl was also the medium for the transmission of Spanish loanwords to indigenous languages that were not in contact with Spanish.

Mesoamerican languages are also characterised by the existence of certain shared post-contact loanwords. This phenomenon was studied in detail by Brown (1999, 2009, 2011). The fourteen features that Brown listed as traits of post-contact Mesoamerica are presented in Table 2.7 below. According to Brown (2009: 868), all of the fourteen features are frequently found in the languages of Mesoamerica but the first nine of them (i.e. A-I) were most likely borrowed from Nahuatl (Brown 2009: 868). The remaining five features (i.e. a-e), on the other hand, could have been either distributed by diffusion or directly from Spanish into individual indigenous languages.⁶⁶

⁶⁶ The existence of some of the above listed loanwords and loan shifts in colonial Tének and colonial Huasteca Nahuatl is hard to establish due to the lack of available sources. Out of the first nine features (A-I), modern Tének only uses two words that originate in Nahuatl and follow the patterns suggested by Brown, i.e. *mitsu* 'cat' and *tumín* 'money'. The word for 'wheat' in Tének is *lab em* 'Spanish corn', which also follows the pattern proposed by Brown. For some of the other features (such as B and C), Spanish loans are used: *chivo* 'goat' and *borrego* 'sheep'. For the remaining features (D,E,G,H) unrelated forms are used in modern Tének. It is possible that the forms referring to features B,C,D,E,H, I may have followed the pattern that Brown presented as typical for post-contact Mesoamerican languages and were lost over time, but there is not enough evidence to prove this at present. For the remaining five features (a-e), the Spanish loans that are present in modern Tének are: *pácax* 'cow', *xabún* 'soap' and *méxa* 'table'. Tének does not use Spanish loans to refer to scissors (Tének: *et'omtalab*), or needle (Tének: *tídhab*). It is not possible to establish whether the Spanish loans in Tének for 'cow', 'soap', and 'table' are a result of direct borrowing from Spanish or a Spanish borrowing that entered Tének through Nahuatl. The Tének loans for 'cat' and 'money', however, appear to be borrowed directly from Nahuatl and the form for 'wheat' also appears to be based on the Nahuatl pattern of naming new items brought by the Spanish.

Table 2.7. Post-contact traits across languages of Mesoamerica
(after Brown 1999: 153-154, Brown 2009: 867).

Symbol	Trait	Origin
A	Loanword for ‘cat’	Classical Nahuatl <i>mizton</i>
B	Native term for ‘goat’ (sometimes ‘sheep’)	Classical Nahuatl <i>tentzone</i>
C	Loan shift for ‘sheep’	derived from a word for ‘cotton’ (realised through overt marking, e.g. “cotton deer” = ‘sheep’, or as polysemy)
D	Loan shift for ‘bread’	derived from a combination of Classical Nahuatl <i>caxtillan</i> and a word for ‘tortilla’ (e.g. Classical Nahuatl <i>caxtillan tlaxcalli</i>)
E	Loan shift for ‘chicken/hen’ (occasionally ‘rooster’)	typically derived from a combination of Classical Nahuatl <i>caxtillan</i> and a term for ‘turkey’ or ‘bird’ (e.g. Classical Nahuatl <i>caxtillantotolin</i> ‘chicken’)
F	Loan shift for ‘wheat’ (or, rarely, some other imported grain)	derived from Classical Nahuatl <i>caxtillan</i> and a term for ‘maize’ (e.g. Classical Nahuatl <i>caxtillan tlaulli</i>),
G	Native term for ‘money’	based on an archaic Spanish term, <i>tomín</i> , which denoted a specific currency denomination – one-eighth of a peso
H	Loan shift for ‘horse’	derived from a term for ‘deer’, typically realised in marking reversals (e.g. Tének “Huastec horse” = ‘deer’) and as polysemy
I	Native term for ‘chicken/hen/rooster’	derived from Classical Nahuatl <i>totolin</i>
a	Loanword for ‘cow’	based on the 16th century realisation of Spanish <i>vacas</i> “cows” (phonologically /vakaš/)
b	Loanword for ‘soap’	based on the 16th century realisation of Spanish <i>jabón</i> ‘soap’ (phonologically /šabon/)
c	Loanword for ‘needle’	based on the 16th century realisation of Spanish <i>aguja</i> ‘needle’ (phonologically /aguša/)
d	Loanword for ‘scissors’	based on the 16th century realisation of Spanish <i>tijeras</i> , in which ‘s’ was an apico-alveolar fricative
e	Loanword for ‘table’	based on the 16th century realisation of Spanish <i>mesa</i> ‘table’, in which ‘s’ was an apico-alveolar fricative

In regard to the semantic calques proposed by Campbell et al. (1986) as one of diagnostic features of the Mesoamerican linguistic area, Brown (2011: 191) claims that five of them, namely the calques for: ‘boa’, ‘lime’, ‘egg’, ‘gold/silver’ and ‘town’, were also diffused by Nahuatl. The evidence for this is the fact that Nahuatl is the only Mesoamerican language that shows all five of the semantic calques and, for this reason, is the language that most likely served as the agent of diffusion of those traits. Nahuatl

can be therefore considered one of the most influential languages that played a crucial role in the formation of the Mesoamerican linguistic area.

Another language that has played an important function in consolidating Mesoamerican languages is Spanish (Diebold 1962: 49). Spanish, which, like Nahuatl, was also a lingua franca in the colonial times, may have even been responsible for the spread of some Nahuatl words throughout Mesoamerica. Present day Mesoamerican languages can also be characterised as having a large number of Spanish loanwords, particularly referring to Christianity, governmental administration, tools, material, measurements, domesticated animals and plants, as well as shared structural borrowings from Spanish (Dakin and Opperstein 2017: 6). Spanish has come to play the role of a dominant lingua franca in a linguistically diverse region. It has created in Mexico a single linguistic area characterised by the Spanish-derived loans adopted by various indigenous languages as a result of their shared tradition of contact with and interference from Spanish (Diebold 1962: 49).

To sum up, the development of the Mesoamerican linguistic area was a long and complex process involving different languages as agents of the spread of linguistic features. The influential and consolidating languages of the area included Nahuatl and Spanish, as the media of diffusion of many linguistic traits throughout Mesoamerica. Spanish has contributed to significant changes in the lexicon and the morphosyntactic structures of the Mesoamerican languages, which have been gradually becoming more and more Hispanicised. Before I move on to show examples of structural change in Nahuatl and Tének in the later chapters, I first discuss briefly the methodological principles and sources of data applied in my study.

2.5. Methodology in language contact studies

The study of contact-induced language change involves identifying innovations in a certain language that were caused by interaction with another language. But language contact is not the only reason why languages can have shared features. First of all,

similarities can be due to language universals, such as markers of clausal negation (Aikhenvald and Dixon 2001: 1). Similarities can also be purely coincidental, as illustrated by the example of the word *dog*, which has the same shape and meaning in both English and Mbabaram (Pama-Nyungan, Australia) (Aikhenvald and Dixon 2001: 2). Genetically related languages, which descend from a common ancestor language, will also share similar categories and meanings expressed by similar forms. For example, Tének shares ergative/absolutive alignment with other Mayan languages due to its genetic origin in the Proto-Mayan language family. Finally, changes may stem from language contact but they may not necessarily be a result of a direct contact with the source language. As an example, global languages such as English can influence the development of non-coterritorial, unrelated languages that are not in direct contact with speakers of English. Nahuatl, Tének, Spanish and Polish all share some vocabulary related to computer technology that originated in English. This fact, however, does not imply that all of these four languages have been in a direct contact situation; rather, Nahuatl and Tének borrowed those items via Spanish.

Considering all of the above mentioned factors that may be responsible for similarities between languages, a reliable study of language change must be designed to account for a wide range of possible causes behind comparable elements. Ideally, a comprehensive study should involve an analysis of a sufficiently large amount of data that represents not only the current lexicon and grammar of the languages in contact, but also takes into consideration the historical development and changes within those languages (Curnow 2001: 422). Other factors that must be taken into consideration are the history of language contact situations between the languages in question, and the sociolinguistic and demographic factors that might have also influenced the outcomes of contact between languages.

Determining whether a certain innovation was indeed contact-induced can be tricky. A list of necessary conditions that must be met in order to classify an element as a borrowing was proposed by Thomason (2001: 93-4, 2010: 34). First of all, the receiving language must be looked at in a holistic way, considering all of its structural components. The next step is to identify a source language with which the receiving

language has been in close contact. The third step is to recognise shared features in both recipient and source languages. While there is no need for these features to be identical, they have to belong to a specific linguistic subsystem, such as phonology or syntax. The fourth step is to prove that the shared features are not innovations in the source language. Finally, the fifth step is to show that the features are indeed innovations in the recipient language, and that they did not exist in the recipient language before this language came into close contact with the source language. Thomason (2010: 34) stresses that, additionally, in order to make the analysis solid, even if a change has been proven to have an external cause, the influence of internal causes should be taken into consideration. Thomason (2010: 35) warns that if one or more of the above prerequisites cannot be met, then claiming that a change is a result of external causation can only be tentative.

To sum up, language change is determined by multiple causes including internal and external linguistic factors, as well as sociodemographic and political considerations that affect language communities. Thus, every contact linguistics study should be multidisciplinary, and it should take into account not only contemporary and historic linguistic data, but also consider any extralinguistic factors that may be relevant to the situation of both speech communities.

2.6. Sources of data and methodology used in this study

2.6.1. Introduction

This work follows the above listed methodological principles for language contact studies. In this part of the chapter I discuss sources of language data that were used in my study. I describe data collection methods and the results of my language documentation in the Huasteca, including audio recordings, transcriptions and word lists for both Nahuatl and Tének. Aside from the language material that I obtained during my fieldwork, I also list the published sources representing both the colonial and more recent Nahuatl and Tének texts that I used in my analysis. Next, I provide information

about the Nahuatl and Tének consultants whose examples of language use were included in this work and, I describe their sociolinguistic profiles, including their age and language competence levels. Finally, I explain the glossing principles that I use for both the data collected in the field and the material that comes from published sources.

2.6.2. The Nahuatl data

The corpus of data representing modern Nahuatl use includes data collected during fieldwork in the Huasteca Potosina between 2014 and 2020, primarily in indigenous Nahua communities in the municipality of Xilitla in the southern part of the state of San Luis Potosí. The villages of Xilitla where Nahuatl material was collected include: Pilateno, Itztacapa, Cuartillo Nuevo, El Ajuate, Pahuayo, San Antonio Huitzquilico, El Jobo, La Herradura, Los Pocitos, Ixtacamel, Agua Puerca and Uxtuapan. A portion of the data was also provided by Nahuatl speakers from other parts of the Huasteca Potosina in the municipalities of Tamazunchale, Tampacán, Matlapa, Axtla de Terrazas, Coxcatlán and Tampamolón Corona. The speakers included both females and males representing different education levels who were between 19 and 75 years of age. They were all bilingual in Nahuatl and Spanish. A separate set of data was collected from students during various visits to the primary school in San Pedro Huitzquilico and the secondary schools in Itztacapa and Cuartillo Nuevo in the municipality of Xilitla. The age of the students attending these schools ranged between 10 and 14 years of age. All of the students were native speakers of Nahuatl and they were also competent speakers of Spanish. Every adult consultant was informed about the purpose of my study and gave their permission to be recorded (in either written or oral consent forms). For the under-age consultants, I obtained the required permission from their parents or teachers. The purpose of my work, as well as the list of planned activities with the students, were explained to the school directors and the teachers who were present in the classrooms where the workshops took place.

Data collection methods included a variety of techniques widely used in language documentation projects. Recordings of natural speech were collected which represent such genres as life stories, oral tradition, recipes, monologues and official speeches.

Additional recordings were collected in elicitation sessions. Grammatical correctness tests were also applied for a number of constructions. The language of the elicitation and grammatical correctness tests was Spanish. Since the use of Spanish as the elicitation tool may lead to more Hispanicised forms in the speakers' responses, on some occasions visual stimuli (such as pictures or movies) were utilised so that the use of Spanish was minimised. In order to guarantee cultural compatibility with the customs and the way of life of people in the Huasteca, visual stimuli included, e.g. videos showing indigenous people involved in typical rural daily activities. In addition, the movie *The Pear Story*, which is widely used in linguistic fieldwork, was also used. Before the visual stimuli were shown, the consultants were instructed to describe what they would see on the pictures or what was happening in the movies. The students at the schools mentioned above also prepared numerous short texts in Nahuatl which represent local stories and legends, which they collected themselves from their older family members as homework. In addition, the primary school students in San Pedro Huitzilquico worked in groups and prepared word lists including basic core vocabulary (e.g. names of local animals and parts of the body) and cultural vocabulary (e.g. names for school equipment or words used to refer to new technology).

The fieldwork data was preserved in a variety of language documentation materials such as audio recordings, word lists and written texts. Voice recordings were made using an Olympus DM-650 digital voice recorder in the WAV format. The total length of the voice recordings in Nahuatl reached about 450 minutes. The software used for the transcription of audio files was ELAN and, for some, also WPS Writer. The school workshops resulted in numerous short texts hand-written by the students in Nahuatl totalling approximately 15,000 words. These texts were then scanned into digital format and, in addition, the text was transcribed using WPS Writer and a Spanish translation was added for those stories that did not include it in their original version. A small part of the transcribed recordings of oral tradition, as well as several stories compiled by the students from the schools in Itztacapa and Cuartillo Nuevo, were also published as a collection of tales *Kamanaltlajtolmej Xilitlan* [The tales of Xilitla] (Sobkowiak 2016). This volume contained 25 stories written by 17 authors from 11 different Nahua

communities and it was edited in collaboration with members of the Nahuatl language collective Nauatlajtoli Xilitlan. In addition, the above mentioned Nahuatl materials were complemented by wordlists collected for various semantic fields representing both cultural and core vocabulary (approximately 1,000 words). The wordlists were first collected on paper during students' group work and then transferred to a spreadsheet document.

In order to show changes between the modern and colonial varieties of Nahuatl, various sources in and about Classical Nahuatl were also used in this study. These include several missionary Nahuatl grammars (Molina 1571a; Carochi 1645; Tapia Zenteno 1753; Cortés y Zedeño 1765) and modern sources describing Classical Nahuatl grammar (Sullivan 1988; Lockhart 2001; Andrews 2003; Launey 2004). The corpus of study also included other documents written in colonial Nahuatl, e.g. wills from Toluca edited by Pizzigoni (2007) and a complaint written in Nahuatl by the indigenous people in Jalisco (Sullivan 2003). The texts that were used represent different varieties of Nahuatl (mostly used in the Central Valley) in the 16th, 17th and 18th centuries and customarily called 'Classical Nahuatl'. Since, to the best of our knowledge, Huasteca Nahuatl does not have surviving documentation from the colonial period, the Classical Nahuatl sources are the best available representation of traditional Nahuatl as spoken in the colonial era.⁶⁷ Moreover, since Huasteca Nahuatl and Nahuatl spoken elsewhere in Mexico were (and are) very closely related, the use of Classical Nahuatl sources to

⁶⁷ According to John Sullivan (p.c., 13 March 2022), there is at least one undated colonial document from Chicontepec in the Huasteca Veracruzana which is written in a mixture of Huasteca and Central Nahuatl.

demonstrate how modern Huasteca Nahuatl changed with respect to a more traditional variety is not only justified but, because of the lack of other materials, also necessary.⁶⁸

In addition to the contemporary Huasteca Nahuatl and Classical Nahuatl sources mentioned above, this study also used a number of publications that represent the intermediate stage between the colonial and present-day Nahuatl. A very useful source was the Huasteca Nahuatl learning materials published in the 1970s and 1980s by Beller (N.) and (Cowan de) Beller (1979, 1984, 1985), who worked in the Huasteca Hidalguense, a region adjacent to the Huasteca Potosina. Although the variety of Nahuatl represented in these materials cannot be referred to as ‘traditional’ Nahuatl, it nevertheless includes structures and vocabulary that illustrate Nahuatl with significantly less Spanish influence than the variety of Nahuatl spoken in Xilitla today.

2.6.3. The Tének data

With respect to the Tének data, the materials used in this study also represent colonial, intermediate and present-day language use. For present-day Tének, a large quantity of data was collected during fieldwork in the Huasteca Potosina between 2016 and 2020. The language consultants were native speakers of Tének from the following villages: San Antonio Huitzquilico in the municipality of Xilitla, San Isidro in the municipality of Aquismón and Tamaletóm in the municipality of Tancanhuitz. The adult speakers were between 23 and 60 years of age and represented different genders, education and social mobility levels, and attitudes towards the heritage language. A significant portion of the work was also done with younger Tének speakers (aged 12-14 years old) in the secondary school in the village of San Antonio Huitzquilico. All of the Tének

⁶⁸ Some characteristics of the mid-18th century colonial Huasteca Nahuatl are mentioned in a Nahuatl grammar book written by Tapia Zenteno (1753), who worked as a missionary in the municipalities of Tampamolón Corona in the Huasteca Potosina where Nahuatl and Tének were (and are) spoken. He learned Tének, and probably also Nahuatl in that region of the Huasteca (Meléndez Guadarrama 2016) where he lived for 20 years. His Nahuatl grammar appears to be a mixture of Nahuatl from the Valley of Mexico (which can be detected, for example, in the use of the antecessive preclitic *o=*) and the Huasteca. It seems that Tapia Zenteno treated the Nahuatl from around Mexico City as the ‘standard’ Nahuatl and the variant spoken in the Huasteca as a regional dialect. Occasionally he makes comments about differences in the use of certain lexical elements in the centre of Mexico and in the Huasteca, referring to the latter variant as *serrano* ‘highland’ Nahuatl. The fact that Tapia Zenteno probably learned Nahuatl in the Huasteca and then became a specialist in Nahuatl in Mexico City, writing a Nahuatl grammar and also giving classes in Nahuatl at the Real y Pontífica Universidad in Mexico City (Antochiew 1984) may also suggest that the differences between the two Nahuatl varieties were not major.

consultants were bilingual in Tének and Spanish, and some of the speakers from San Antonio Huitzilco are trilingual and they can also speak Nahuatl. As with the Nahuatl consultants, I also informed my Tének consultants about the goal of my work and obtained the required permission before making audio recordings. Prior to my work at the school in San Antonio Huitzilco, I explained my goals to the school director and obtained her permission to perform a series of workshops with the students at this institution. During my work with the students, the teachers were present in the classroom.

Tének data collection methods were very similar to the techniques used in the fieldwork with Nahuatl speakers described above. Recordings of natural speech included life stories, tales about the elements of local landscape and speeches. Additional recordings included elicitation of lexicon, phrases and sentences, as well as grammatical correctness tests. The language of elicitation was Spanish. In addition, visual stimuli, including pictures and movies (the same ones that were used as prompts for the Nahuatl speakers), were also utilised. The consultants were recorded using an Olympus DM-650 digital audio recorder. The work with the students in San Antonio Huitzilco involved collection of core and cultural Tének vocabulary from different semantic fields, which the students collected by working in small groups. In addition, the students were also asked to judge the grammatical correctness of various Tének phrases and clauses shown to them on paper.

The fieldwork data with the Tének speakers was preserved in audio recordings, word lists and lists of translated phrases and sentences. The total length of voice recordings was about 150 minutes. The word lists for cultural and core vocabulary included close to 1,000 unique vocabulary items. The number of phrases and clauses/sentences translated to Tének during elicitation sessions reached approximately 320.

The Tének data obtained during my fieldwork in the Huasteca was also complemented by materials published in different varieties of Tének. The San Luis Potosí variety is represented in publications including: books of stories (e.g. Van't Hooft and Cerda Zepeda 2003; Trejo Arenas 2015), a grammar by Esteban Martínez et

al. (2006) and two dictionaries (Fernández Acosta et al. 2013; Flores Martínez 2018). In addition, this study used materials representing contemporary Tének spoken in the state of Veracruz. The published sources include several works on South Eastern Tének by Kondic, including her various scholarly publications (2011, 2012, 2013, 2016b), as well as a compilation of oral tradition in this variety (2016a). Moreover, several works by Meléndez Guadarrama were also used (2011, 2013, 2017b, 2018, 2021), including a book of texts and elicited phrases in Tének spoken in El Mamey, Veracruz (2017a).

The modern Tének data was contrasted with traditional Tének materials from various colonial sources. These included missionary works in Tének written by De la Cruz (1571), De Quirós (2013 [1711]), Tapia Zenteno (1767) and an anonymous Tének phrasebook from the beginning of the 18th century (edited by Hurch and Meléndez Guadarrama 2020). The late 19th century Tének phrasebook by Lorenzana (1896) also was considered a source that represents a more traditional variety of the language.

As with Nahuatl, intermediate-stage language materials were also included to investigate diachronic change in Tének. These materials include 20th century resources that represent a more conservative variety of Tének from the variety that it is spoken nowadays (e.g. Larsen 1955, 1972). Another valuable source of data was a comprehensive academic grammar of Tének written by Edmonson (1988).

2.6.4. The examples presented in this study

In order to make the data corpus as varied as possible, this study included not only Nahuatl and Tének material from different periods, but also material representing a variety of registers collected from speakers of distinct sociolinguistic profiles. The consulted speakers represented different genders, age groups, places of origin, places of residence, professions, education and social mobility levels. Out of dozens of speakers from whom I gathered data during my work in the Huasteca, the data presented in this study includes examples provided by 25 speakers (21 Nahuatl and 4 Tének speakers). To protect the identity of my consultants, the examples of their language use that are included in later parts of this work will not specify their names but, rather, will be coded. The codes are included in the description of the examples. A key to the codes

representing the 25 speakers along with the information about their sociolinguistic profiles is given in Table 2.8 below.

Out of the 21 Nahuatl speakers, 10 were female and 11 were male. Out of the 4 Tének speakers, 2 were female and 2 were male. The Nahuatl speakers were between 12 and 76 years of age, and the Tének consultants ranged between 13 and 34 years of age. All consultants live in their respective Nahua or Tének communities, except for: AFF who comes from Tamaletóm but lives in Xilitla, the municipal capital; JFR who moved to a *mestizo* community outside Xilitla; LFH who lives in Mexico City; LGA who lives in Xilitla, and RSR who lives in Tamazunchale, another municipal capital located outside the Tének speaking zone. The speaker SMF resides in San Antonio Huitzilco, which is a Tének community with a significant number of Nahua residents due to the proximity to the Nahua zone and frequently occurring intermarriage. The Nahuatl speakers represented contrastive levels of formal education including: 1 person who completed primary school, 7 speakers who completed secondary school (until age 14-15), 2 who completed high school (until age 18-19) and 2 who had a college education. In addition, 9 Nahuatl consultants at the time of data collection attended secondary schools in the villages of Itzacapa and Cuartillo Nuevo. Of the Tének speakers, 3 had a college education and 1 was attending secondary school.

The consulted speakers were all native speakers of either Nahuatl or Tének but they represented different levels of competence, which was linked to their place of residence, age and occupation. To mark their contrastive levels of competence, I use my own system of notation, as follows. The indigenous language proficiency of a person who speaks Nahuatl or Tének every day with either/both their family members or/and others members of the indigenous community, and displays positive language attitudes towards their respective heritage language is marked as ‘N’ (Nahuatl-dominant) or ‘T’ (Tének-dominant). The next category of consultants consists of individuals who use Nahuatl or Tének often but their preferred language of communication is Spanish. In this group I include language activists LFM and RSR, and a Nahuatl teacher LGA, who, despite having very positive attitudes towards their heritage languages, tend to use more Spanish because of their place of residence, and social or family situation. These

consultants are marked as ‘N=S’ (for Nahuatl speakers) or ‘T=S’ (for Tének speakers). The third category of speakers are marked as ‘S’ (i.e. Spanish-dominant).

The examples that are presented in this work use the following orthographic and glossing rules. In the case of examples that come from my own fieldwork recordings, elicitations, grammatical correctness tests and other data collection activities that did not involve published sources, the orthographic conventions are the ACK orthography for Nahuatl (see §3.2.3) and a set of orthographic conventions based on Fernández Acosta et al. (2013) for Tének (see §3.3.3). The glossing of these examples is my own and follows the abbreviations used in the Leipzig Glossing Rules (LGR) (2015) with several other abbreviations added if these were missing in the LGR. All examples from published sources follow their original orthography, unless stated otherwise. The examples from the published linguistic resources on Nahuatl or Tének that include glossing are presented in their original form, unless indicated differently. The use of angle brackets (<...>) indicates the original orthography used in a colonial source which was later changed to conform to more modern orthography in either a published source that quotes the example or by myself. All of the examples also include my own translation to English, except for examples which came from a publication in English.

Table 2.8. Nahuatl and Tének speakers consulted during fieldwork with their respective codes and sociolinguistic profiles.

Code	Language	Community	Municipality	Age	Sex	Education	Profession	Language competence
ABN	N	Cuartillo Nuevo	Xilitla	12	F	in secondary school	student	N=S
AGJ	N	Pilateno	Xilitla	56	M	secondary school	works at his own land, shopkeeper	N
AFF	T	Tamaletóm	Tancanhuitz	34	F	college	teacher	T=S
AHL	N	La Herradura	Xilitla	53	F	secondary school	works with local NGOs	N
ASH	N	Los Pocitos	Xilitla	32	F	college	involved in indigenous rights'	N
CAH	N	Itztacapa	Xilitla	12	M	in secondary school	student	N=S
DJH	N	Itztacapa	Xilitla	12	M	in secondary school	student	N=S
DLH	N	Ixtacamel	Xilitla	58	M	secondary school	farmer	S
EZH	N	Cuartillo Nuevo	Xilitla	12	M	in secondary school	student	N=S
FRF	N	Itztacapa	Xilitla	13	M	in secondary school	student	N=S
GHH	N	Itztacapa	Xilitla	14	M	in secondary school	student	N=S
JAA	N	Itztacapa	Xilitla	12	M	in secondary school	student	N=S
JFR	N	Agua Puerca	Xilitla	21	M	high school	tour guide, entrepreneur	N=S
LFM	T	San Isidro	Aquismón	25	M	college	language activist	T=S
LGA	N	El Jobo	Xilitla	75	M	college	Nahuatl teacher, preacher	N=S
MMS	N	Pahuayo	Xilitla	74	F	secondary school	works at home	N=S
MRC	N	Itztacapa	Xilitla	14	F	in secondary school	student	N=S
PCM	N	Itztacapa	Xilitla	14	F	in secondary school	student	N=S
PGR	N	Uxtuapan	Xilitla	55	F	secondary school	works at home	N=S
PRC	N	Pilateno	Xilitla	64	M	secondary school	works with local NGOs	N
RFR	N	Agua Puerca	Xilitla	24	F	high school	works with local NGOs	N=S
RSR	T	El Carrizal	Tampamolón	33	M	college	teacher, language activist	T=S
SAB	N	El Ajuate	Xilitla	72	F	secondary school	works at home	N=S
SMF	N	San Antonio	Xilitla	76	F	primary school	works at home	S
TSA	T	San Antonio	Xilitla	13	F	in secondary school	student	T=S

2.7. Concluding remarks

An analysis of language change resulting from linguistic diffusion in two or more genetically unrelated languages is a complex task. Some scholars have claimed that there are no restrictions on what linguistic structures can be affected in a situation of a very intense and long contact, and that “it is the sociolinguistic history of the speakers, and not the structure of their language, that is the primary determinant of the linguistic outcome of language contact” (Thomason and Kaufman 1988: 35). However, the language contact situation studied in this work proves this claim to be accurate only to some extent. Although the importance of sociolinguistic factors, such as age, social mobility, language attitudes and the degree of bilingualism, is confirmed in this study, the linguistic factors should not be considered as secondary. Despite the fact that the Nahuatl people and the Tének people are both in very intense contact with Spanish and *mestizo* culture nowadays, the linguistic diffusion that can be observed in Nahuatl is more extensive and does not affect exactly the same structures as the linguistic diffusion that can be observed in Tének. This can be explained by the fact that Nahuatl and Tének are typologically different languages, and these typological differences may facilitate some and block other innovations resulting from contact with Spanish. There are indeed no universal outcomes of language contact since every situation is unique, yet the outcomes are conditioned by both linguistic and extralinguistic factors. This study of language change in Nahuatl and Tének illustrates such multiple causation in linguistic diffusion.

Chapter 3: Nahuatl and Tének: a structural overview and previous studies

3.1. Introduction

In this chapter I provide a structural overview of traditional Nahuatl and Tének, and I describe the available literature on the influence of Spanish on both languages. First of all, I give a brief summary on the genetic classification of Nahuatl and its closest relatives. I then focus on the phonology of this language and the main orthographic conventions used to write Nahuatl. I next discuss the nominal morphology of Nahuatl, addressing such issues as the typical morphological components of a Nahuatl noun, its two basic forms, i.e. the absolutive and possessive, and the principles of plural marking. I then describe how a typical Nahuatl verb is constructed, including the principles of dividing Nahuatl verbs into classes and the corresponding tense-aspect-mood marking, as well as a list of verb affixes. Lastly, I present the literature on the topic of Spanish influence in Nahuatl. For Tének, I also provide information about its classification within the Mayan family and I describe its phonemes, stress patterns and vowel harmony. I discuss the nominal morphology of Tének, including the generic, absolutive and possessive forms of nouns. I then deal with the morphology of Tének verbs, including personal ergative and absolutive markers, transitivity markers, valency increasing and decreasing suffixes, and tense-aspect-mood suffixes. Furthermore, I introduce the topic of inverse alignment, which is one of the most difficult features to grasp while studying Tének. I also briefly discuss embedded clauses before moving on to present the existing studies on influence of Spanish on the lexicon and grammar of Tének.

The structure of this chapter is the following. Section §3.2 provides information on traditional Nahuatl, including essential details regarding its genetic affiliation, phoneme

inventory, nominal morphology, verbal morphology and syntactic structure. This section also mentions previous studies of Spanish-contact induced phenomena in Nahuatl. Section §3.3 gives a structural overview of Tének, including its genetic affiliation, sound system, nominal morphology, patterns of grammatical alignment and the notion of inverse alignment. This section also deals with Tének verb morphology and selected aspects of syntax, as well as the available sources analysing contact with Spanish. Section §3.4 provides concluding remarks.

3.2. Nahuatl: a structural overview

3.2.1. Introduction

The following sections provide an overview of Nahuatl. After I describe its genetic affiliation, its phonemic inventory and some of the available orthographic conventions used to represent the sounds of this language, I move on to explore several aspects of the nominal and verbal morphology and syntax in Classical Nahuatl. I show that Nahuatl was traditionally a language very different from Spanish with a highly complex word structure and the presence of many Mesoamerican traits including nonverbal predicates, relational nouns, inalienable possession and noun incorporation. Since the Spanish conquest Nahuatl found itself under the influence of the colonial language and its lexicon, and later its structures also started to become Hispanicised. To conclude these sections on Nahuatl, I provide a short review of the available literature on the impact of Spanish on Nahuatl, including both colonial and modern varieties of this language.

3.2.2. Classification of Nahuatl

Nahuatl is a Uto-Aztecan language and it probably originated in the southwest of the present-day United States and northwestern Mexico. According to Glottolog, the Uto-Aztecan language family includes 36 sub-families and 69 languages spoken in the

Southwestern United States and Mexico (Hammarström et al. 2021).⁶⁹ Nahuatl belongs to the Southern Uto-Aztecan division of the family and its closest relative is Pipil, spoken in El Salvador. According to Canger and Dakin (1985: 360) and Dakin (2001: 21-22), another close relative of Nahuatl was Pochutec, an extinct language spoken until the 20th century on the Pacific coast of Oaxaca in southern Mexico. They consider Pochutec a divergent dialect of the Western Periphery. However, other scholars, including Campbell and Langacker (1978) and Campbell (2016), treat Pochutec as a separate language outside of the Core Nahua branch (see Figure 3.1).

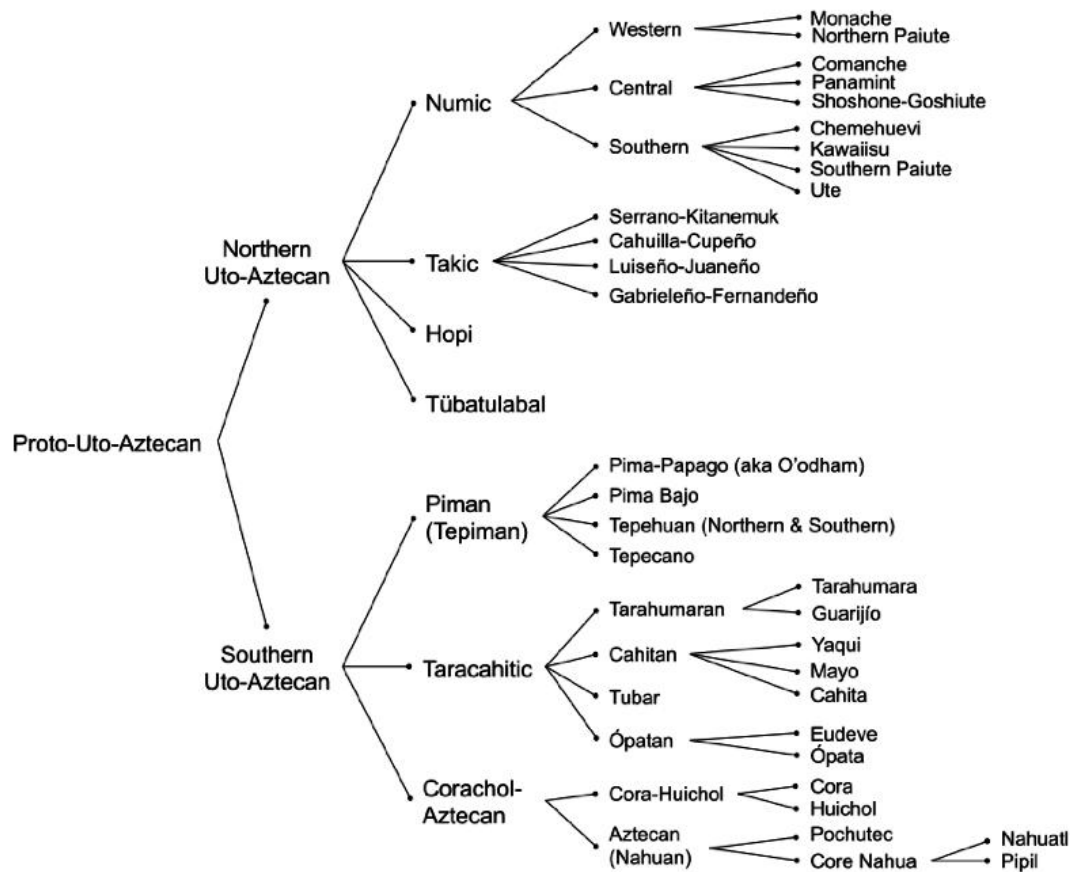


Figure 3.1. The Uto-Aztecan language family (Campbell 1997: 134).

There have been many proposals to subclassify the varieties of Nahuatl. The earliest attempts included the hypotheses proposed by Sapir (1919), Lehmann (1920), Whorf (1937, 1946 [1939]) and Mason (1923), who all divided Nahuatl dialects according to

⁶⁹ For further information on the Uto-Aztecan languages see e.g. Campbell (1997) and Golla (2011).

whether they use the lateral affricate /tʎ/ consonant (spelled [tʎ]). Although these scholars agreed what the basis of the split was, they did not concur with each other on which dialects were older. While Sapir (1919) thought that the *tl*-dialects were more conservative than the ones that replaced the /tʎ/ with /t/, Lehmann (1920), Mason (1923) and Whorf (1937) were convinced that the opposite was true, i.e. that the /tʎ/ sound was an innovation in the Nahuatl dialects spoken in central Mexico. In addition to this basic /t/ vs. /tʎ/ split, Whorf (1946 [1939]) later also distinguished the *l*-dialects, thus introducing the three-way division into the *tl*-dialects, the *t*-dialects and the *l*-dialects.

As more data representing different dialects of Nahuatl was collected, more comprehensive analyses of Nahuatl dialectology were proposed. Hasler (1958, 1961) listed four dialects: Eastern, Northern, Central and Western. Canger and Dakin (1985) proposed a general split between the Eastern and Western branches. Lastra de Suárez (1986) classified the Nahuatl dialects into four areas: the Centre, the Western Periphery, the Eastern Periphery and the Huasteca. Later Canger (1988) simplified the division into two spoken varieties of Nahuatl: Central and Peripheral groups. According to Canger, the Peripheral groups are characterised by the lack of a number of features (such as the antecessive clitic *o=*) that are present in the Central varieties spoken in the Valley of Mexico, Northern and Central Puebla, Morelos and Tlaxcala. Canger also suggested that the Central dialectal area is a result of a mixture of features from both the Western and Eastern dialects and proposed to treat the Central dialects as an urban koiné, or mixed contact varieties that emerged as a result of contact between the Eastern and Western groups. The Central dialects later became dominant as a result of the political power of the Aztec Empire and its capital located in the Valley of Mexico where the Central dialects were spoken. In Canger's classification (1988), Huasteca Nahuatl and Central Guerrero Nahuatl are also classified as Central dialects, but she admits that these varieties additionally possess features that are also specific to the Peripheral varieties, which include the Western Periphery, Northern Guerrero, Sierra de Puebla, Isthmus and Pipil (Canger 1988: 45-59). One of such features is, for instance, the use of the form *nochi* for 'all', instead of *mochi*. Other scholars, including Kaufman (2001)

include Huasteca Nahuatl in the Eastern Periphery, along with Sierra de Puebla Nahuatl, Isthmus Nahuatl and Pipil.

Today, Nahuatl is the most widely spoken indigenous language in Mexico and its users are located in communities in the State of Mexico, Puebla, Guerrero, Morelos, Tlaxcala, Oaxaca, Michoacán, Durango and the outskirts of Mexico City (Milpa Alta), with most speakers living, however, in the Huasteca region in the states of Veracruz, Hidalgo, Puebla and San Luis Potosí. Ethnologue distinguishes 28 modern varieties of Nahuatl with separate ISO codes (Eberhard et al. 2021). Glottolog, on the other hand, lists three more, i.e. 31 separate varieties (Hammarström et al. 2021). As a consequence of migration, there are also numerous Nahuatl speakers in urban centres such as Mexico City, Monterrey, Guadalajara and also in the United States.

Nahuatl spoken in the Huasteca today has been categorised into several varieties. Beller and Beller (1979), Eberhard et al. (2021) and Hammarström et al. (2021) list three such varieties: Central Huasteca Nahuatl, Eastern Huasteca Nahuatl and Western Huasteca Nahuatl. According to this classification, the variety of Nahuatl spoken in the Huasteca Potosina is classified as Western Huasteca Nahuatl. All varieties of Huasteca Nahuatl are mutually intelligible and the phonological, lexical and morphosyntactic contrasts do not prevent communication between the speakers living in different parts of the region. Huasteca Nahuatl, is, however, less closely related to other modern varieties of Nahuatl and, in some cases, speakers of different varieties have difficulties understanding one another.

In regard to the relation between Classical Nahuatl and modern Nahuatl, no contemporary spoken Nahuatl variety is identical to the variety of Nahuatl spoken in colonial times and documented as ‘Classical Nahuatl’. The differences between colonial and modern Nahuatl varieties can be attributed to various factors, including both internal developments and contact with Spanish. However, there is little doubt that all modern varieties, including the Nahuatl spoken in the Huasteca, are related to Classical Nahuatl, and as such, Classical Nahuatl documentation can be used (with caution) in comparative studies that aim at detecting change between traditional varieties of Nahuatl and modern varieties including Huasteca Nahuatl.

3.2.3. Phoneme inventory and orthographic conventions

Traditional, pre-Spanish contact Nahuatl had a moderately small consonant inventory (Maddieson 2013). The 15 consonant phonemes include nasals, plosives (stops), affricates, fricatives and approximants (see Table 3.1). One of the characteristics of the Classical Nahuatl sound system was a lack of distinctive voicing in consonants. A very common Nahuatl phoneme, the lateral affricate /tʎ/, has changed in some varieties to either /t/, as in Isthmus Nahuatl or Pipil, or into /l/, as in Nahuatl spoken in Michoacán (see Canger 1988). The glottal stop, also called the *saltillo*, which occurred only after vowels, was also a prominent feature of Classical Nahuatl. In many modern Nahuatl varieties the glottal stop is mostly realised as glottal fricative /h/.

Table 3.1. Consonants in Classical Nahuatl.

	Labial	Alveolar		Palatal	Velar		Glottal
		Central	Lateral		Plain	Labialised	
Nasal	m	n					
Plosive	p	t			k	k ^w	ʔ
Affricate		ts	tʎ	tʃ			
Fricative		s		ʃ			(h)
Approximant			l	j		w	

As a result of contact with Spanish, the sound system of Nahuatl has gradually adopted new phonemes, i.e. /b, d, f, g, r/. In early Spanish loanwords in Nahuatl these phonemes were substituted with close equivalents in terms of place and manner of articulation. These included the replacement of Spanish /b/ with Nahuatl /p/ or /w/, as in *cahuayo* (from Spanish *caballo* ‘horse’); the replacement of Spanish /d/ with Nahuatl /t/ or /l/, as in *alcalte* (from Spanish *alcalde* ‘mayor’), and the replacement of Spanish /f/ with Nahuatl /p/, as in *pilman* (from Spanish *firma* ‘signature’) (Olko 2020: 41-42). However, as a result of intense contact with Spanish, it is now common among young bilingual speakers to use the full Spanish phonemic inventory in Spanish loanwords in Nahuatl.

The phonemic inventory of Nahuatl includes four vowels, all of which have short and long counterparts. The short and long rounded vowels /o/ and /o:/, fluctuate

between close-mid and fully close quality (Newman 1967: 181). The vowels in traditional Nahuatl are presented in Table 3.2.⁷⁰

Table 3.2. Vowels in Classical Nahuatl.

	Front		Central		Back	
	Long	Short	Long	Short	Long	Short
Close	i:	i				
Close-mid	e:	e			o:	o
Open			a:	a		

Other characteristic features of Nahuatl pronunciation include stress falling on the penultimate syllable. Nahuatl allows only syllables with maximally one initial and one final consonant. Consonant clusters can occur at syllable boundaries. An epenthetic vowel /i/ is added to some morphemes to prevent consonant clusters. For example, the third person object prefix can be realised as /k/ before vowels and as /ki/ before consonants, except when preceded by the subject prefixes *ni-* and *-ti*.

There are many systems of orthographic representation of Nahuatl sounds. Table 3.3 presents the phoneme inventory of traditional Nahuatl along with three orthographic conventions most widely used for writing Nahuatl. The Colonial orthography is the representation of Nahuatl sounds in early post-conquest documents and books written by native speakers, as well as religious texts and books produced by Spanish missionaries. The so-called ‘ACK orthography’ (or, the ‘Andrews-Campbell-Karttunen orthography’), which will be used to represent the unpublished Nahuatl data collected for this work, is based on the orthography used in the colonial Nahuatl grammar by Carochi (1645), and modified by Andrews (2003), Karttunen (1992) and Campbell and Karttunen (1989). The SEP orthography is a

⁷⁰ Although several authors, including Beller and Beller (1979: 205) who described Huasteca Nahuatl, reported that vowel length distinction had been lost in the modern Nahuatl variety they studied, other scholars dispute this claim. Dexter (2004), for example, found several examples to prove that vowel contrast is still preserved in Nahuatl spoken around Xilitla. According to John Sullivan (p.c., 13 March.2022), the contrast between short and long vowels still exists in modern Huasteca Nahuatl, although it may be more discernible in certain varieties than in others.

writing convention used and currently promoted by the Mexican Ministry of Education (*Secretaría de Educación Pública* - SEP).

Table 3.3. Phonemes of Nahuatl with their orthographic representation.

IPA (phonemic representation)	Colonial orthography	ACK orthography	SEP orthography
/p/	p	p	p
/t/	t	t	t
/k/	c, qu	c, qu	k
/k ^w /	cu, uc	cu/uc	ku
/w/	hu, uh	hu/uh	u
/ts/	tz	tz	ts
/s/	s, c, z, ç	z, c	s
/tʃ/	ch	ch	ch
/ʃ/	x	x	x
/ʔ/	h	h	j
/tʰ/	tl	tl	tl
/l/	l	l	l
/m/	m	m	m
/n/	n	n	n
/j/	y	y	y
/a/ and /a:/	a, ā	a	a
/e/ and /e:/	e, ē	e	e
/i/ and /i:/	i, ī	i	i
/o/ and /o:/	o, ō	o	o

In this work, Nahuatl examples from published sources are provided in their original orthography, while my own examples are represented with the ACK orthography. My choice of the ACK orthography is motivated by the fact that it highlights continuity between the Classical and modern varieties, unlike the SEP orthography for example.

3.2.4. Nominal morphology

Classical Nahuatl nouns have relatively complex morphology. The type of nominal markers that can be attached to a nominal stem depends on whether a noun is used with an absolutive (i.e. non-possessive) or a possessive meaning. The simplest form of a Nahuatl noun is a singular absolutive noun with an unmarked 3rd person subject, which

is composed of a root and an absolutive suffix, as shown in example (a) in (3.1), where the absolutive suffix is *-tl*. A plural absolutive noun in (b), is marked with the plural suffix *-meh*.

(3.1) Classical Nahuatl absolutive nouns

- a. *cone-tl*
 child-ABS.SG
 ‘child’
- b. *cone-meh*
 child-ABS.PL
 ‘children’

Apart from the *-tl* singular absolutive suffix used for roots ending in a vowel, Nahuatl also employed three other singular suffixes: *-tli* for roots ending in consonants other than [l] (e.g. *ohtli* ‘road’), *-li* for roots ending in [l] (e.g. *calli* ‘house’), *-(i)n* used in the case of some small animals, plants and celestial bodies (e.g. *xilin* ‘crayfish’) and $-\emptyset$ for loan nouns (e.g. *arroz* ‘rice’, from Spanish *arroz*). As for the plural absolutive suffixes, the most commonly attested are *-tin*, *-me(h)* and *-(h)*. The *-tin* suffix occurs after noun roots ending in consonants, as in *macehualtin* ‘commoners’; the *-me(h)* suffix is used after vowels, as in *totome* ‘birds’; and the glottal stop (*-h*) occurs only after a vowel, as in *cihuah* ‘women’. However, as noted by Lockhart (2001: 51), these rules are not consistent in all varieties of traditional Nahuatl, as in some regions *-tin* is preferred over *-meh*, for instance. The full paradigm of both singular and plural absolutive suffixes in presented in Table 3.4 below.

Table 3.4. Morphological components of a Nahuatl absolutive noun.

Person	Subject prefix		Absolutive suffix
1SG	<i>n(i)-</i>	ROOT	<i>-tl / -tli / -li / -(i)n / -\emptyset</i>
2SG	<i>t(i)-</i>		
3SG	$\emptyset-$		
1PL	<i>t(i)-</i>		<i>-tin / -meh / -h / -n / -ntin</i>
2PL	<i>an-</i>		
3PL	$\emptyset-$		

In Nahuatl possession is expressed morphologically on possessed head nouns. A noun in its possessive form receives a corresponding possessive prefix and its absolutive suffix is replaced by a possessive suffix (Table 3.5).

Table 3.5. Morphological components of a Nahuatl possessive noun.

Person	Subject prefix	Possessive prefix	Possessive suffix
1SG	<i>n(i)-</i>	<i>n(o)-</i>	<i>-hui</i>
2SG	<i>t(i)-</i>	<i>m(o)-</i>	<i>-uh</i>
3SG	\emptyset -	<i>i-</i>	\emptyset
1PL	<i>t(i)-</i>	<i>t(o)-</i>	ROOT
2PL	<i>an-</i>	<i>amo-</i>	
3PL	\emptyset -	<i>-im-</i>	<i>-huan</i>
HUM		<i>te-</i>	
NHUM		<i>tla-</i>	

There are three singular suffixes used with singular possessed animate nouns and with possessed inanimate nouns. Out of the three possessive suffixes (*-hui*, *-uh* and \emptyset), the most universal suffix is \emptyset applied with all nouns, including borrowed nouns (e.g. *to-juez- \emptyset* [POSS.1PL-judge-POSS.SG] ‘our judge’). The suffix *-hui* occurs after a consonant and, as noted by Lockhart (2001: 3), is rarely attested in colonial texts, as in *n-oquich-hui* (POSS.1SG-man-POSS.SG) ‘my husband’. The suffix *-uh*, on the other hand, is used after vowels, as illustrated in (3.2a) below. The plural suffix *-huan* is used with animate plural nouns, as shown in (3.2b).

- (3.2) Classical Nahuatl possessive nouns
- a. ***no-cone-uh***
 POSS.1SG-child-POSS.SG
 ‘my child’
- b. ***no-cone-huan***
 POSS.1SG-child-POSS.PL
 ‘my children’

If the possessor is not identified, the *te-* and *tla-* possessive prefixes are used. The *te-* prefix refers to human possessors and *tla-* to non-human possessors, as in *tenan* *te-nan* (POSS.HUM-mother) ‘mother’.

Similarly to Spanish, Nahuatl nouns can be inflected for number, which can be either singular or plural. However, traditionally in Nahuatl only animate nouns could have a plural form. Animate nouns in Nahuatl refer to people, animals, gods, as well as entities which had a special status in the Nahua cosmovision (e.g. stars or hills). Nahuatl plural suffixes are of two kinds, one for nouns in the absolutive form (see Table 3.4) and the other for possessed nouns (see Table 3.5), as illustrated in examples (b) in (3.1) and (b) in (3.2) above. However, the plural of inanimate nouns in Classical Nahuatl can be signaled by other means, i.e. by reduplication of the first syllable of the nominal root, as in *cahcalli* *cah~cal-li* (DISTR~house-ABS.SG) ‘separately located houses, various kinds of houses’ (Andrews 2003: 111), the use of a quantifier such as *miac* ‘many’ (as in *miac calli* ‘many houses’), or by combining a numeral with a numeral classifier. The latter strategy is illustrated in (3.3), in which *tetl* ‘stone’ acts as a classifier for round objects. However, as I show in §4.2, in modern Nahuatl, including Huasteca Nahuatl, numeral classifiers are no longer used and there is an increasing tendency among younger speakers to grammatically pluralise inanimate nouns.⁷¹

- (3.3) Numeral classifier *tetl* in Classical Nahuatl (Stolz 2018: 340)
- | | |
|-------------------------------|---------------------|
| <i>cen-te-tl</i> | <i>cal-tzin-tli</i> |
| one-stone [CLF]-ABS.SG | house-DIM-ABS.SG |
| ‘one house’ | |

Some Nahuatl nouns, including kinship terms and nouns denoting body parts, are considered inherently possessed and, as such, cannot appear in an absolutive form. In Nahuatl it is not customary to talk about ‘a mother’ in general without specifying whose mother one is referring to. The same rule applies to parts of the body. Nahuatl also has a category of intimate possession, or ‘organic’ possession (Lockhart 2001: 69-70), which is a special type of possession that indicates a close relationship between a possessor

⁷¹ See Stolz (2018) for further information on nominal classifiers in Classical Nahuatl.

and a possessum. This type of possession is expressed by means of a special suffix *-yo* (or its alternative forms *-lo*, *-cho*, *-ço* that occur when *-yo* assimilates to the preceding stem), also used to express the abstract quality of the noun from which it derives (Lockhart 2001: 69).⁷² Intimate possession is similar to inalienably possessed nouns, but used in a broader range of contexts. Thus, whereas *eztli* ‘blood’, refers to e.g. blood in a bucket or as a stain, the intimately possessed blood, or blood still running in somebody’s veins, would be *nezço* n-ez-ço (POSS.1SG-blood-ITP) ‘the blood cursing inside my veins’ (Lockhart 2001: 69).

Nahuatl nouns can function as predicates and, according to Lockhart (2001: 1), “[e]ach noun in an utterance is at least potentially a complete equative statement to itself”. This feature of Nahuatl has been described as ‘omnipredicativity’ (Launey 1994, 1998, 1999, 2004). For example, *nicihuatl*, where the subject prefix *ni* is attached to the noun *cihuatl* ‘woman’, can be interpreted as ‘I am a woman’. The lack of a subject prefix on a Nahuatl noun indicates that the subject is the third person, as in the form *cihuatl* which can be interpreted as ‘she is a woman’. Nouns in Nahuatl carry the same agreement prefixes as verbs, excluding tense-aspect-mood categories (Launey 2004: 1441). According to this interpretation, a phrase such as *nehnemi tlacatl* (example 3.4 below) should not be interpreted as ‘the man walks’ but, rather, as ‘he walks, (the one that) is a man’.

- (3.4) Omnipredicativity in Classical Nahuatl
Ø-neh~nemi *Ø-tlaca-tl*
 SBJ.3SG-FREQ~live SBJ.3SG-man-ABS.SG
 ‘He walks, (the one that) is a man.’

A frequent operation in Nahuatl is noun compounding in which a complex noun is made up of a head noun on the right and another noun stem on the left. The semantic relation

⁷² According to John Sullivan (p.c., 13 March .2022), the morpheme *-yo* is not a suffix, but rather a patientive noun root expressing pertinence which takes compounded nouns. When the compounded noun appears in an unpossessed form, then *-yo* is used to refer to abstract concept, and when it is used with a possessed noun, it refers to intimate possession.

between the two noun stems can involve one of the following: comparison, material (3.5), location, instrument, possessor or agent (Launey 1999).

(3.5) Nominal compound in Classical Nahuatl

toch-cal-li

rabbit-house-ABS.SG

‘rabbit hole’

Nahuatl nouns can also be incorporated into verb forms. The topic of noun incorporation is explored in more detail in §5.4.

Classical Nahuatl, like many other Mesoamerican languages, did not have prepositions or grammatical case and used relational nouns instead to indicate spatial and other relations, e.g. company or manner (see Table 3.6). In fact, the use of relational nouns is one of the strong Mesoamerican linguistic area traits (Campbell et al. 1986). Although relational nouns convey the meaning of adpositions, syntactically they function as nouns since they can have a possessive prefix and/or they can receive a compounded noun, either directly or indirectly, by means of the ligature *-t(i)-*. In traditional Nahuatl, relational words followed a noun or a possessive prefix. Thus, the relational noun *pan* ‘surface’ could appear with a noun, as shown in example (a) in (3.6), or following the third person singular possessive prefix *i-* (b). The possessive prefix indicates the object of a relational word. However, according to Lockhart (2001: 20), the meaning of the two forms was not exactly the same, as the form bound with a noun was used in a more generic sense.

(3.6) Relational noun *-pan* in Classical Nahuatl (Lockhart 2001: 20)

a. *te-pan*

stone-**surface**[RTL]

‘on stone’

b. *i-pan*

in te-tl

POSS.3SG-**surface**[RTL] DET stone-ABS.SG

‘on the stone’ (lit. ‘its surface, the stone’)

Apart from *-pan*, Classical Nahuatl used many other relational nouns.⁷³ An example of another very productive relational noun is *-huan* ‘company’, as illustrated in (3.7).

- (3.7) Comitative relational noun *-huan* in Classical Nahuatl
Fabian i-huan i-cone-uh
 Fabian POSS.3SG-**company**[RTL] POSS.3SG-child-POSS.SG
 ‘Fabian together with his child’

Table 3.6. Relational nouns in colonial Nahuatl (Lockhart 2001: 21-25).

Noun	Gloss	Example
<i>-pan</i>	on, in the time of, as	<i>ipan in cahuallo</i> ‘on the horse’
<i>-tech</i>	next to, adhering to	<i>itech nitlalia nanima Dios</i> ‘I place my soul with God’
<i>-pampa</i>	because of, concerning	<i>topampa quichihua</i> ‘he/she does it for us, because of us, on our behalf’
<i>-huan</i>	in the company of, together with, moreover	<i>niquinhuica Fabian ihuan ipiltzin</i> ‘I accompany Fabian and his child’
<i>-ca</i>	by means of, through, with	<i>ica atl quipaca</i> ‘he/she washes it with water’
<i>-icampa</i>	behind	<i>notlal mani icampatzinco teopan</i> ‘My land is behind the church’
<i>-nehuac</i>	near, close to, next to	<i>Quauhnhuac</i> ‘close to the woods’ (i.e. Cuernavaca)
<i>-icpac</i>	on top of	<i>tlalticpac tinemi titlaca</i> ‘We human beings live on earth’
<i>-tlan</i>	next to, below	<i>mocaltitlan niquitta in motex</i> ‘Next to your house I see your brother-in-law’
<i>-ixpan</i>	facing, in front of, before, in the presence of	<i>nixpan mochihua in testamento</i> ‘Before me (the notary) the testament is made’
<i>-itic</i>	inside, within	<i>nitic ninococoa</i> ‘inside me I am sick’
<i>-tzintlan</i>	below, underneath	<i>in tlalli itzintlan tepetl mani</i> ‘the land is below, at the foot of the mountain’
<i>-co/c</i>	in, at, locative	<i>tepec</i> ‘at a mountain’, <i>nomac</i> ‘in my hands’, <i>ilhuicac</i> ‘in the sky, heaven’, <i>Xochimilco tlatocati</i> ‘he is the ruler in Xochimilco’
<i>-pa/-huic</i>	toward, from	<i>tepecpa nitziuh</i> ‘I head toward the mountain’, <i>tepechuic nitziuh</i> ‘I head toward the mountain’
<i>-copa</i>	from <i>-co/c</i> and <i>-pa</i> adds the meaning ‘in a certain manner’	<i>noyollocopa nicchihua</i> ‘I do it from my heart, voluntarily’
<i>-chan</i>	residence, home, where one was born	<i>ichantzinco</i> ‘he is at his home’

⁷³ For further examples of relational nouns with examples see e.g. Lockhart (2001: 21-25) or Andrews (2003: 445-493).

To sum up, Nahuatl nominal morphology is complex and distinct from Spanish. Traditional Nahuatl marks plural only for animate nouns and the nouns used in generic sense receive absolutive marking. Nahuatl indexes possession on nouns and has a category of inherently possessed nouns, as well as intimate possession marking. Other distinctive features include numeral classifiers and relational nouns. Moreover, Nahuatl nouns can function as predicates and form full sentences. Nahuatl nominal traits, many of which are also areal traits of the Mesoamerican linguistic area, are therefore quite distinct from Spanish nominal categories. An even more complex area of Nahuatl morphology that shows further contrasts between this language and Spanish, is verbal morphology, to which I turn now.

3.2.5. Verbal morphology

One of the most complex parts of the structure of Nahuatl is verbal morphology. A typical Nahuatl verb is composed of a root and affixes, including prefixes and suffixes. Prefixes indicate the subject, the object, as well as directional marking, reflexive and human or non-human objects. Suffixes indicate tense-aspect-mood and the number of the subject. A summary of the paradigm of verbal prefixes in Nahuatl is given in Table 3.7 below.

Table 3.7. Classical Nahuatl verb prefixes (Launey 2004: 1436).

	Subject	Object	Directional	Reflexive	Non-distinct human object	Non-distinct non-human object	
1SG	<i>n(i)-</i>	<i>-nech-</i>		<i>-n(o)-</i>			
2SG	<i>t(i)-</i>	<i>-mitz-</i>		<i>-m(o)-</i>	<i>-te-</i>	<i>-tla-</i>	
3SG	\emptyset	<i>-q(ui)-</i>	<i>-on-</i>	<i>-m(o)-</i>			ROOT
1PL	<i>t(i)-</i>	<i>-tech-</i>	<i>-hual-</i>	<i>-t(o)-</i>			
2PL	<i>am-</i>	<i>-amech-</i>		<i>-m(o)-</i>			
3PL	\emptyset	<i>-quim-</i>		<i>-m(o)-</i>			

The prefixes that can be used before a verb root depend on the transitivity of a verb. An intransitive verb typically has only a subject prefix (3.7), and a transitive verb has both subject and object prefixes (3.8).

(3.7) Intransitive verb in Classical Nahuatl

ni-choca

SBJ.1SG-cry

‘I cry’

(3.8) Transitive verb in Classical Nahuatl

ti-nech-itta

SBJ.2SG-OBJ.1SG-see

‘you see me’

Nahuatl is a pro-drop language, i.e. its verbal arguments need not be expressed in a nominal phrase if they are referentially evident. The arguments are, however, obligatorily marked on the verb, as illustrated in (3.8). This feature is one of the typical traits of a polysynthetic language.⁷⁴

Aside from prefixes for verbal arguments, a verb can also bear directional prefixes and ‘non-distinct’ argument prefixes. Directional markers denote a position or movement in relation to a ‘centre’: *-on-* marks a distance, or an increase in distance, and *-hual-* marks a decrease in distance, as exemplified in (3.9).

(3.9) Directional prefixes in Classical Nahuatl (Launey 2004: 1438) [glosses modified]

a. *Ø-on-tzicuini*

SBJ.3SG-OUTDIR-run

‘he/she runs away’

b. *Ø-hual-tzicuini*

SBJ.3SG-INDIR-run

‘he/she comes running’

⁷⁴ A list of diagnostic features of polysynthetic languages was proposed by e.g. Mithun (2017a) and Sadock (2017). They include the following characteristics: complex verb structure, indexing of core arguments within the verb, presence of applicatives, noun incorporation and pragmatically motivated word order.

When the object of a verb is unknown or left unspecified, a non-distinct object prefix can be used. This morpheme follows the directional prefix and it can involve the use of either an unspecified human *te-* (3.10a) or a non-human *tla-* (3.10b) argument.

(3.10) Non-distinct argument prefix in Classical Nahuatl

- a. *ni-te-tlazohtla*
SBJ.1SG-**OBJ.HUM**-love
'I love people, i.e. I am a loving person'
- b. *ni-tla-cua*
SBJ.1SG-**OBJ.NHUM**-eat
'I eat'

In the case of verbs in the imperative mood, the slot of the indicative mood second person singular or plural subject is filled with the imperative prefix *xi-*, as illustrated in (3.11).

(3.11) Imperative mood in Nahuatl

- ¡*xi-cochi!*
IMP-sleep
'Sleep!'

Verbal suffixes express a number of categories including tense, aspect, mood and number. These suffixes attach to a verb stem which, in turn, includes a root, and optional verbalising suffixes and valency changing suffixes, such as causative and applicative. The full Classical Nahuatl verb stem paradigm with suffixes and clitics is presented in Table 3.8.

Table 3.8. Classical Nahuatl verb stem paradigm.

STEM			Suffixes	
VR	CAUS	APPLIC	TENSE/ASPECT	PLURAL
<i>-i</i>	<i>-ltia</i>	<i>-ia</i>	PRESENT	
<i>-ti</i>	<i>-tia</i>	<i>-lia</i>	<i>-Ø</i>	<i>-h</i>
<i>-hua</i>	<i>-itia</i>	<i>-huia</i>	IMPERFECTIVE	
<i>-hui</i>	<i>-lia</i>	<i>-ltia</i>	<i>-ya</i>	<i>-ya-h</i>
<i>-ya</i>	<i>-oa</i>	<i>-huilia</i>	HABITUAL	
<i>-a</i>	<i>-altia</i>		<i>-ni</i>	<i>-ni-h</i>
<i>-ihui</i>	<i>-huia</i>		FUTURE	
<i>-ahui</i>			<i>-z</i>	<i>-z-que-h</i>
ROOT <i>-tiya</i>			PRETERITE	
<i>-tla</i>			<i>-c/-Ø</i>	<i>-que-h</i>
<i>-oa</i>			PLUPERFECT	
			<i>-ca</i>	<i>-ca-h</i>
MOOD				
CONDITIONAL				
			<i>-zquia</i>	<i>-zquia-h</i>
OPTATIVE				
			<i>-Ø</i>	<i>-ca-n</i>
ADMONITIVE/VETATIVE				
			<i>-Ø</i>	<i>-tin</i>
PURPOSIVE				
INBOUND NON-FUTURE				
			<i>-co</i>	<i>-co-h</i>
INBOUND FUTURE				
			<i>-quiuh</i>	<i>-quiuh-h</i>
INBOUND OPTATIVE				
			<i>-qui</i>	<i>-quih</i>
OUTBOUND PAST				
			<i>-to</i>	<i>-to-h</i>
OUTBOUND NON-PAST				
			<i>-tiuh</i>	<i>-tihui-h</i>
OUTBOUND OPTATIVE				
			<i>-ti</i>	<i>-ti-h</i>

The first suffix that can follow the root is a verbalising morpheme that derives an intransitive verb from another part of speech, e.g. a noun. A great number of transitive verbs in Nahuatl are formed by adding a causative and/or an applicative (benefactive) suffix to verbs, including verbs derived from nouns. These suffixes are used to increase

the valency of a verb. A verb with a causative marker indicates that the process the verb refers to is caused by an external agent. Causativisation adds one argument place to the verb and thus, the ‘new’ agent appears as the subject and the ‘old’ subject is demoted to the status of an object, as illustrated in (3.12). The topic of causativisation in Nahuatl is explored in more detail in §5.2.3.

- (3.12) Causative in Classical Nahuatl
ni-mitz-cua-ltia *in* *e-tl*
 SBJ.1SG-OBJ.2SG-eat-CAUS DET bean-ABS.SG
 ‘I make you eat beans’

In the case of the applicative, the added argument has a benefactive meaning. The applicative prefix representing the new benefactive object takes the place of the prefix that represented the object of the original verb (3.13a). The Nahuatl applicative can also turn an intransitive verb (e.g. *mahui* ‘to fear’) into a transitive one, as illustrated in (3.13b).

- (3.13) Applicative in Classical Nahuatl
 a. *ni-mitz-tla-cohui-lia*
 SBJ.1SG-OBJ.2SG-OBJ.NHUM-buy-APPL
 ‘I buy things for/from you’
 b. *ni-mitz-mahui-lia*
 SBJ.1SG-OBJ.2SG-fear-APPL
 ‘I’m scared of you’

Aside from valency increasing operations, Classical Nahuatl also had a morphological means for decreasing the valency of a verb. This function was fulfilled by adding one of the non-active suffixes: *-lo*, *-o*, *-hua*, *-lohua*, *-hualo*, as shown in (3.14).

- (3.14) Passive voice in Classical Nahuatl
ni-notza-lo
 SBJ.1SG-call-PASS
 ‘I am called’

Nahuatl verbs can appear in either the present, future or preterite tense. The forms of suffixes expressing tense, as well as the form of suffixes expressing aspect and mood, depend on which class a particular verb belongs to. There are four such classes which contain both transitive and intransitive verbs. The verbs are not members of a particular class based on their meaning, but, rather, based on how the preterite is formed from their verb stems (Andrews 2003: 62ff.; Campbell and Karttunen 1989: 81ff.). Campbell and Karttunen (1989) divide Nahuatl verb stems into the following four classes:

Class 1: Those that end in vowels that never drop out (invariant verb stems)

Class 2: Those that lose their final vowels in the preterite and function as consonant stems

Class 3: Those that end in two vowels, the second of which is *-ā*

Class 4: A small group of verbs that end in *-ā* and which might be thought to be a special case of Class 3 verbs

(Campbell and Karttunen 1989: 82)

The least morphologically complex tense marking in Classical Nahuatl is the present tense which is unmarked (3.15a). If required, the present tense plural suffix (*-h*) appears at the end of the verb complex (3.15b).

(3.15) Present tense in Classical Nahuatl

- a. *ni-cuica-(Ø)*
SBJ.1SG-sing-(SG)
'I sing'
- b. *ti-cuica-h*
SBJ.1PL-sing-PL
'we sing'

Forming the preterite is a more complex morphological operation since its form is determined by the class of the verb. Examples of verbs of different classes with their respective preterite suffixes are given in Table 3.9.

Table 3.9. Nahuatl verb classes with respective preterite singular and plural suffixes.

	Present tense root	Preterite root	Preterite singular suffix	Non-present plural suffix
Class 1	<i>choca</i> ‘cry’	<i>choca</i>	<i>-c</i>	
Class 2	<i>toca</i> ‘plant maize’	<i>toc</i>	<i>-Ø</i>	<i>-que-h</i>
Class 3	<i>maltia</i> ‘bathe’	<i>maltih(-qui)</i>	<i>-Ø</i>	(-NPRS-PL)
Class 4	<i>tlacua</i> ‘eat’	<i>tlacuah</i>	<i>-Ø</i>	

The future tense in Nahuatl is formed by adding the *-z* suffix (3.16a). For plural subjects this morpheme is also complemented with the non-present suffix *-que* and the plural suffix *-h* (3.16b).

(3.16) Future tense in Classical Nahuatl

- a. *ni-choca-z*
 SBJ.1SG-cry-FUT
 ‘I will cry’
- b. *Ø-qui-maca-z-que-h*
 SBJ.3PL-OBJ.3SG-give-FUT-NPRS-PL
 ‘They will give (it to) him/her’

Other verbal features marked in Nahuatl with suffixes include aspect and mood. The imperfective aspect is marked with the suffix *-ya(h)* (3.17), where [h] is added to indicate plural. The conditional mood, marked with the suffix *-zquia(h)*, indicates that an event, which at some past moment was thought of as probable, finally did not occur, as shown in example (3.18).

(3.17) Imperfective aspect in Classical Nahuatl

- Ø-qui-itta-ya*
 SBJ.3SG-OBJ.3SG-see-IMPRF
 ‘he/she was seeing it’

(3.18) Conditional mood in Classical Nahuatl

- Ø-qui-itta-zquia*
 SBJ.3SG-OBJ.3SG-see-COND
 ‘he/she nearly saw it, he/she should have seen it (but did not)’

Nahuatl has also purposive suffixes that mark a movement prior to the realisation of a process.⁷⁵ This movement can be inbound (‘to come to [verb]’), as illustrated in (3.19a), or outbound (‘to go to [verb]’), as shown in (3.19b). The purposive suffixes can occur in uncompleted, completed or optative forms, as illustrated in Table 3.10 (cf. Launey 2004: 1440).

(3.19) Purposive suffixes in Classical Nahuatl

- a. *Ø-qui-itta-co*
 SBJ.3SG-OBJ.3SG-see-**INPURP.NFUT**
 ‘he/she came to see it’
- b. *Ø-qui-itta-to*
 SBJ.3SG-OBJ.3SG-see-**OUTPURP.PST**
 ‘he/she went to see it’

Table 3.10. Purposive suffixes in Classical Nahuatl.

	Uncompleted (future or non-past)		Completed (non-future or past)		Optative	
	SG	PL	SG	PL	SG	PL
Inbound	<i>-quiuh</i>	<i>-quihuih</i>	<i>-co</i>	<i>-coh</i>	<i>-qui</i>	<i>-quih</i>
Outbound	<i>-tiuh</i>	<i>-tihuih</i>	<i>-to</i>	<i>-toh</i>	<i>-ti</i>	<i>-tih</i>

One of the frequently attested derivational operations in Nahuatl involves reduplication of the first syllable of the verbal root. This can be done in order to mark intensity by lengthening the vowel in the reduplicated syllable, as illustrated in (3.20b). Reduplication is also used to indicate that a process is scattered or fragmented (Launey 2004: 1441), as illustrated in (3.20c), in which an [h] is added to the vowel of the reduplicated syllable. A non-reduplicated form of the verb *tequi* ‘to cut’ is shown in (3.20a).

⁷⁵ Beller and Beller (1979) refer to these suffixes as ‘directionals’.

- (3.20) Reduplication in Nahuatl (Launey 2004: 1441) [glosses and translation modified]
- a. *Ø-qui-tequi*
 SBJ.3SG-OBJ.3SG-cut
 ‘he/she cuts it’
 - b. *Ø-qui-tē~tequi*
 SBJ.3SG-OBJ.3SG-FREQ~cut
 ‘he/she cuts it intensely or continuously’
 - c. *Ø-qui-teh~tequi*
 SBJ.3SG-OBJ.3SG-DISTR~cut
 ‘he/she cuts it into small pieces’

Another productive morphological process in Nahuatl is noun incorporation, which Mithun (1984) calls “the most nearly syntactic of all morphological processes”. In Nahuatl an incorporated noun stem is prefixed to the verb and is used “not only objectively, but also instrumentally, locatively, and as predicate of subject or object; noun incorporation is . . . but a particular form of modifying the primary meaning of the verb by prefixing another stem to that of the verb” (Sapir 1911: 267). In the process of noun incorporation, the absolutive suffix of the noun is dropped, as illustrated in (3.21) in which the noun stem *e* (from *etl* ‘bean’) is incorporated into the verb *namaca* ‘sell’. The topic of noun incorporation is explored in greater detail in §5.4.3.

- (3.21) Noun incorporation in Classical Nahuatl
- Ø-e-namaca*
 SBJ.3SG-**bean**-sell
 ‘he/she sells beans’

Another frequently attested derivational operation involves joining two verbs in order to form a compound verb in which the second verb stem functions as an aspectual or modal auxiliary. The most widely used verbs in such auxiliary verb incorporation are *cah* ‘be’, *yauhi* ‘go’, *huallauh* ‘come’, *nemi* ‘move’, *huetzi* ‘fall’, *nequi* ‘to want’ and *ehua* ‘to depart’. The two compounded verbs are always linked with the ligature *-t(i)-*. An example of a compound verb in which the verb *nemi* functions as an auxiliary indicating the progressive aspect is shown in (3.22).

(3.22) Auxiliary verb construction in Classical Nahuatl

Ø-choca-ti-nemi

SBJ.3SG-cry-LIG-move(AUX)

‘he/she goes about crying’

To summarise, traditional Nahuatl displays highly complex verbal morphology with many traits that are different from Spanish. A high degree of synthesis in Nahuatl results in many grammatical operations occurring in the domain of morphology, including e.g. causativisation and the expression of an added benefactive object. As I show in chapter 5, contact with Spanish has resulted in changes to many traditional morphological operations on verbs including noun incorporation as well as valency increasing operations such as causativisation.

3.2.6. Syntax

As can be seen from the description of word structure presented above, Nahuatl has highly complex morphology, as a result of which many grammatical relations can be expressed in a single word. Thus, numerous features that in other languages are in the domain of syntax (e.g. expression of an indirect object), in Nahuatl fall under the domain of morphology, or, to be more precise, morphosyntax. Andrews (2003: 15-16) described such compound words as ‘nuclear clauses’:

[Nahuatl] does have a number of monomorphemic, nonparadigmatic (i.e. invariant) sentence-fragment units called *particles* . . . But, except for these few words, all of the structural units at this rank are *nuclear clauses* . . . Since nuclear clauses obligatorily contain a subject and a predicate, they are under the control of the rules of *morphosyntax* (i.e. syntax that employs *only* morphological devices - stems and inflectional affixes). English/Spanish words remain, of course, under the control of the rules of *morphology* (to be more precise, *inflectional morphology*).
(Andrews 2003: 15-16)

Furthermore, Nahuatl is a pro-drop language, in which noun phrases or independent pronouns are often omitted and the arguments are expressed within the nuclear clauses, as illustrated in (3.23), in which the verb *itta* ‘see’ bears both subject and object markers that precede the verbal root.

- (3.23) Verbal complex in Classical Nahuatl
ti-nech-itta
 SBJ.2SG-OBJ.1SG-see
 ‘you see me’

Although many morphosyntactic traits in Nahuatl, including the expression of causation and the expression of an added benefactive object with the applicative marking, were covered in the sections above, a number of features concerning clause and sentence structure are briefly introduced in this part of the chapter.

With respect to word order, the main characteristic that should be noted is that Classical Nahuatl is a non-configurational language with a free order of constituents determined by topicalisation (Lockhart 2001: 81). Word order depends on the desired emphasis, so different orders are possible, as shown in the examples below. Whereas example (3.24a) illustrates a verb-initial word order, a contrastive verb-final ordering is shown in (3.24b)

- (3.24) Word order in Classical Nahuatl (Launey 2004: 1435) [glosses modified]
- a. *Ni-c-cua* *in naca-tl*
 SBJ.1SG-OBJ.3SG-eat DET meat-ABS.SG
 ‘I am eating the meat.’
- b. *In naca-tl* *ni-c-cua*
 DET meat-ABS.SG SBJ.1SG-OBJ.3SG-eat
 ‘(As for) the meat, I am eating it.’

However, although different word orders are attested in Classical Nahuatl, Launey (1992) showed that in Classical Nahuatl there was a general preference for a verb-initial basic word order as the most pragmatically neutral ordering of constituents.

With respect to the ordering of constituents in a clause, the verbal complex is usually preceded by particles and followed by any specifications of verbal arguments (Lockhart 2001: 174). This word order is illustrated in an example (3.25).

(3.25) Word order in Classical Nahuatl (Lockhart 2001: 173) [my glosses]

Huel mo-cocohua y(n) no-naca-yo
very REFL.3SG-hurt DET POSS.1SG-body-pertinence
'My body is very sick.'

As noted by Lockhart (2001: 174), the subject or the object can also be placed before the verbal complex in order to emphasise it or focus on it. A more detailed description of word order in Classical Nahuatl and an analysis of word order changes that can be observed in modern Nahuatl appears in §6.2.3.

In regard to coordination, two or more nuclear clauses in Classical Nahuatl can be linked in marked or unmarked coordination. Marked coordination involves using a specific coordinator, whereas unmarked coordination is achieved by simply juxtaposing the clauses. Of the two, Classical Nahuatl favoured unmarked coordination (Andrews 2003: 544), which, apart from conjunction (example 3.26), could also be used for disjunction ('or') or adversative coordination ('but').

(3.26) Unmarked conjunction in Classical Nahuatl (Andrews 2003: 545)

Mimiltic, achihztin huitztic, achi tzīmpitzāhuac.
'It is cylindrical, somewhat pointed, **and** slightly narrow at its base.'

For further description and examples of unmarked types of coordination in Classical Nahuatl see §6.5.3.

Marked coordinating in Classical Nahuatl, on the other hand, was far less common and involved the use of various coordinators, including *auh* used to join principal clauses or sentences, or larger portions of text (3.27).

(3.27) Marked conjunction in Classical Nahuatl (Sahagún 1961b: 87)

Auh ca iz tica in titeach in tiacapātli, auh ca iz tōca in titlacoieoa, auh in titlatoqujlia; auh iz tica ompa tica on in tixocoiutl.

'**And** here standest thou who art the oldest, the firstborn; **and** here art thou who art the second; **and** thou who followest; **and** thou who standest, who standest there, thou who art the youngest.'

Marked coordination, in which smaller portions of text, including phrases, were linked, involved the use of a possessive-state relational noun phrase *ihuan* (see §3.2.4), as illustrated in (3.28).

- (3.28) Linking of phrases in Classical Nahuatl (Andrews 2003: 548)
*Ōmotlālih, **ihuān** ōtlacuah.*
'He sat down **and** ate.'

Clause linking strategies for conjunction, disjunction, as well as adversative coordination have undergone significant changes as a result of contact with Spanish. This topic is discussed in more detail in chapter 6, in which I provide a more thorough description of the traditional ways in which clauses and phrases were coordinated.

3.2.7. Argument marking in Western Huasteca Nahuatl

Although the main focus of this chapter so far has been on the traditional grammatical features of Classical Nahuatl, one characteristic of modern Western Huasteca Nahuatl deserves special attention since it seems to be a unique development among present-day Nahuatl varieties. The phenomenon in question concerns arguments marking of transitive verbs and the emergence of fusional morphology.

In Western Huasteca Nahuatl certain combinations of subject and object prefixes have merged into one inflectional morpheme. For example, the phrase 'you see me' has the form *techitta* (3.29a), in which the two prefixes: *ti-* (indicating the second person singular subject) and *-nech-* (indicating the first person singular object) have fused into the form *tech*. In contrast, in other varieties of Nahuatl, such as Eastern Huasteca Nahuatl, the same meaning is expressed with the form *tinechitta* (3.29b), in which the subject and object are expressed with two separate morphemes.

- (3.29) Fusional morphology in Western Huasteca Nahuatl compared with other varieties
- a. ***tech-itta***
SBJ.2SG.OBJ.1SG-see
 ‘you see me’
 - b. ***ti-nech-itta***
SBJ.2SG-OBJ.1SG-see
 ‘you see me’

Similar fusion can be observed when the second person singular subject prefix *ti-* and the first person plural object prefix *tech-* are combined. These subject and object morphemes also merge into the form *tech* (3.30a). In other varieties of Nahuatl this combination of subject and object prefixes has the form *titech* (3.30b).

- (3.30) Fusional morphology in Western Huasteca Nahuatl compared with other varieties
- a. ***tech-maca***
SBJ.2SG.OBJ.1PL-give
 ‘you give (it to) us’
 - b. ***ti-tech-maca***
SBJ.2SG-OBJ.1PL-give
 ‘you give (it to) us’

The fusional form *tech* is also attested in imperative forms combining the second person singular subject and the first person singular object (3.31a). In this case, the morpheme *tech* replaces the combination of two morphemes *xi* (imperative) and *nech* (first person singular object) that are used in other varieties of Nahuatl (3.31b). The same fusional form *tech* is employed in the imperative form for the combination of the second person singular subject and the first person plural object (3.32a), instead of the form *xitech* found in other varieties of Nahuatl (3.32b).

- (3.31) Fusional morphology in imperatives with the 1st person singular object in Western Huasteca Nahuatl compared with other varieties
- a. *ɟtech-maca!*
IMP.OBJ.1SG-give
'Give (it to) me!'
 - b. *ɟxi-nech-maca!*
IMP-OBJ.1SG-give
'Give (it to) me!'
- (3.32) Fusional morphology in imperatives with the 1st person plural object in Western Huasteca Nahuatl compared with other varieties
- a. *ɟtech-maca!*
IMP.OBJ.1PL-give
'Give (it to) us!'
 - b. *ɟxi-tech-maca!*
IMP-OBJ.1PL-give
'Give (it to) us!'

Although the prefix *tech* is most often used in the combinations of subject and object mentioned above, the same fusional morpheme is also possible - although pragmatically odd - in another combination, namely the first person plural subject and the first person singular object (see Table 3.11 below). In this case, however, the verb receives the plural suffix *-h*, which indicates that the subject is plural, as in *techmacah* 'we give me'.

The examples above show that Western Huasteca Nahuatl developed at least one case of fusional morphology, in which one morphemic form (*tech*) expresses two grammatical features (the subject and the object), and also is used to express several different configurations of subject and object in both indicative and imperative moods. The subject-object verbal prefix paradigm in Huasteca Nahuatl (including Western Huasteca Nahuatl) is presented in Table 3.11 below.

The emergence of fusional morphology in Western Huasteca Nahuatl can be interpreted as a case of both complexification and simplification. On the one hand, it constitutes a decrease in morphological transparency and an increase in irregularity. On the other hand, this syncretism can be considered an example of simplification in which

there has been a reduction in the number of forms representing different subject-object configurations.⁷⁶

Table 3.11. Huasteca Nahuatl subject-object verbal prefix paradigm (the abbreviation WHN indicates the forms used in Western Huasteca Nahuatl (Beller and Beller 1979: 270).

		OBJECT					
		1SG	2SG	3SG	1PL	2PL	3PL
S U B J E C T	1SG	<i>ni-mo</i>	<i>ni-mitz</i>	<i>ni-h</i> <i>ni-c-V</i>	<i>ni-tech</i>	<i>ni-mech</i>	<i>ni-quin</i> <i>ni-quinin</i>
	2SG	<i>ti-nech</i>	<i>ti-mo</i>	<i>ti-h</i> <i>ti-c-V</i>	<i>ti-tech</i>	<i>ti-mech</i>	<i>ti-quin</i> <i>ti-quinin</i>
		<i>tech</i> (WHN)			<i>tech</i> (WHN)		
	Imperative						
		<i>xi-nech</i>	<i>xi-mo</i>	<i>xi-h</i> <i>xi-c-V</i>	<i>xi-tech</i>	<i>xi-mech</i>	<i>xi-quin</i> <i>xi-quinin</i>
		<i>tech</i> (WHN)			<i>tech</i> (WHN)		
	3SG	\emptyset - <i>nech</i>	\emptyset - <i>mitz</i>	\emptyset - <i>qui</i> \emptyset - <i>mo</i>	\emptyset - <i>tech</i>	\emptyset - <i>inmech</i>	\emptyset - <i>quin</i> \emptyset - <i>quinin</i>
						\emptyset - <i>anmech</i> (WHN)	
	1PL	<i>ti-nech</i>	<i>ti-mitz</i>	<i>ti-h</i> <i>ti-c-V</i>	<i>ti-mo</i>	<i>ti-mech</i>	<i>ti-quin</i> <i>ti-quinin</i>
		<i>tech</i> (WHN)					
2PL	<i>in-nech</i>		<i>in-qui</i>	<i>in-tech</i>	<i>in-mo</i>	<i>in-quin</i> <i>in-quinin</i>	
	<i>an-nech</i> (WHN)		<i>an-qui</i> (WHN)	<i>an-tech</i> (WHN)			<i>an-mo</i> (WHN)
3PL	\emptyset - <i>nech</i>	\emptyset - <i>mitz</i>	\emptyset - <i>qui</i>	\emptyset - <i>tech</i>	\emptyset - <i>inmech</i>	\emptyset - <i>quin</i> \emptyset - <i>quinin</i> \emptyset - <i>mo</i>	
					\emptyset - <i>anmech</i> (WHN)		

⁷⁶ The origin of the emergence of fusional morphology in Western Huasteca Nahuatl remains unclear. Further investigation is required in order to determine whether the innovation is the result of language contact or internal development.

3.2.8. Spanish-contact induced change in Nahuatl

Nahuatl is by far the best documented indigenous language of the Americas and thanks to the large corpus of Nahuatl written sources that have been compiled from the early colonial times, it is possible to trace the influence of Spanish in this language over the span of five centuries.⁷⁷

Some of the early sources that mention the presence of Hispanic lexical elements in Nahuatl are the missionary grammars of Nahuatl (called *Artes*) written in the 16th, 17th and 18th centuries by Spanish friars, who worked in many parts of Mexico Christianising the Nahua people. One such account can be found in the grammar by Cortés y Zedeño (1765). The author contrasted the variety of Classical Nahuatl used by the friars (which he calls *Idioma culto* ‘the cultured language’) with the 18th century contact variety then spoken (and now extinct) by the local population in the bishopric of Guadalajara, and he calls it *Mexicano castellanizado* ‘the Hispanicised Nahuatl’. Cortés y Zedeño blamed the Hispanisation of Nahuatl on trade and other types of relations the Nahua people had had with the Spanish colonisers, and he called their variety *ya muy adulterado* ‘already very adulterated’, referring to a large amount of the Spanish borrowings that, in his opinion, contaminate Nahuatl. He wrote:

These Indians always seemed to me Barbarians, and for a long time, for the most part, the sweat of the Ministers of the Gospel was wasted; because these [Ministers were] using the cultured Language; and those [Indians] were speaking in castilianised Mexican; and mexicanised Castilian, in such a confusing whirlwind, [that] the grain fell on dry ground, due to not ensuring to water it in the persuasion, or spread the seed well, in the words: to this was added the notable variation, which said Tongue suffers, even in pronunciation ... Their own Tongue; or at least, when there had not passed centuries, as have now passed of their commerce, and relationship with the Spanish, with whose communication they have gone learning various Castilian words; from which it results, that their language is already very adulterated, joining many times in turn, Mexican words, with Castilian [words], or mexicanising the Castilian [words], in such a way, that some Mexican [words] have been castilianised, such as Tompiate [woven basket], Mecate [rope], etc. (Cortés y Zedeño, 1765: *Prólogo*; English translation: Paul Dexter-Sobkowiak).⁷⁸

⁷⁷ The extensive corpus of Classical Nahuatl texts written in alphabetic writing introduced by the Spanish includes such documents as historical annals, petitions, legal documents, letters, theatrical plays, religious texts and a large amount of legal and administrative documents such as wills, bills, parish records and demographic records (e.g. censuses) (Olko 2020: 16-17).

⁷⁸ Original text in Spanish: “A estos Indios notaba Yo siempre Barbaros, y tenia mucho, el que en gran parte, se malograste el sudor de los Ministros de Evangelio; porque usando estos del Idioma culto; y

Although Cortés y Zedeño did not analyse in detail what Spanish borrowings were present in Guadalajara Nahuatl, the study of other colonial sources allows for a better understanding of the type of contact phenomena that could be observed in Nahuatl in that period. Brylak et al. (2020) published a dictionary of loanwords in both colonial and modern Nahuatl (but mostly the former), in which they indicated time periods, dialects of Nahuatl and documentary genres of specific loanwords. This publication listed lexical borrowings including both words (e.g. *cahuayo* ‘horse’, from Spanish *caballo*) and phrases (e.g. *alcalde mayor* ‘chief magistrate’, *Viernes Santo* ‘Holy Friday’). As confirmed in the introductory part to this source by Olko (2020: 32, Tab. 1, 33), as well as by the study of Field (2002: Tab. 5.1), nouns are the most frequently attested category of Spanish lexical borrowings in colonial Nahuatl. Other attested categories include adjectives, adverbs, prepositions and verbs (Olko 2020: 32), although these are less frequently found. With regard to the semantic fields covered by loans, the highest percentage of borrowed nouns refer to religious concepts and objects linked with European imports, followed by terms referring to new offices and titles, place names, animals, plants, units of measure and legal terms (Olko 2020: 38, Tab. 3).

The progressing influence of the Spanish and *mestizo* culture, and the gradually increasing dominance of the Spanish language in both colonial and independent Mexico led to a situation in which more indigenous people became bilingual and so the Spanish contact phenomena in Nahuatl steadily increased. One of the first 20th century accounts of Spanish influence on Nahuatl comes from Whorf (1946 [1939]: 379), who studied Nahuatl spoken in Milpa Alta located close to the Mexican capital. Among the “intrusions from Spanish” that he listed there are borrowings of Spanish prepositions, conjunctions and adverbs, including *para* ‘for’, *por* ‘for, because’, *pues* ‘so’ and *mientras* ‘during’. He also mentions the presence of loan translations of numerous

hablando aquellos en Mexicano castellanizado; y Castellano mexicanizado, â tan confuso torbellino, caía el grano en terrenos secos, por no acertarle el riego en la persuacion, ó distribuirle bien la semilla, en las palabras:â esto se añadía la notable variedad, que padece dicha Lengua, aun en la pronunciacion ... Su propia Lengua; ô por lo menos, quando no havian passado siglos, como han passado ahora de su comercio, y trato con los Españoles, con cuya comunicacion han [i]do aprendiendo varias palabras Castellanas; de que resulta, que su idioma estè ya muy adulterado, juntandose muchas veces con sus periodos, palabras Mexicanas, con Castellanas, ô mexicanizandose las Castellanas, al modo, que se han castellanizado algunas Mexicanas, como Tompiate, Mecate, &c.”

Spanish or Mexican Spanish idioms, such as *ica ompa* ‘that way’; *ca quemah, ca ahmo* ‘que sí, que no’; *quihtoznequi* ‘it means’ (cf. Spanish *quiere decir*), and the use of the particle *ye* ‘already’ with preterite forms to indicate past perfective. Whorf also attested numerous borrowings of Spanish verbs which were adapted into Nahuatl by adding the native verbalising morpheme *-oa*. Despite the presence of these lexical and structural “intrusions”, Whorf observes, however, that “[t]hese Hispanisms have not made for any substantial alteration in Aztec grammar” (Whorf 1946 [1939]: 379).

Several studies attempt to classify the stages of Spanish influence in Nahuatl according to the type of borrowings that were adopted. Karttunen and Lockhart (1976), for example, compiled a pioneering concise listing of Spanish loanwords, and analysed their time of approximate borrowing and phonetic adaptations. They proposed three main stages in the process of the adaptation of Nahuatl to Spanish. These three stages were later refined by Lockhart (1992: 105-121). In stage 1, from the arrival of the Spanish to ca. 1540-1550, Nahuatl remained largely unaffected since the speakers of this language used the resources of their own language such as neologisms or meaning change to name new concepts. Stage 2, lasting from the mid-16th to the mid-17th century, was a period of widespread borrowing of Spanish nouns. Stage 3, which started in the mid-17th century and lasted until at least the time of the publication of Lockhart’s book (1992), is characterised by multilevel language changes. This period witnessed borrowings of verbs and particles, as well as the adoption of Spanish plural forms and sounds originally not present in Nahuatl. Many structural-syntactic and semantic calques were also created in this stage.

An alternative study and classification of the stages of change in Nahuatl was proposed by Jensen (2008), who looked at the history of Nahuatl spanning from its earliest history as a Uto-Aztecan language to its more recent history of intense Hispanisation. Jensen examined twelve features including word order, adpositions, relative clauses, possessive constructions, copular constructions, plural marking, numerals and noun incorporation (Table 3.12).

Table 3.12. Four stages of Nahuatl (Jensen 2008: 22).

No	Typological feature	Uto-Aztecan	Mesoamerican Nahuatl	Colonial Nahuatl	Spanish
1	Constituent order	SOV	V(O)S(O)	SV and VS	SV and VS
2	Adpositions	postpositions	postpositions / relational nouns	postpositions / relational nouns / prepositions	prepositions
3	Relative clauses	pre- and post-head	pre- and post-head	pre-head	pre-head
4	Possessive constructions	'he/his-dog the man'; 'there is his dog'	'he/his-dog the man'; 'there is his dog'; possessive nouns	<i>piya</i> 'have'; possessive nouns	<i>tener</i> 'have'
5	Copula constructions	zero-copula	zero-copula	zero-copula	<i>ser</i> 'be'
6	Adjectives	no	no	no+Spanish loans	adjectives
7	Impersonal constructions	yes	yes	no?	no
8	Incorporation	yes	yes	yes?	no
9a	Causative	yes	yes	yes/non-productive	no
9b	Applicative	yes	yes	yes	no
10	Plural of inanimate nouns	no	no	for some yes	yes
11	Numeral system	no?	vigesimal	vigesimal / decimal	decimal
12	Classifiers	no	yes	yes?	no

In her study Jensen demonstrated how the typological profile of Nahuatl has evolved from a Uto-Aztecan language to a language that adopted many Indo-European features as a result of an intense contact with Spanish. Based on her investigation, Jensen divides the history of Nahuatl into the following stages: Nahuatl as a Uto-Aztecan language (Nahuatl with Uto-Aztecan features), Nahuatl as a Mesoamerican language (Nahuatl shifts as a result of contact with other Mesoamerican languages), colonial Nahuatl (when the influence of Spanish begins), and modern Nahuatl (which shows heavy influence of Spanish).

The trajectory of gradual typological change in Nahuatl as a result of language contact has also been investigated in other studies, most of which focused on

typological change triggered by contact with Spanish. Olko et al. (2018) traced the change in several morphosyntactic features of Nahuatl including animacy as a grammatical category (that affects e.g. plural marking), relational words as a lexical category, the formal distinction between comitative (formed with the relational word *-huan*) and instrumental markers (formed with the relational word *-ca*), existential predicative possession and word order. Olko et al. (2018) concluded that the key innovative features in Nahuatl in the colonial period were minor native patterns that subsequently and gradually became widespread as a result of their similarity with specific Spanish features. For instance, Olko et al. (2018: 482-485) showed that the borrowing of the Spanish preposition *para* ‘for’ has triggered the development of adpositions as a lexical category through the grammaticalisation of relational nouns and the emergence of new types of complement (purpose and temporal) clauses (cf. Suárez 1983: 136-137).

The advancing typological transformation of Nahuatl and its convergence with Spanish is also evident in the high frequency of borrowed Spanish function words. These include prepositions (*de* ‘of’, *para* ‘for, in order to’, *sin* ‘without’, etc.), coordinating conjunction (*o* ‘or’, *pero* ‘but’), subordinating conjunctions (*hasta* ‘until’, *porque* ‘because’, *como* ‘as, since, how, like’), and the complementiser *que* ‘that’. Although prepositions were not a lexical category in Classical Nahuatl, the fact that they are frequently used by speakers confirms that they have become a word class in modern Nahuatl (Field 2002: 142-143).⁷⁹ Moreover, as noted by Olko (2020: 36), the borrowing of conjunctions not only affects the lexicon of Nahuatl, but also transforms syntactic patterns at the interclausal level. This typological shift has made Nahuatl and Spanish even more compatible and greatly reduced the constraints on the borrowability of additional foreign elements in Nahuatl, such as articles and demonstratives.

The evidence of typological shift in modern Nahuatl has been demonstrated in several studies that focus on heavily Hispanicised varieties and specifically analyse language displacement. For example, Law (1961) discussed linguistic acculturation in

⁷⁹ According to the analysis of modern Tlaxcala Nahuatl by Field (2002: Tab. 5.2), whereas the borrowed content versus borrowed function word ratio was 767 to 46 terms, there were 3421 attestations of content words versus 3221 attestations of function words.

Isthmus Nahuat with respect to phonology, morphology, syntax and the lexicon. First of all, Law distinguished four periods of language contact and borrowing that are characterised by the level of linguistic acculturation in phonology. Thus, in Period I all phonemes of Spanish lexical borrowings were conformed to the phonemic system of Nahuat. For example, the phoneme /f/ was realised as /p/, and the Spanish loan *falta* ‘fault, sin’ became *paltah*. Period II was characterised by the introduction of the Spanish phonemes /t/ and /d/. The Spanish phoneme /b/, as well as stress occurring on the penultimate syllable, among others, were introduced in Period III. The last period, Period (IV), is characterised by almost complete acculturation on the phonological level in which all Spanish sounds are used by native Nahuat speakers without any phonological adaptation.

At the morphological level, Law (1961) briefly discussed the adoption of Spanish verb infinitives into the Nahuat system by adding the required suffixes, and he mentioned the borrowing of the Spanish plural suffix *-s* on Spanish noun loans. Furthermore, Law (1961: 559) also identified borrowings which include Spanish adverbs and calques of adverbial phrases, e.g. *siempre yajqui* ‘he went anyway’ (from Spanish *siempre* ‘always, anyway’). Law also discussed changing word order, including the change from the traditional order of attributive plus head (3.33a) to the opposite order (3.33b).

(3.33) Changes in word order in Isthmus Nahuat (Law 1961: 559-560) [my glosses]

- a. *ayá* *Ø-qui-nequi*
 NEG SBJ.3SG-OBJ.3SG-want
 ‘he no longer wants it’
- b. *Ø-cahui* *arreglado*
 SBJ.3SG-leave arranged
 ‘it stands arranged for’ (cf. Spanish *queda arreglado* ‘it stands arranged for’)

In addition, Law (1961) mentioned Spanish lexical borrowings involving cultural and core vocabulary. The latter in Isthmus Nahuat are exemplified by such Spanish loan nouns as *lunah* ‘moon’ or *hermanoh* ‘brother’, which have native equivalents (*metztli* and *icni*, respectively).

The Spanish influence on the Nahuatl spoken in the Malinche Volcano area of Central Mexico located in the states of Tlaxcala and Puebla was studied by Hill and Hill (1980). They analysed the economic and social factors affecting language vitality and linguistic acculturation, and highlighted the relationship between these factors in the use of honorifics and numerals. In their study, Hill and Hill (1980: 332-336) showed how the four levels of distinction in honorific usage, which were traditionally realised through a system of affixes that appeared on verbs, nouns and pronouns, were still intact in direct address but had undergone attrition when used in reference in the Nahuatl-speaking communities in central Tlaxcala.⁸⁰ Hill and Hill (1980: 336-341) also demonstrated wide variation in the grammar of numeral-noun constructions, in which some speakers do not pluralise nouns in such constructions, while others apply number agreement on nouns.

In a different work by the same authors (Hill and Hill 1986), they studied “a syncretic way of speaking” of Malinche Nahuatl (which they call ‘Malinche Mexicano’). Among the aspects Hill and Hill analysed there are lexical borrowings (including verbs, nouns, adjectives, adverbs, particles and affixes), and phonological convergence that manifests itself in stress shift and the nativisation of Spanish consonants and vowels. Syntactic convergence in Malinche Nahuatl involves changes in word order and borrowing of the Spanish noun-adjective word order, as illustrated in a borrowing of a fixed phrase in (3.34a), which replaced the traditional order in which the modifiers which function as predicates precede nouns (3.34b).

⁸⁰ The traditional four level distinction in honorific usage in direct speech in Tlaxcala Nahuatl includes the following levels. Level I is used with intimates and subordinates, as in *teh tinechmaca* ‘you give me’. Level II is used with strangers or with intimates (e.g. senior kinsmen) and requires the addition of the prefix *on-* ‘away from the speaker’ to a verb and the addition of the honorific suffix *-tzin* to a pronoun, as in *tehuatzin tinechonmaca* ‘you give me’. Level III, the “reverential level”, is used with the elderly people or people of great distinction, and it requires the addition of the reflexive prefix *mo-* and the applicative suffix onto a verb (and often also the addition of the reverential suffix *-tzihoa*), as well as the use of the pronoun *momahuizotzin* ‘your reverence’, as in *momahuizotzin tinechonmomaquilia* ‘your reverence gives me’. Level IV is used between *compadres*, and it is similar to Level III, with the exception that it uses the third person singular form, as in *imahuizotzin nechonmomaquilitzihoa* ‘his reverence gives me’ (even in direct address). The general rule for honorifics in reference is that each level “drops” one step, e.g. when a parent is addressed directly, Level II is used, but when a parent is discussed, Level I is used.

(3.34) Changes in noun-adjective word order in Malinche Nahuatl
(Hill and Hill 1986: 236) [glosses modified]

- a. *in campo santo*
 DET field holy
 ‘the cemetery’
- b. *huēi in ī-cuil~cuil-tzīn*
 big DET POSS.3SG-RDPL~buttock-DIM
 ‘how big her buttocks are!’

Hill and Hill (1986) also demonstrated a word order change in genitive constructions, in which the traditional Malinche Mexicano possessor-possessee order (3.35a) has been replaced with the reverse order and an additional use of the Spanish preposition *de* ‘of’, as well as the loss of possessive morphology on the head noun, as illustrated in (3.35b).

(3.35) Changes in word order in genitive constructions in Malinche Nahuatl
(Hill and Hill 1986: 244, 246) [glosses modified]

- a. *in Eugenia i-tah-tzin*
 DET Eugenia POSS.3SG-father-REV
 ‘Eugenia’s father’
- b. *ni buen amigo de teh*
 1SG good friend of 2SG
 ‘I am your good friend’

The other contact phenomena analysed by Hill and Hill (1986) include the emergence of prepositions, the use of Spanish prepositions *de* ‘of’ and *que* ‘that’, and the overall reduction of syntactic complexity. Hill and Hill mentioned the loss of productivity of compounding, observing that in Malinche Nahuatl traditional forms in which a noun referring to a generic object can be incorporated into a verbal complex (3.36b) are replaced by periphrastic constructions, in which the noun appears outside the verb (3.36b).

(3.36) Loss of noun incorporation in Malinche Nahuatl
(Hill and Hill 1986: 251) [glosses modified]

- a. *ni-ā-miqui*
SBJ.1SG-**water**-die
'I am thirsty'
- b. *ni-miqui de ātl*
SBJ.1SG-die of **water**
'I am thirsty'

A portion of the study of Malinche Nahuatl by Hill and Hill (1986: 271-272), which is very relevant to my own analysis of changes in the counting system in Huasteca Nahuatl (see §4.4.3), deals with the use of numerals with nouns. Hill and Hill (1986: 271, Table VI.3.3) distinguished several stages of Hispanisation of Malinche Nahuatl in terms of whether the speakers use native or Spanish numerals with native or Spanish nouns, and whether they pluralise animate or inanimate nouns:

- | | |
|-------------------------|--|
| A. Indigenous Mexicano: | Mexicano numbers only. Pluralization optional with animate nouns. Some other nouns (e.g., kin terms, nouns with diminutive suffixes) also always pluralized. |
| B. Early Contact: | Spanish numbers appear, but pluralization remains as in (A). |
| C. Learned Usage: | Plurals begin to appear in noun-numeral constructions on 'learned' Spanish words such as <i>oración</i> 'prayer', particularly on words with easy-to-hear <i>-es</i> plurals (as opposed to <i>-s</i> plurals, which are harder to hear.) Plurals begin to appear on very common Spanish words such as <i>peso</i> . |
| D. Mixed Usage: | All mixed construction types . . . existing alongside unmixed types for individual speakers. |
| E. Sorting: | Spanish numerals are always followed by a plural noun, regardless of the etymology of the noun. Mexicano numerals are always followed by a singular, regardless of the etymology of the noun.
[...] |
| F. Purist: | Spanish numerals avoided. |
| G. Rememberers: | Recitation of Mexicano numerals is a performance. |

(Hill and Hill 1986: 271-272)

Other phenomena analysed by Hill and Hill (1986: 276ff.) include the introduction of the Spanish relativising elements including *que* ‘that’, *de* ‘that’, *lo que* ‘that’, *cuando* ‘when’, *donde* ‘where’, which replaced the native strategy of using the particle *in* or simply juxtaposing the verbal and nominal elements.

Changes in Pipil, a variety of Nahuatl spoken in El Salvador, were examined by Campbell (1987), who divided the innovations into six groups, as follows:

- a) constructions borrowed directly from Spanish,
- b) shifts in native constructions due to phonetic similarity with Spanish forms,
- c) expansion of native forms to match Spanish functions with which originally there was only partial equivalence,
- d) changes in “thrust” (or “degree”) due to overlap with Spanish,
- e) “boundary loss”, and
- f) other changes, not motivated by contact with Spanish.

(Campbell 1987: 253-254)

With respect to direct loans from Spanish, Campbell (1987) mentioned the Spanish comparatives such as *más* ‘more’ and *que* ‘than’, as well as the coordinate conjunctions *pero* ‘but’, *sino* ‘but’, *y* ‘and’, *más bien* ‘rather’ and *o* ‘or’. Regarding the expansion of native Pipil forms to match Spanish functions, Campbell (1987: 265) gave examples to show that (what he calls) ‘past participles’ are used as adjectives (e.g. the form *chihchi:lih-tuk* ‘reddening, reddened’, which previously only functioned in verbal constructions). Moreover, following the pattern found in Spanish, Pipil developed an innovative periphrastic way of expressing the future, as in (3.37a) which replaced the future tense suffix *-z* found in the traditional variety (3.37b).

(3.37) Expressing future in Pipil (Campbell 1987: 267) [glosses modified]

- a. *ni-yu* *ni-k-chiwa*
 SBJ.1SG-**go** SBJ.1SG-OBJ.3SG-do
 ‘I’m going to do it’
- b. *ni-k-chiwa-s*
 SBJ.1SG-OBJ.3SG-do-FUT
 ‘I will do it’

Campbell (1987) also noted that in Pipil certain relational nouns, such as *pal* ‘possession’ or *huan* ‘with’ are often used without possessive prefixes and function as prepositions. In addition, Campbell (1987: 272) investigated changes due to overlap with Spanish, such as the “enhancement” of the use of definite *ne* and indefinite *ce* articles, and the expansion of the progressive aspect in verbs. Finally, among the changes that, according to Campbell, are not due to Spanish influence, there is a shift in word order. Campbell observed that Pipil changed its word order from the former VSO found in Proto-Nahua to VOS as a consequence of contact with Southern Mayan and Xincan languages, which also have VOS order.

Several cross-dialectal studies of changes in Nahuatl were conducted by Flores Farfán (1999, 2008). The varieties of Nahuatl that he analysed include those spoken in the following regions: River Balsas, Chilacachapa and Acatlán (all in the state of Guerrero), Hueyapan and Tepoztlán (Morelos) and San Miguel Xaltipan (Tlaxcala). The phonological changes that are common to all these varieties include the development of voicing contrast, the disappearance of contrasting vowel length, the introduction of Spanish phonemes that were not present in traditional Nahuatl, the change from /ts/ to /s/, the substitution of the glottal stop or the glottal fricative by /n/, and the treatment of /u/ and /o/ as separate vowels (Flores Farfán 1999, 2008). In terms of shared morphological adaptations, Flores Farfán mentioned a blurring of the clear-cut distinction between possessive and absolute noun forms (*pitso* vs. *pitsotl* ‘pig’) and the deletion of some obligatory morphology (e.g. causative suffix and possessive prefix) (Flores Farfán 2008: 35-36). Moreover, Flores Farfán (2008: 36-37) also described the reduction of the distinction between indicative and imperative forms. Furthermore, he found that loss of the obligatory subject and object prefixes is also occurring in some varieties including Chilacachapa Nahuatl (3.38a). For contrast, example (3.38b) shows a more traditional verbal argument marking found in less Hispanicised varieties.

(3.38) Loss of argument prefixes in Chilacachapa Nahuatl (Flores Farfán 2008: 37)

- a. *amo mati*
NEG know
'I don't know'
- b. *amo ni-c-mati*
NEG SBJ.1SG-OBJ.3SG-know
'I don't know'

Another change concerns the native Nahuatl future marker *-z*, which in most varieties is becoming identified with the Spanish infinitive, e.g. *cochiz* 'to sleep' (Flores Farfán 2008: 37-38). With respect to syntax, Flores Farfán (2008: 38) observed that Nahuatl has become more analytic, a change that impacts its "coinage of new words, considerably limiting processes of composition and incorporation". Flores Farfán also noted that modern Nahuatl is shifting from a postpositional to a prepositional language. Moreover, he pointed out that double infinitive constructions are often attested (e.g. a verb of movement + verb, e.g. *para ir a* +verb 'in order to go + verb'), as illustrated in (3.39).

(3.39) Double infinitive construction in (Flores Farfán 2008: 38) [glosses modified]

- para yawe-h tlali-s*
for go-PL put-FUT
'in order to go to put it'

Another characteristics of modern varieties is the loss of the obligatory specific object prefix as in *cohua* 'to buy', instead of \emptyset -*qui-cohua* (SBJ.3SG-OBJ.3SG-buy) 'she/he buys it'. Flores Farfán (2008: 40) also observed the use of numerous semantic calques based on Spanish courtesy formulas, e.g. *cualli tonalli* 'good day' (based on Spanish *buenos días*).

The existing studies of the influence of Spanish on Huasteca Nahuatl include various mentions of lexical borrowings in works by Beller (N.) and (Cowan de) Beller, such as their grammar of Huasteca Nahuatl (1979) and their two-volume Nahuatl course (1984, 1985). A concise study of the sociolinguistic situation of Huasteca Nahuatl in Huejutla, Hidalgo was proposed by Stiles (1982). Stiles linked language use with

socio-economic, cultural and political factors, including education level, group loyalty and attitudes, and he also provided examples of changes in Nahuatl that stem from contact with Spanish. By comparing data from Hidalgo Nahuatl with texts in Classical Nahuatl, Stiles analysed Spanish loanwords and described the way in which those new words were adapted to Nahuatl phonology. Stiles also discussed Spanish lexical interference in 20th century Hidalgo Nahuatl and the morphological phenomena affecting nouns and verbs, as well as adjectives and adverbs.

There have been no studies on language contact phenomena in Nahuatl as spoken in Xilitla specifically, aside from the study by Dexter (2004), who mentioned adaptation of Spanish loans into the native Nahuatl sound system. In his work, Dexter claimed that Xilitla Nahuatl retains contrastive vowel length in native words but all vowels in Spanish loanwords which are present in this variety are realised as long vowels.

To summarise, the topic of Spanish-induced changes in Nahuatl has attracted some degree of attention. The presence of Spanish lexical borrowings has been by far the most studied topic. Although the subject of phonological and morphosyntactic innovations has also been analysed in a number of modern varieties of Nahuatl, it remains unexplored in Western Huasteca Nahuatl.

3.2.9. Summary

As shown in the preceding sections, the grammatical categories and morphological processes particular to Nahuatl nouns and verbs display many Uto-Aztecan and Mesoamerican traits which are not present in Spanish. For example, in Nahuatl not only verbs but also nouns can operate as predicates. Although Nahuatl and Spanish both distinguish number as singular vs. plural, in Nahuatl plural marking depends on whether a noun is animate or inanimate. Moreover, traditional Nahuatl was a highly synthetic language with agglutinative morphology and very complex verbal morphology. A Nahuatl verb is not only inflected for its arguments, number, tense and aspect, but can also be marked for direction of action and even an added benefactive object. Nouns could also be incorporated into verbs in order to indicate generic objects or function as adverbs. In short, the morphological operations in traditional Nahuatl were distinct from

those found in Spanish and, as a result of intense and long contact with this colonial language, many of the morphological features of Nahuatl have been changed. Although the topic of Spanish-contact induced changes has been investigated in several contact linguistics studies, it still remains an understudied topic especially in the case of the variety of Nahuatl analysed in this work.

3.3. Tének: a structural overview

3.3.1. Introduction

In this section I provide a structural overview of Tének. First, I review its genetic affiliation and closest relatives within the Mayan language family. I then describe its vowel and consonant inventory, its stress patterns and the orthographic conventions applied to represent the sounds of the language. I also deal with the pronominal system used in intransitive and transitive clauses with different argument configurations. I explain the principles of inverse alignment that apply to verbal argument configurations in Tének. In addition, I explore several aspects of Tének morphosyntax including plural marking, alienable vs. inalienable possessive marking, tense-aspect-mood marking and valency changing operations. I also describe various syntactic features of traditional Tének, including word order and clause embedding. Finally, I provide a description of existing sources that have analysed the influence of Spanish on this language.

3.3.2. Classification of Tének

Tének is generally considered to be the most isolated and atypical member of the Mayan language family (Edmonson 1995: 378). There is no consensus among scholars about the specific classification of Tének within the Mayan family. While it is not disputed that the closest relative of Tének was Chikomuselteq, a language once spoken in Chiapas that became extinct in the late 19th century, there is a debate about Tének's

relation to other languages of the family.⁸¹ Several sources, including Kaufman (1990) and Campbell and Kaufman (1985), have claimed that Tének and Chikomuselték form a separate branch of the Mayan family due to their long separation from their sister languages. Kaufman's model of the Mayan language family includes four branches: the Wastekan (or, Huastecan) branch, the Yukatekan branch, the Western branch and the Eastern branch (as shown in Figure 3.2).

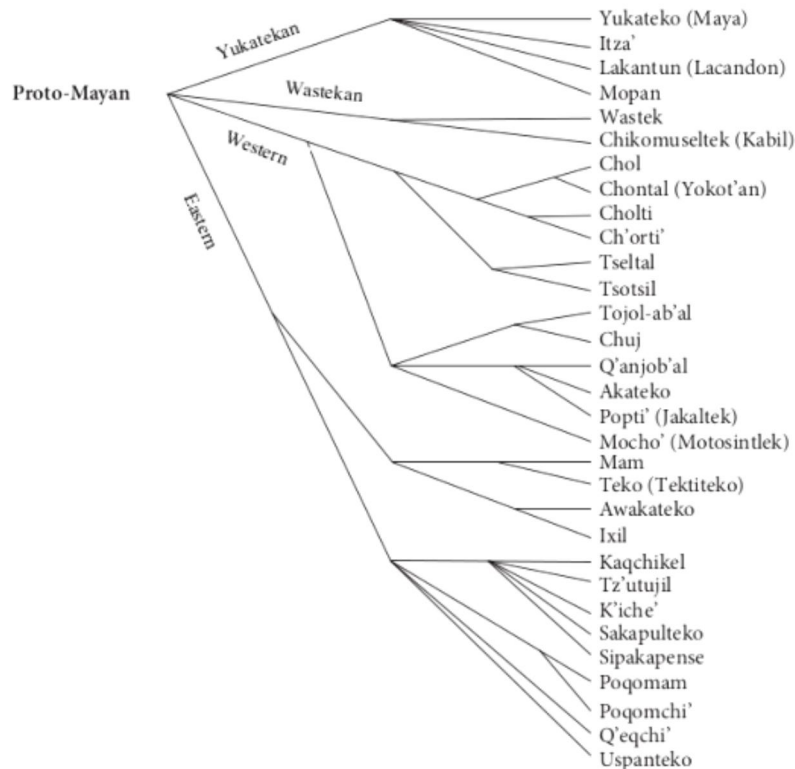


Figure 3.2. The Mayan language family (Law 2014: 8). Names of the four branches added.

A different view of the grouping of the Mayan language family was proposed by Robertson (1992), who classified Tének within the Western branch of the Mayan languages, based on the phonological and morphological similarities between this language and such languages as Chol, Ch'orti', Tseltal, Tsotsil and Tojol-ab'al (as shown in Figure 3.3).

⁸¹ Chikomuselték is not a well documented language. Apart from an incomplete confessionary from the 18th century published by Zimmermann (1966), there are also short wordlists and phrase lists collected by Sapper (1897) and Termer (1930). Campbell and Canger (1978) compiled a list of words remembered by some older residents of Chicomuselo (where Chikomuselték was once spoken), but did not find any speakers of the language.

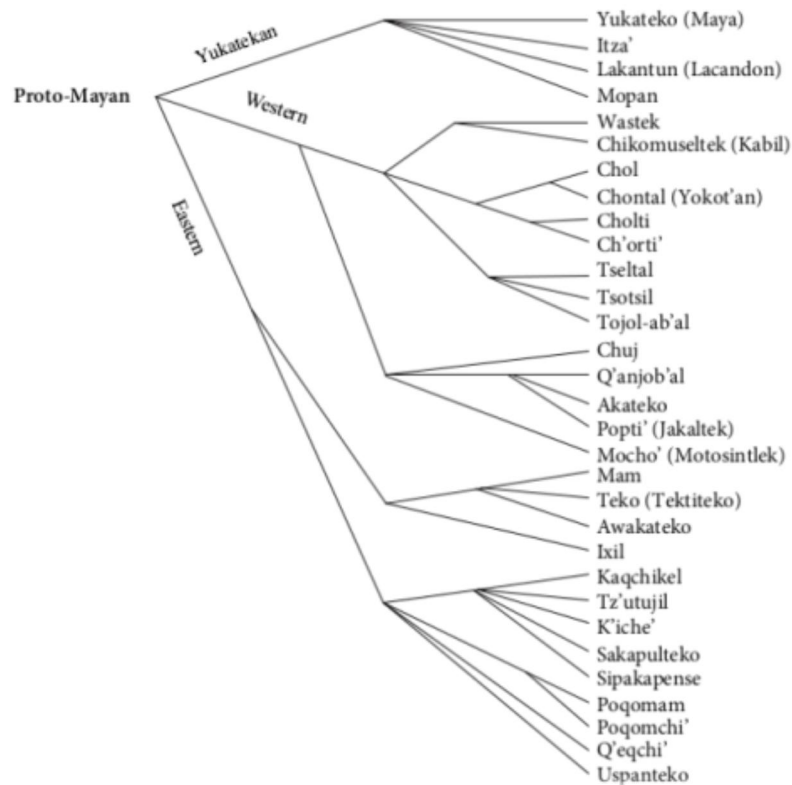


Figure 3.3. The Mayan language family (Law 2014: 9). Names of the three branches added.

Although the genetic affiliation of Tének is still a matter of debate among the Mayanists, there is no dispute about the fact that this language is a unique member of the Mayan language family, typologically distant from its sister languages. Tének lacks some characteristics shared by many languages of this language family, such as serial or directional verbs, numeral classifiers, split ergativity and tones. Moreover, Tének has developed several features that differ from other Mayan languages. These include post-verbal aspectual suffixes (marked pre-verbally in other languages of the family). Tének uses only one set of ergative markers (unlike other Mayan languages, which use two, one pre-vocalic and one pre-consonantal). Tének also has a more developed middle voice but has lost the distinction between inclusive and exclusive first person plural markers. One of the most prominent innovations in Tének, which is not shared by other Mayan languages, is inverse alignment, i.e. marking of the arguments of a verb based on the hierarchy and topicality of speech act participants. Some of the Mayan traits that are retained in Tének are ergative-absolutive argument marking, a rather flexible word order, basic syllable structure CVC or CV'VC, and stress falling on the last long vowel

(or on the first vowel in words without long vowels). In addition, according to Kaufman (1990), independent personal pronouns in Tének are almost identical to those that were present in Proto-Mayan.

There are several varieties of modern Tének that are classified in a number of ways. Ethnologue distinguishes San Luis Potosí Huastec (Potosino Huastec), Southeastern Huastec (Huasteco de San Francisco Chontla), Huasteco de Tantoyuca and Huasteco de Veracruz (Eberhard et al. 2021). INALI, i.e. *Instituto Nacional de las Lenguas Indígenas*, the National Institute of the Indigenous Languages (INALI 2008), on the other hand, classifies Tének into three varieties: Western (spoken in San Luis Potosí), Central (spoken in the Tantoyuca region in Veracruz) and Eastern (spoken in Sierra de Otontepec in Veracruz).⁸²

3.3.3. Phoneme inventory and orthography

Tének has an average size consonant inventory with twenty-two consonant phonemes. A prominent feature are glottalised (ejective) plosives /kʔ/, /tʔ/, as well as affricates /tʃ/ and /tsʔ/. The alveolar affricate /ts/, which is present in the variety of Tének spoken in San Luis Potosí, is pronounced as a post-alveolar or palatal affricate /tʃ/ in the variety spoken in the municipalities of Chontla and Tantoyuca, or as /tʃ/ or /ts/ in the municipalities of Tancoco and Chinampa de Gorostiza in Veracruz (Meléndez Guadarrama 2011: 83). The bilabial voiced plosive /b/ is glottalised in the variety of Tének spoken in Chontla in Veracruz (Meléndez Guadarrama 2011: 84-85). The Tének phonemes not used in Spanish or Nahuatl include such glottalised sounds as /tʔ/, /kʔ/, /kʔw/, /tsʔ/ and the dental fricative /θ/. However, Nahuatl and Tének share many sounds including the labio-velar /kʷ/ and the glottal stop /ʔ/. Modern Tének additionally uses /d/, /g/, and /f/, but these phonemes are only present in Spanish loanwords. The phonemes /r/ and /s/ also appear in loanwords and some onomatopoeic Tének words (Edmonson 1988: 30). The consonant inventory of traditional Tének is presented in Table 3.13.

⁸² For more information on the dialectal variation of Tének and the differences between its varieties see e.g. Kaufman (1985) and Meléndez Guadarrama (2011, 2018).

Table 3.13. Consonant inventory in Tének (P: plain, G: glottalised).

		Labial		Dental/ Alveolar		Alveo- palatal / Palatal		Velar		Labio-velar		Glottal
		P	P	G	P	G	P	G	P	G		
Nasal		m	n									
Plosive	voiceless	p	t	t'				k	k'	k ^w	k' ^w	ʔ
	voiced	b										
Affricate			ts	ts'	tʃ	tʃ'						
Fricative			θ / s		ʃ							h
Approximant			l		j					w		
Flap			r									

Tének has five short vowels: /a, e, i, o, u/ and their respective long equivalents: /a:, e:, i:, o:, u:/ (Table 3.14).

Table 3.14. Vowel inventory in Tének.

	Front		Central		Back	
	Long	Short	Long	Short	Long	Short
Close	i:	i			u:	u
Mid	e:	e			o:	o
Open			a:	a		

Vowel length is phonemic in Tének, as illustrated in the minimal pair *belál* /bela:l/ ‘believe’ and *belal* /belal/ ‘walk’. Whereas in Nahuatl there is no phonemic distinction between close and close-mid vowels /u/ and /o/, in Tének these two vowels are separate phonemes, which is similar to Spanish. According to Edmonson (1988: 34), there are no vowel-initial words in Tének because any vowels not preceded by another consonant are preceded by a glottal stop. Since this is a general rule, word-initial glottal stops will not be marked in my examples of Tének use. However, some authors including Edmonson (1988), Meléndez Guadarrama (2011, 2018) and Neri Velázquez (2011) consistently mark the initial glottal stop.

As is the case with Nahuatl, Tének has also been represented by a number of different orthographies. Table 3.15 gives a list of phonemes of this language with their orthographic representations that are used in this work, which is based on Fernández Acosta et al. (2013). The orthography used in Edmonson’s Tének grammar (1988) is also provided since many examples in my study come from this source.

Table 3.15. Phonemes in Tének and their orthographic representation.

IPA representation	This work	Edmonson 1988	IPA representation	This work	Edmonson 1988
/a/	a	a	/n/	n	n
/a:/	á	a:	/o/	o	o
/b/	b	b	/o:/	ó	o:
/tʃ/	ch	č	/p/	p	p
/tʃʰ/	chʰ	čʰ	/t/	t	t
/e/	e	e	/tʰ/	tʰ	tʰ
/e:/	é	e:	/θ/	dh	θ
/h/	j	h	/ts/	ts	ç
/i/	i	i	/tsʰ/	tsʰ	çʰ
/i:/	í	i:	/u/	u	u
/k/	k	k	/u:/	ú	u:
/kʰ/	kʰ	kʰ	/w/	w	w
/kʷ/	kʷ	kʷ	/ʃ/	x	š
/kʰʷ/	kʰʷ	kʰʷ	/j/	y	y
/l/	l	l	/ʔ/	ʔ	ʔ
/m/	m	m			

Tének has two types of syllables: CV and CVC. Syllables consisting of solely a vowel or of the type VC are not allowed in Tének (Meléndez Guadarrama 2011: 77). The syllable nucleus can be short or long. In contrast with other Mayan languages, Tének is not a tonal language. Primary stress in Tének is predictable and falls on the last long vowel of a word. If a word lacks a long vowel, the first vowel of the word is stressed (Edmonson 1988: 40).

Tének is also characterised by vowel harmony, in which the vowels of suffixes assimilate to the vowel present in the root. Vowel harmony affects verbs, nouns and adjectives (Ochoa Peralta 1984: 51). In verbs, for instance, the vowel of the

incompletive suffix of intransitive verbs *-Vl* assimilates to the vowel of the verbal root. For example, the incompletive form of the verbal root *tsem-* ‘to die’ becomes *tsemel* ‘he/she dies’, while the incompletive form of the verbal root *way-* ‘to sleep’ is realised as *wayal* ‘he/she sleeps’.

To summarise, the traditional phoneme inventory of Tének is quite different from both Spanish and Nahuatl. Unique features of Tének phonology include glottalised stops and affricates, contrastive vowel length and vowel harmony. Further distinctive traits of morphology and syntax in Tének are explored in the next sections.

3.3.4. Nominal morphology

Tének nouns display many categories particular to Mesoamerican languages but distinct from Spanish. Mesoamerican traits in nominal morphology in Tének include absolutive affixes on nouns, the limited occurrence of plural markers on nouns, contrast between alienably and inalienably possessed nouns (including intimate possession), locatives derived from body parts, and nominal possession of the type ‘his-noun1 (the) noun2’ (Campbell et al. 1986). Numeral classifiers, which are a feature of Classical Nahuatl (see §3.2.4) and are in use in other Mayan languages, are absent in Tének.

A Tének noun is composed of the root and additional elements including determiners, clitics and/or suffixes (see Table 3.16).

Table 3.16. Tének noun paradigm.

<i>an</i> (definite)	ROOT	<i>-láb</i> (generic)	
<i>i</i> (indefinite)		<i>-lek(l)</i> (absolutive)	
<i>a</i> (honorific)		$-\emptyset$ (base form)	= <i>chik</i> (plural)
<i>u= / a= / in= / i=</i> (possessive)		<i>-il/-al</i> (possessive, alienable)	
		$-\emptyset$ (possessive, inalienable)	

Similarly to Nahuatl, a Tének noun can appear in a possessive or non-possessive form. The non-possessive, i.e. the ‘base form’ in Edmonson’s (1988) terminology, can receive a definite or indefinite marker, as in *an pik’o* (DEF dog) ‘the dog’, where *an* is the definite marker. Proper names of human and divine beings, as well as names of special status beings (e.g. *its* ‘moon’ or *k’ichá* ‘sun’), are preceded by the honorific marker *a*, as in *a Eduardo* (HON Edward) ‘Edward’. Optionally, the base form can also have the plural clitic =*chik* as in *pik’ochik* ‘dogs’. The plural clitic also attaches to other parts of speech, as I explain later. Tének has two other non-possessive, i.e. generic and absolutive suffixes, which are usually applied to derive non-possessive forms from bound possessive noun forms (Edmonson 1988: 319). The generic suffix can sometimes have a collective sense and can give the noun a plural meaning, as illustrated in (3.40a). The absolutive suffix expresses a partitive sense and can be translated as ‘one of the class of’ (3.40b).

(3.40) Generic and absolutive suffixes in Tének

- a. *an mám-láb*
 DEF grandfather-GENR
 ‘the grandfathers’
- b. *i dham-lek*
 INDEF nose-ABS
 ‘(one of the class of) noses’

A Tének noun can also appear in a possessive form, and in this situation it is preceded by a Set A ergative marker (Edmonson 1988: 349) (see §3.3.5). Tének displays contrastive alienable and inalienable possessive marking. Inalienably possessed nouns, which include e.g. kinship terms, body parts and parts of a whole, do not receive a special possessive suffix, as illustrated in *u=dham* (A1.SG=nose) ‘my nose’, or *u=mám* (A1.SG=grandfather) ‘my grandfather’. Alienably possessed nouns, on the other hand, receive a marker, as shown in (3.41).

(3.41) Alienable possession in Tének

u=pik'o-il

A1.SG=dog-POSS

'my dog'

Different possessive markings in Tének can reflect different semantic properties of a noun (Edmonson 1988: 350-369). Thus, for example, while referring to a woman's necklace that is an integral part of her traditional clothing one would say *in=ow* 'her necklace' (3.42a). The same expression with the possessive marker *-il* (b) can, in turn, refer to e.g. an animal's collar.

(3.42) Alienable vs. inalienable possessive marking in Tének

a. *in=ow*

A3.SG=necklace

'her necklace'

b. *in=ow-il*

A3.SG=collar-POSS

'its collar'

In Tének, the marking of possession depends on the level of perceived proximity between the possessor and possessum (Maldonado 1994), which is very culture specific. Thus items such as pieces of traditional clothing or everyday items, e.g. *u=dhayem* 'my quechquemitl' (a type of woman's poncho), were traditionally considered inalienably possessed. The topic of possessive marking in Tének and how it has been affected by contact with Spanish is explored in more detail in §4.3.3.

Tének nouns must be preceded by an article, a demonstrative or a possessive pronoun (i.e. a Set A marker), unless they follow the preposition *ti* or are used vocatively (Edmonson 1988: 489). These articles or demonstratives have the same form regardless of the number or natural gender of nouns.

Although Tének lacks the category of grammatical gender, it has the category of number and it distinguishes between singular and plural number. However, in traditional Tének plural marking is optional and a base form of a noun may have either a singular or plural referent (Edmonson 1988: 398). For instance, the root *ts'ik'ách* can

have a singular or plural meaning ('girl/girls'). Tének nouns can also take the overt plural clitic (=chik), as in *ts'ik'áchchik* 'girls'. The use of =chik for plural depends on the animacy hierarchy (Edmonson 1988: 404). Nouns that refer to humans are most likely to be pluralised with the clitic =chik, followed by domestic and wild animals, plants, inanimate objects and finally, abstract concepts. In practice, however, nearly all nouns can be pluralised by including a numeral in a noun phrase (3.43a) or using a quantifier (e.g. *yam* 'many') (3.43b). If a numeral is used, the plural suffix does not appear on the noun. The topic of plural marking on nouns in Tének is analysed in more depth in §4.2.5.

(3.43) Expressing plural with numerals and quantifiers in Tének

- a. *óx* *i* *ts'ik'ách*
three INDEF girl
 'three girls'
- b. *yán* *a* *inik*
many DEF man
 'many men'

As can be seen from the description above, the traits of Tének nominal morphology are quite distinct from those of Spanish. Two of the most striking differences are the optional plural marking, and the distinctive marking for alienably and inalienably possessed nouns. As I show in chapter 4, both of these features have been significantly altered as a result of contact with Spanish.

3.3.5. Grammatical alignment

Tének is a head-marking ergative-absolutive alignment language, which indexes the subject of an intransitive verb in a different way than the agent of a transitive verb (Dixon 1994). Tének, like other Mayan languages, uses two sets of pronominal markers, i.e. ergative and absolutive, which are referred to by Mayanists as 'Set A' and 'Set B' markers, respectively. Whereas some Tének experts treat these markers as independent words (e.g. Ochoa Peralta 1984; Edmonson 1988; Zavala Maldonado 1994), for other scholars (e.g. Larsen 1953; Meléndez Guadarrama 2011; Neri Velázquez 2011) they are

clitics, i.e. forms which are “phonologically dependent upon a neighbouring word (its host) in a construction” (Crystal 2008: 80). In this work, I treat (and gloss) pronominal markers as clitics, since they fit well the definition of a clitic. They cannot function as separate lexical elements and they are controlled by their host verbs or nouns.

Tének pronominal markers are obligatory and they index person, number and case. They are always placed before the verb, which stands in contrast with other Mayan languages, in which the ergative markers appear as prefixes, and the absolutive markers tend to appear as postclitics (Meléndez Guadarrama 2011). A separate set of independent pronouns in Tének, on the other hand, can be used optionally and they can either precede or follow the verb. The full paradigm of pronominal markers is presented in Table 3.17. Note that in the absolutive Set B, the third person can have two forms: *u* or \emptyset (zero-marked). The *u* form is used to mark the subject of a monovalent verbal predicate in the incompletive form and the zero marking can occur with an intransitive verb both in incompletive and completive form (Zavala Maldonado 1994: 51).

Table 3.17. Tének independent pronouns, and ergative and absolutive pronominal markers.

Person	Independent pronouns	Ergative (Set A)	Absolutive (Set B)
1SG	<i>naná'</i>	<i>u</i>	<i>in</i>
2SG	<i>tatá'</i>	<i>a</i>	<i>it</i>
2SG (reverential)	<i>xaxá'</i>	<i>a</i>	<i>ix</i>
3SG	<i>jajá'</i>	<i>in</i>	\emptyset / <i>u</i> ⁸³
1PL	<i>wawá'</i>	<i>i</i>	<i>u</i>
2PL	<i>tatá'chik</i>	<i>a=chik</i>	<i>it=chik</i>
2PL (interrogative)	<i>¿xaxá'chik?</i>	<i>a=chik</i>	<i>ix=chik</i>
3PL	<i>jajá'chik</i>	<i>in=chik</i>	\emptyset / <i>u=chik</i>

The Set A ergative markers signal the agent is a transitive clause (3.44a), and the possessor in a possessive noun phrase (3.44b). Unlike other Mayan languages, which

⁸³ The *u* Set B 3rd person singular pronominal marker, according to Edmonson (1988: 116), “tends to be used more in cleft or focused sentences, is relatively frequent as the subject of passives, and can be used on predicate adjective constructions but never in equative nominal sentences”.

have two phonologically conditioned sets of ergative markers (one pre-vocalic and one pre-consonantal), Tének has only one universal set.

(3.44) Set A ergative pronominal markers in Tének

- a. *u=k'apul i bakan*
A1.SG=eat INDEF tortilla
'I'm eating a tortilla'
- b. *u=pik'o-il*
A1.SG=dog-POSS
'my dog'

The absolutive markers, Set B, on the other hand, signal the subjects of non-verbal predicates (3.45a), and the subjects of intransitive verbs (3.45b).

(3.45) Set B pronominal markers in Tének (Zavala Maldonado 1994: 32) [glosses modified]

- a. *in=kweteem*
B1.SG=single
'I am single'
- b. *in=bix-om*
B1.SG=dance-INERG
'I am dancing'

Independent pronouns are optional and are sometimes used for emphasis, as illustrated in (3.46).

(3.46) Independent pronoun used for emphasis in Tének

- Naná in=ádhil*
1SG B1.SG=run
'I am running'

Although the presence of ergative-absolutive marking of verbal arguments in Tének is similar to other Mayan languages, unlike its Mayan relatives, Tének has developed inverse alignment for transitive clauses. Whereas other languages of the family mark both arguments of transitive verbs, the agent and the object, in the Tének verbal complex there is only one slot for the argument, so the agent and object of a transitive phrase compete to fill this slot. As a consequence, either an ergative or an absolutive

marker is chosen depending on which of the participants ranks higher in the 1>2>3 hierarchy (Zavala Maldonado 1994: 68-70), in which first and second person (or, Speech Act Participants - SAP), outrank third person participants (or, 1>2>3). As a result, a transitive verb in Tének has agreement marking which usually refers only to one of the two participants of the transitive clause.

The four possible types of agent and object configurations and corresponding alignment constructions in Tének are: direct, inverse, local and a situation in which both arguments are the 3rd person (3:3), as summarised in Table 3.18 below.

Table 3.18. Agent and object configurations and corresponding alignment in Tének.

	Agent	Object
Direct	SAP	3
Inverse	3	SAP
Local	SAP	SAP
3:3	3	3

In a direct alignment construction, in which the agent is a SAP and the patient is the 3rd person (SAP: 3), only the SAP agent is marked with a Set A marker (example 3.47a). In an inverse alignment construction, in which a 3rd person (the agent) is acting on a SAP (the object) (3:SAP), only the SAP object is marked with a Set B marker (example 3.47b). In a local alignment construction, in which both arguments are SAPs (SAP:SAP), the only argument which is marked is the SAP which is higher in the hierarchy (1>2), as shown in (3.47c) and (3.47d). In all cases of inverse and local alignment constructions, the appropriate person marker (either the agent, or the object, whichever is higher according to the SAP hierarchy) is preceded by a special alignment marking $t(V)=$. This marker, which Zavala Maldonado (1994) refers to as the ‘inverse marker’, signals that the verb has the object which is not in the 3rd person, i.e. the object is a SAP, either the 1st or the 2nd person. Finally, in the situation in which both arguments are the 3rd person (3:3), then only the agent is marked with a Set A marker (3.47e). In addition to these four types, in the case of reflexive meaning, i.e. when the agent and object are the same, the Set B marker is used (3.47f) (see Constable 1989).

- (3.47) Transitive verb argument alignment in Tének
(Esteban Martínez et al. 2006: 31) [my glosses]
- a. *Naná' u=tsu'tal* (1SG A1.SG=see) 'I see him/her' (1:3)
 - b. *Jajá' t=in tsu'tal* (3SG INV=B1.SG see) 'He/she sees me' (3:1)
 - c. *Tatá t=in tsu'tal* (2SG INV=B1.SG see) 'You see me' (2:1)
 - d. *Naná' t=u tsu'tal* (1SG INV=A1.SG see) 'I see you' (1:2)
 - e. *Jajá' in=tsu'tal=chik* (3SG A3.SG=see=PL) 'He/she sees them' (3:3)
 - f. *Naná' in=tsu'nal* (1SG B1.SG=see) 'I see myself' (1:1)

A paradigm showing different configurations of verbal arguments for transitive verbs with their respective marking is shown in Table 3.19. Note how the inverse and local configurations of arguments require the inverse marker $t(V)=$.

Table 3.19. Agent-object matrix for a transitive clause
(based on Zavala Maldonado 1994: 68).

		O B J E C T					
		1st SG	2nd SG	3rd SG	1st PL	2nd PL	3rd PL
S	1st SG	<i>in</i>	<i>t=u</i>	<i>u</i>		<i>t=u=chik</i>	<i>u=chik</i>
U A	2nd SG	<i>t=in</i>	<i>it</i>	<i>a</i>	<i>t=u</i>		<i>a=chik</i>
B G	3rd SG	<i>t=in</i>	<i>t=i</i>	<i>u</i>	<i>t=u=chik</i>	<i>t=i=chik</i>	<i>in=chik</i>
J E	1st PL		<i>t=u</i>	<i>i</i>	<i>u</i>	<i>t=u=chik</i>	<i>i=chik</i>
E N	2nd PL	<i>t=in</i>	<i>a</i>	<i>a</i>	<i>t=u</i>	<i>it</i>	<i>a=chik</i>
C T	3rd PL	<i>t=in</i>	<i>t=i</i>	<i>in</i>	<i>t=u</i>	<i>t=i=chik</i>	<i>u</i>
T							

According to Meléndez Guadarrama (2011: 240), inverse alignment is not a result of internal change but evolved in this language as a consequence of contact with Mixe-Zoquean languages in the Pre-Classic period between 650-350 BCE.

This pattern of argument marking in Tének is found in the varieties of this language used today in the state of San Luis Potosí and also around Tantoyuca in Veracruz. According to Meléndez Guadarrama (2011), a different pattern of argument marking was found in colonial Tének and is still used in the present-day varieties spoken in Tancoco and Chontla in Veracruz.⁸⁴ In the Huejutla variety of Tének recorded by De la

⁸⁴ Zavala Maldonado (1994) briefly described simplification in inverse alignment pronouns in modern Tének in comparison to colonial Tének. He observed that modern Tének only marks one participant in

Cruz (1571), transitive or ditransitive verbs with the 2nd person object would mark the two arguments according to the formula $ta=B2=Set\ A$, in which the particle *ta* was the predecessor of the modern $t(V)=$ marker described above, the Set B marker referred to the 2nd person object and the Set A marker referred to the agent. In the case of transitive or ditransitive verbs with the 1st person object, only the argument higher in the SAP hierarchy was marked, i.e. the 1st person object, according to the formula $ta=k=B1$, in which the 1st person object is indexed with the Set B marker (Meléndez Guadarrama 2013: 224). Meléndez Guadarrama (2011, 2013) also found that this type of argument marking is still preserved in the varieties of Tének from Tancoco and Chontla in Veracruz. This is an argument that speaks in favour of considering the inverse alignment in modern San Luis Potosí and Tantoyuca Tének as a more recent development. This would imply that a more traditional transitive verb argument marking in Tének was realised according to the formula $Set\ B=Set\ A=Verb$ (Meléndez Guadarrama 2011: 228), in which both object and agent were marked, as is still the case in other Mayan languages. The *ta* particle, according to Robertson (1993) and Meléndez Guadarrama (2011), has evolved into the $t(V)=$ marker used in modern Tének to mark inverse alignment, although its original function was not to mark inverse alignment specifically but, rather, to indicate that the object was not in the 3rd person.

To summarise, argument marking in Tének is very different from Nahuatl and Spanish, both of which have nominative-accusative alignment. Tének not only displays ergative-accusative alignment, similar to other Mayan languages, but it has also developed inverse alignment in which the marking of arguments in transitive verbs is conditioned by their rank in the hierarchy of verb arguments. This characteristic of the structure of Tének is one of the most complex features to grasp while analysing this language. Another complex aspect of Tének grammar is verbal suffixes, which are analysed next.

SAP:SAP and 3:SAP alignments, and only explicitly signals the pronominal participant occupying the highest position within the $1>2>3$ hierarchy in transitive verb complexes. He contrasted this with colonial Tének, in which the inverse and local configurations were signaled with the inverse marker and with both ergative and absolute pronominals on the verb (with some exceptions).

3.3.6. Verbal morphology

As mentioned before, Tének has morphologically complex verbs which consist of pronominal markers, a verbal root and suffixes that appear in a rigid order. A typical syllabic structure of a verbal root is CV(:)C (Edmonson 1988: 151), although many modern varieties of Tének, including that spoken in Tamaletóm (Neri Velázquez 2011: 11), have lost the initial glottal stop so that a V(:)C root is also possible. The morphemes that form the verbal complex can include the verbal root, auxiliary verb and bound morphemes (e.g. aspect markers, causative or applicative markers). The syllabic structure of affixes in Tének includes a vowel (-V) and a consonant (-C), but other types are also possible (-CV, -CVC, and -CVCVC) (Meléndez Guadarrama 2011: 85-86). The verbal complex may be complemented by an auxiliary verb (Meléndez Guadarrama 2011: 177), and since auxiliaries have their own stress, they are considered separate phonological words belonging to the verbal complex. According to Meléndez Guadarrama (2011: 177), in Tének a ‘verbal word’ (in Spanish: *palabra verbal*), that is understood as one morphological unit, can be formed by more than one phonological word. For further information about auxiliary verbs see §3.3.7.

A Tének verbal root can receive a number of markers, including transitivity markers, valency increasing or decreasing markers (e.g. causative), aspect, plural and other additional markers (such as an emphasis or a quotative marker). The verbal complex also includes an obligatory pronominal marker (often preceded by the inverse alignment marker or the subordination marker), which signals the arguments of a verb, according to the principles of direct or inverse alignment explained in the section above. While the aspect markers are obligatory, the causative and applicative only appear in valency changing operations. The transitivity markers are also required, aside from a few exceptions (Meléndez Guadarrama 2011: 180). As mentioned above, and described further in §3.3.7, a verbal complex can include an auxiliary verb as well. The structure of a modern Tének verbal complex, as used in San Luis Potosí and Tantoyuca in Veracruz, is presented in Figure 3.4.

Verbal complex									
Aux	Preclitics			ROOT	Affixes			Postclitic	
AUX	<i>t(V)=</i>	<i>k(a)=</i>	B= / A=			-CAUS	-TR -INERG -INACC -ANTIP -RECP -MV	-APPL	-INCOMPL -COMPL -PFV

Figure 3.4. Verbal complex of modern San Luis Potosí and Tantoyuca Tének (based on Meléndez Guadarrama 2011: 179).

Below, I explain the basic morphological operations that involve Tének verbs, including the marking of transitivity, valence decreasing and increasing operations, aspect and plural marking.

Tének verbs are required to have transitivity affixes which indicate that a verb is either transitive or intransitive (Figure 3.4). Both transitive and intransitive markers have different phonological forms depending on the syllabic structure of a verbal root. The intransitive markers can be divided into inaccusative (if the sole argument of the clause is the patient) or inergative (if the argument is the agent). These transitivity markers have received different names in the literature, including ‘thematic suffixes’ (Edmonson 1988) or ‘status suffixes’ (Ochoa Peralta 1984). The transitivity markers are added to the verbal root in order to form the verbal base, which - in turn - can receive an aspect suffix. There are three types of aspect suffixes: incomplete, complete and perfective. In Tének it is aspect and not tense that is the prominent verbal category. The paradigm of aspect markers in Tének depending on whether verbs are transitive or intransitive is given in Table 3.20.

Table 3.20. Transitivity markers in Tének and the corresponding aspect suffixes
(after Neri Velazquez 2011: 29).

Type of verb base	Transitivity marking	Aspect suffix	
Transitive	/-aʔ/	INCOMPL /-al/	
	/-Vy/	COMPL /-Ø/	
	/-Vw/	PFV /-a:mal/	
Intransitive	Inaccusative	/-e/	INCOMPL /-l/ or /-:l/
		/-i/	COMPL /-y/ or /-Ø/
	Inergative	/-u/	PFV /-enek/ or /-nek/
		/-Vl/	INCOMPL /-Ø/
		/-Vm/	COMPL /-a:ts/
		PFV /-a:maθ/	

In example (3.48) the form of the incomplete aspect marker is either *-al* in the case of a transitive verb (3.48a), or is zero-marked in the case of an inergative verb (3.48b).

- (3.48) Incomplete aspect markers for transitive and intransitive verbs
(Esteban Martínez et al. 2006: 34-35) [my glosses]
- a. *U=bix-a-al*
A1.SG=dance-TR-INCOMPL
'I'm dancing (a dance)'
- b. *In=bix-om-Ø*
B1.SG=dance-INERG-INCOMPL
'I'm dancing'

Example (3.49) shows two forms of the perfective aspect marker: the form *-amal* suffixed onto a transitive verb (3.49a) and the form *-ámadh* used in the case of an inergative verb (3.49b).

- (3.49) Perfective aspect markers for transitive and intransitive verbs
(Esteban Martínez et al. 2006: 34-35) [my glosses]
- a. *U=bix-a-amal*
A1.SG=dance-TR-PFV
'I was dancing (a dance)'
- b. *In=bix-m-ámadh*
B1.SG=dance-INERG-PFV
'I was dancing'

Like Nahuatl and other Mayan languages, Tének also has the morphological means of changing the valency of a verb (i.e. the number and type of arguments controlled by the verb), including causative, applicative, passive, antipassive and reciprocal. The operations that increase the valency are causative and applicative. The causative markers are the only markers that can appear between the verbal root and the transitivity marker. The two causative suffixes in Tének have the following forms: *-dh* and *-b* (Edmonson 1988: 187, 196). Example (3.50a) shows the verb *way* ‘sleep’ in its intransitive form, and example (3.50b) shows the same verb with causative and transitive markers.

(3.50) Causative in Tének (Neri Velázquez 2011: 13) [glosses modified]

- a. *An kwito:l Ø=way-al-Ø*
 DEF child B3.SG=sleep-INERG-INCOMPL
 ‘The child sleeps’
- b. *A María in=way-θ-a-al an kwito:l*
 HON María A3.SG=sleep-CAUS-TR-INCOMPL DEF child
 ‘María makes the child sleep.’

Another operation to increase the valency of a verb is the applicative voice, which adds a benefactive or a malefactive argument (the recipient). The applicative suffix *-ch* is added to the verbal base (Edmonson 1988: 202). According to Meléndez Guadarrama (2011: 185), when a verb has an applicative marker directly suffixed onto a root, the transitivity suffix is omitted. Since the applicative marker is in the same slot as the transitivity marker, the applicative marker is immediately followed by the aspect marker. In applicative constructions the only arguments morphologically marked on the verb are the agent and the recipient, which is the new (applied) object. These arguments are then marked according to the direct or inverse alignment principles. In example (3.51) the applicative marker is used on the verb and the benefactive argument appears after the object, in the last position of the sentence. The applicative constructions in Tének are dealt with in more detail in §5.3.4.

- (3.51) Applicative voice in Tének (Edmonson 1988: 525) [glosses modified]
- | | | | | |
|------------|-------------------|---------------------------|------------|--------------|
| <i>ʔan</i> | <i>ɸ'ik'a:č</i> | <i>ʔin=ɸeʔ-č-Ø-i</i> | <i>ʔan</i> | <i>k'oye</i> |
| DEF | girl | A3.SG=grind-APPL-COMPL-EP | DEF | corn.dough |
| | <i>ʔin=ʔa:č</i> | | | |
| | A3.SG=grandmother | | | |
- ‘The girl ground the corn dough for her grandmother.’

Morphological operations that decrease the valency of verbs are passive voice, antipassive voice and reciprocal constructions. The passive voice is formed by adding the passive suffix which is combined with the aspect marker and can have several forms depending on the aspect (Edmonson 1988: 169, 559-560).⁸⁵ An example of a sentence in the active voice with completive aspect is given in (3.52a) and the same sentence in the passive voice is given in (3.52b).

- (3.52) Active and passive voice in Tének (Edmonson 1988: 560) [glosses modified]
- a. *ʔan pik'oʔ ʔin=k'at'-uw-Ø ʔan miɸuʔ*
 DEF dog A3.SG=bite-TR-COMPL DEF cat
 ‘The dog bit the cat’
- b. *ʔan miɸu Ø=k'at'-uw-at [k'al ʔan pik'oʔ]*
 DEF cat B3.SG=bite-TR-PASS.COMPL with DEF dog
 ‘The cat was bitten [by the dog]’

The antipassive, a type of grammatical voice found in ergative languages which either involves omitting the object or expressing it in an oblique case, is formed by adding the antipassive morpheme *-Vx* (Edmonson 1988: 560). The result of the antipassivisation process is that the patient of a transitive verb becomes an oblique in the new verbal base and the agent is marked with the Set B absolutive marker (3.53a). Like the applicative, the antipassive marker also fills the same slot as the transitivity marker. The oblique patient may be specified in a prepositional phrase in an inergative construction, as illustrated in (3.53b).

⁸⁵ The suffix *-áb* is used for the incompletive aspect, the suffix *-a* is used for the completive aspect (with verbal bases suffixed with *-a'*) the suffix *-at* is employed for the completive aspect (with verbal bases suffixed with *-Vy* and *-Vw*), and the suffix *-áme* is used for the perfective aspect (Edmonson 1988: 169).

(3.53) Antipassive voice in Tének (Edmonson 1988: 560) [glosses modified]

- a. *ʔan pik'oʔ Ø=k'at'-uš-Ø*
 DEF dog B3.SG=bite-ANTIP-INCOMPL
 'The dog bites.'
- b. *ʔan pik'oʔ Ø=k'at'-ul-Ø [k'al ʔan miçuʔ]*
 DEF dog B3.SG=bite-ENERG-INCOMPL with DEF cat
 'The dog cat-bites.'

The reciprocal construction, in which both the agent and patient of a verb are coreferential, is formed by adding the suffix *-V:x* and also, additionally, making the vowel of the verbal root long (3.54a). The reciprocal marker also fills the same slot as the transitivity marker. As opposed to the transitive construction (3.54b), in which the agent is marked with the Set A ergative marker, in a reciprocal construction the verb complex is preceded by a Set B absolutive marker.

(3.54) Reciprocal construction in Tének (Edmonson 1988: 561) [glosses modified]

- a. *ʔan pik'oʔ Ø=k'a:t'-u:š-Ø*
 DEF dog B3.PL=bite-RECP-INCOMPL
 'The dogs bite each other.'
- b. *ʔan pik'oʔ ʔin=k'at'-uw-al ʔan miçuʔ*
 DEF dog A3.SG=bite-TR-INCOMPL DEF cat
 'The dog bites the cat.'

Plural marking, as mentioned above, is optional both on Tének nouns and verbs. A lack of plural marking on a verb does not imply that the participant (subject of an intransitive verb or agent of a transitive verb) of the event is singular. In fact, this feature can sometimes show ambiguity in which the participant can be understood as either singular or plural, as shown in (3.55). However, it is usually the context, or the independent pronoun, as illustrated in (3.56), that can clarify the number of participants (Meléndez Guadarrama 2011: 215).

(3.55) Optional plural marking in Tének
 (Meléndez Guadarrama 2011: 215) [my translation]

- ʔi=ʔá:θlač ʔábal k=a yakw'aʔ ʔan ʔólom*
 B2.SG/PL=run for SR=A2.SG/PL catch DEF pig
 'You (2SG or 2PL) run to get the pig.'

- (3.56) Use of plural pronoun in Tének
 (Meléndez Guadarrama 2011: 215) [glosses modified]
tata:ʔ=čik ʔit=ʔúkw'nal
 2SG=PL B2.PL=cry
 ‘You (2PL) cry.’

The adaptation of Spanish verbs in Tének is similar to Nahuatl in that the Spanish verbs are also borrowed as infinitives and are equipped with the obligatory native morphology. Borrowed Spanish verbal roots do not, however, follow the CV(:)C phonological pattern of native Tének verbs. Example (3.57) illustrates two Spanish verbs: *significar* ‘to mean’ and *ofrecer* ‘to offer’ that have been adopted by Tének. Both verbs are used with obligatory Tének verbal morphology including the ergative markers *in* (A3.SG) and *i* (A1.PL), transitivity markers and aspect markers. The second verb also receives the applicative marker *-ch* (spelled in the source ‘tx’), which suggests that this verbal loan has been fully integrated into the Tének system.⁸⁶

- (3.57) Spanish loan verbs in Tének (Kondic 2016a: 95) [glosses modified]
Ani pwees jachana’ in=signifikaar-iy-al
 CONJ then that.way A3.SG=mean-TR-INCOMPL
ke wawaa’ xoo’ni n=i bach’-w-al
 that 1PL where RTL=A1.PL receive-TR-INCOMPL
i=ofreseer-in-tx-iy-al n-a dyoos
 A1.PL=offer-EP-APPL-TR-INCOMPL DET-HON God
 ‘This means that we offer to God what we receive from him.’

To sum up, verbal morphology in Tének is quite distinct from Nahuatl or Spanish. All Tének verbs are marked for transitivity and aspect, and there is no tense marker. Morphological operations in this ergative language involve changing the valency of a verb by adding causative, applicative, antipassive, or reciprocal markers, among others. In contrast with Nahuatl, Tének does not have two slots for the two arguments of a transitive verb, but instead, only one argument is marked according to direct, local or

⁸⁶ Note that Kondic (2016a), in contrast to Meléndez Guadarrama (2011), glosses her examples in such a way that an applicative marker (*-tx*) can be followed by a transitivity marker (*-iy*). For Meléndez Guadarrama (2011: 188, ex. 12), the morphological element *-txiy* would be considered a single morpheme expressing the benefactive.

inverse alignment principles. Inverse alignment makes Tének a unique language not only within Mesoamerican languages, but also within the related Mayan languages which have not developed a similar argument marking strategy.

3.3.7. Syntax

As I have shown in the section above, due to complex verbal morphology in Tének, many of the grammatical operations that are fulfilled at the sentence level in such languages as Spanish, are fulfilled in Tének at the morphological level by adding suffixes to the verbal root. Expressing causation or an applied object are just two examples of such operations. However, there are operations in Tének that should be considered in the section dealing with the syntax of this language. These include word order, prepositional phrases, the use of auxiliary verbs and embedded clauses.

Although I deal with the topic of word order in Tének in greater detail in §6.2.4, here I remark that traditionally it is verb-initial and sensitive to the animacy hierarchy. When the agent (S) and the object (O) are equally animate, the constituent order is VSO (Campbell and Kaufman 1976: 191). In the cases when the subject is higher on the animacy scale, then the ordering is VOS. The word order for monovalent intransitive verbs is VS (or, verb-subject). Modern Tének, however, tends to have the SVO (or, agent-verb-object) word order in transitive sentences, and the SV in intransitive sentences. This change can be attributed to contact with Spanish, as I demonstrate in my analysis of changes in word order in §6.2.4.

Grammatical meanings may be expressed syntactically by the use of auxiliary verbs. In Tének auxiliary verbs are applied to express various TAM categories, such as the future tense, the progressive aspect and the imperative mood. The most productively used auxiliary verbs in Tének are *ne'ets* 'go', *lé* 'want', *tál* 'come', *kwa'al* 'have' and *k'wajat* 'be placed, be located'. Unlike in Nahuatl, in which auxiliary verbs are compounded with the main verb and follow it in the verb complex, auxiliary verbs in Tének precede the nuclear verb. An example of a future tense construction with the auxiliary verb *ne'ets* is presented in (3.58). A modal verb construction modelled on the

Spanish construction *tener que* ‘have to’, in which the Tének verb *kwa’al* is used, is illustrated in (3.59).

- (3.58) Use of auxiliary verb to express future tense
(Esteban Martínez et al. 2006: 23) [my glosses]

Naná ne’ets [t=in k’apul]
1SG go SR=B1.SG eat
‘I am going to eat.’

- (3.59) Modal verb construction with an auxiliary verb (LFM)

Kw-a’-al [k=u k’al-ej k’al an ilalix]
have-TR-INCOMPL SR=B1.PL go-COMPL with DEF doctor
‘We have to go to the doctor.’

The examples above illustrate embedded clauses (in square brackets) introduced by auxiliary verbs. The auxiliaries are separated from the conjugated intransitive verbs and the pronominal Set B absolutive markers by the special subordinating markers *t=* and *k=*. The full forms of these markers are *ti* and *ka*, respectively. Although the form of the subordinating marker *t(i)=* can be the same as the form of the inverse marker *t(V)=* described in §3.3.5, its function is distinct. Instead of marking inverse alignment, it indicates subordination. The *t(i)=* subordinator, along with a Set B absolutive marker which is attached to it as a postclitic, occurs in structures where a verb of the main clause (in this case, an auxiliary) is followed by an intransitive verb of the subordinated clause. This set of markers is referred to in the literature as the T-B Set (Zavala Maldonado 1994: 53) and its presence indicates that the verb in the second position is an embedded verb (Zavala Maldonado 1994: 56). The T-B Set is used when the action does not have clearly cut temporal boundaries, it is relevant to the present and the verb is in the incompletive form.

Another set, the K-B Set, which combines the *k(a)=* subordinator and a Set B absolutive marker, on the other hand, occurs not only in the case of embedded but also non-embedded structures, such as intransitive imperatives and hortatives. An imperative construction with the K-B Set is presented in (3.60).

(3.60) Imperative construction in Tének

ʃK=it ket-an!
 IMP=B2.SG/PL sit-MV
 ‘Sit!’

Unlike in the case of the T-B Set, in which the subordinate verb of an embedded structure appears in the incomplete form, the subordinate verb in the K-B embedded structures always appears in the complete form. The K-B Set is used when the temporal frame of the event has more defined beginning and ending points, and the event is not relevant to the present. The paradigm of the three sets of absolutive pronominal markers (Set B, the T-B Set and the K-B Set) is presented in Table 3.21.

Table 3.21. Three sets of absolutive pronominal markers in Tének
 (based on Zavala Maldonado 1994: 52).

	1SG	1PL	2SG	2PL	3
Set B	<i>in</i>	<i>u</i>	<i>it</i>	<i>it / ix</i>	\emptyset / u
K-B Set	<i>k=in</i>	<i>k=u</i>	<i>k=it</i>	<i>k=it / k=ix</i>	<i>ka=∅</i>
T-B Set	<i>t=in</i>	<i>t=u</i>	<i>t=a(t) / t=it</i>	<i>t=at / t=ax</i>	<i>ti=∅</i>

Yet another type of embedded clauses are the structures in which a subordinated transitive verb is used. In this case a regular Set A marker is used for verbs in the incomplete form, as illustrated in (3.61).

(3.61) Embedded clause with a transitive verb in incomplete form in Tének
 (Van’t Hooft and Cerda Zepeda 2003: 35) [my glosses]

Tam ti=∅ k’waj-at in=met’-a-al
 when SR=B3.SG be.located-INCOMPL A3.SG=look.at-TR-INCOMPL
 ‘When she was looking at it’

When verbs appear in the complete form, and also when they are in the imperative or hortative mood, a different set is used, the K-A Set. In this set the *k(a)=* subordinator (the same one as in the K-B Set described above), precedes a Set A ergative pronominal marker. The K-A Set is used for verbs in the complete form and also for transitive

imperatives and hortatives. The K-A Set is used in contexts in which the agent of a clause acts on a 3rd person patient (3.62).

- (3.62) Embedded clause with a transitive verb in completive form in Tének (LFM)
A=ch'uchbiy a its' ne'ets k=a k'atsej a itsik'
 A2.SG=point.at DEF moon FUT SR=A2.SG spoil(COMPL) DEF nail
 'You pointed at the moon (so) your fingernail will go bad.'

The paradigm of the $k(a)=$ subordinator with the respective ergative pronominal markers (the K-A Set) is presented in Table 3.22.

Table 3.22. The K-A Set paradigm with the 3rd person patient
 (based on Zavala Maldonado 1994: 62).

	SG	PL
1	$k=u$	$k=i$
2	$k=a$	
3	$k=in$	

In embedded transitive constructions in which the agent-object configuration is inverse, the inverse alignment marker $t(V)=$ is required. In (3.63), the 3rd person agent acts on the 1st person object, therefore the inverse marker appears before the B1 pronominal marker. In addition, the $k(a)=$ marker is also required (between the $t(V)=$ marker and the B1 marker) since we are dealing with the embedded clause in the completive aspect.

- (3.63) The K-Inverse Set in San Luis Potosí Tének
 (Zavala Maldonado 1994: 71) [glosses modified]
Ani yab Ø=che'-nek u=aamu ti=k=in pijch-iy-Ø
 CONJ NEG B3.SG=come-PRF A1.SG=boss INV=SR=B1.SG feed-TR-COMPL
 'My boss has not come to feed me.'

The inverse marker combined with the $k(a)=$ marker can also occur with a Set B pronominal marker (thus forming the K-B Set) and with a Set A pronominal marker (the K-A Set) (Zavala Maldonado 1994: 70). Table 3.23 shows the paradigm of the K-Inverse Set. As pointed out by Zavala Maldonado (1994: 71), in all cases in which

the object is the second person, the $k(a)=$ marker does not appear, and the regular inverse markers are used.

Table 3.23. The K-Inverse Set in San Luis Potosí Tének
(based on Zavala Maldonado 1994: 70).

		O		B	J	E	C	T
		1st SG	2nd SG	3rd SG		1st PL	2nd PL	3rd PL
S	1st SG		$t=u$	$k=u$			$t=(ix=)u$	$k=u$
U	A 2nd SG	$ti=k=in$		$k=a$		$tu=k=u$		$k=a$
B	G 3rd SG	$ti=k=in$	$t=i$	u		$tu=k=u$	$t=i$	$k=in$
J	E 1st PL		$t=u$	$k=i$			$t=(ix=)u$	$k=i$
E	N 2nd PL	$ti=k=in$		$k=a$		$tu=k=u$		$k=a$
C	T 3rd PL	$ti=k=in$	$t=i$	$k=in$		$tu=k=u$	$t=i$	$k=in$
T								

The K-Inverse Set is also used in non-embedded clauses, e.g. hortatives or imperatives, with the inverse arrangement of participants, as shown in (3.64).

- (3.64) The K-Inverse Set used in the imperative mood in Tének
(Zavala Maldonado 1994: 71) [glosses modified]
- Xoo'* **$ti=k=in$** **$tolm-iy=chik$** *tataa'* *patal=chik*
 now INV-IMP-B1.SG help-TR=PL 2SG/PL all=PL
 'Now, all of you help me!'

To sum up, Tének sentence structure displays numerous features particular to ergative languages, including not only the use of different sets of pronominal markers for transitive and intransitive verbs, but also a separate set for the inverse alignment. Another two sets of markers are employed when introducing subordinate verbs or imperatives or hortatives. These features are not present in Nahuatl nor in Spanish since both languages have a nominative-accusative alignment.

3.3.8. Spanish influence on Tének

Studies on aspects of contact with Spanish and language change resulting from it in Tének are scarce and mostly limited to recognition of the existence of Spanish lexical

loanwords. McQuown (1984: 91-92), for example, provided a short inventory of nominal loans from other Mesoamerican languages and Spanish. He listed the noun *pik'o* 'dog' as a loan from Zapotec and the noun *tima* 'cup' as a loan from Zoque.⁸⁷ Some of the lexical borrowings from Nahuatl present in Tének are e.g. *tiyopan* 'temple' (from Nahuatl *teopan*) or *mitsu* 'cat' (from *mizton*). The largest group of foreign nouns in Tének in McQuown's list are lexical borrowings from Spanish. He mentioned personal names, such as *Pedro*, and cultural borrowings referring to objects and concepts introduced by the Spanish, e.g. *pale* 'priest' (from Spanish *padre*), *patux* 'duck' (from *pato*), *kineya* '(guineo) banana' (from *guinéa*) or *binoj* 'liquor' (from *vino*).

In her descriptive grammar of San Luis Potosí Tének, Edmonson (1988) also mentioned borrowings from Spanish. She claimed that approximately 90% of Spanish lexical borrowings present in her sample were nouns (including numerals), and the rest were particles and function words and a few adjectives (Edmonson 1988: 315). A large portion of Spanish loanwords were cultural borrowings denoting animals, plants, foods and concepts introduced after the Spanish conquest. Edmonson also discussed loan adaptation processes that apply to Spanish lexical borrowings, including the addition of possessive and plural morphology, as well as other aspects of nominal morphology such as generic or collective suffixes. She also mentioned that Spanish loan adjectives can be verbalised with inchoative morphemes. According to Edmonson (1988: 315), in her data "[t]here is even one example of a Spanish infinitive [i.e. *cobrar* 'charge'], which receives Huastec verbal thematic and inflectional suffixes". She also briefly commented on Spanish core borrowings, such as *hardi:n* 'garden' (from Spanish *jardín*), or *tye:nda* 'store' (from Spanish *tienda*). According to Edmonson (1988: 316), several Spanish lexical borrowings have undergone semantic shift. For example, the meaning of *tiheraš* (from Spanish *tijeras* 'scissors') was changed and it is used to refer to the posts used to support a centre roof beam (Edmonson 1988: 316). The meaning of the noun *kristya:no* 'Christian' was, on the other hand, extended to mean 'person' in general. Edmonson also mentioned phonetic adaptations of Spanish loanwords. She listed examples that

⁸⁷ See Kaufman (1980) for a discussion of non-Spanish loanwords in Tének.

show that, among other adaptations, vowel-initial Spanish loans were preceded by the glottal stop and there were various sound substitutions, e.g. *delo:h* for Spanish *reloj* ‘watch’, or *ba:kaš* for Spanish *vaca* ‘cow’.

The topic of Spanish lexical borrowings in colonial materials has not attracted much attention. However, one contribution was made by Meléndez Guadarrama (2017b), who analysed Spanish-Tének 16th-century language contact attested in the Christian doctrine in Tének written by De la Cruz (1571). The attested phenomena include lexical borrowings introduced for naming new religious concepts, as well as semantic and syntactic calques. Meléndez Guadarrama focused in particular on the use of native Tének resources (e.g. neologisms or word-for-word translations of Spanish metaphors) that were applied to express such concepts as ‘faith’, ‘hell’ and ‘communion’. This study found that borrowings are all nouns, and are morphologically and syntactically integrated into the native structure of Tének.

Hurch and Meléndez Guadarrama (2020) made a valuable contribution to the topic of language change and Tének dialectology by analysing an anonymous 18th century bilingual list of phrases in Eastern Tének and their equivalents in Spanish. They also consulted these expressions with present-day native speakers from the states of San Luis Potosí and Veracruz. The publication consists of a reproduction of the pages of the manuscript along with its exact transcription in the original orthography in Tének and Spanish. In addition, a translation of the 18th century phrases to modern Tének is also provided, as well as extensive comments and philological notes. Although the focus of the work by Hurch and Meléndez Guadarrama is not on the influence of Spanish on modern Tének specifically it, nevertheless, provides an excellent source for studies comparing colonial and modern varieties of the language.

The topic of structural borrowings in Tének remains even less explored than lexical borrowings. Sobkowiak and Kilarski (2018) focused on changes in alienable and inalienable possessive marking. This study showed that the choice of possessive marking in modern Tének is not only sensitive to semantic factors (as was described by Edmonson 1988 and Maldonado 1994), but is also sensitive to the socio-cultural background of Tének speakers, including such factors as age, as well as degree of social

mobility and exposure to Spanish. For example, Sobkowiak and Kilarski (2018) demonstrated that culturally significant items, such as the *quechquemitl* (embroidered poncho worn by Tének women), tend to be marked as alienably possessed (with the possessive suffix *-il*), which contrasts with traditional zero-marking applied for inalienably possessed items, parts of the whole, body parts and kinship terms. Sobkowiak and Kilarski showed that possessive marking in modern Tének has been influenced by contact with Spanish and *mestizo* culture and, as a result, has lost many of the culture-specific contrasts found in the traditional variety of this Mayan language.

3.3.9. Summary

Tének can be described as a Mayan language that is typologically very different from Spanish and has many features that are not present in Spanish. Some of the distinctive traits in the Tének sound system are vowel harmony in verbal suffixes, contrastive vowel length and obligatory glottalisation of word-initial vowels. Some characteristic morphological features of Tének include, e.g. contrastive marking of alienable and inalienable possession, as well as animacy-based plural marking on nouns. Moreover, Tének has complex verbal morphology, in which it is possible to mark indirect objects on verbs by adding the applicative suffix. The most distinctive trait in Tének is, however, its ergative-absolutive alignment and, in some contexts, inverse alignment. Despite its numerous interesting features, Tének remains an understudied language. The topic of the influence of Spanish on the morphology and the syntax of this Mesoamerican language has attracted even less attention.

3.4. Concluding remarks

The traditional phonological and morphosyntactic traits present in Nahuatl and Tének differ significantly from Spanish. Although Nahuatl and Tének belong to different language families, some of the features of these languages are similar due to the process of linguistic convergence that affected both languages as part of the Mesoamerican

linguistic area. Similar features include, for example, shared nominal possessive construction patterns, the use of relational nouns, the vigesimal numeral system, inalienable possession and plural marking which is only applied in the case of animate nouns. However, despite many similarities between Nahuatl and Tének, these two languages also have many features not shared by one another. Perhaps one of the most important such features is grammatical alignment. Whereas Nahuatl shares nominative-accusative alignment with Spanish, Tének, similarly to other Mayan languages, displays ergative-absolutive alignment. Unlike Nahuatl, Spanish, or even other Mayan languages, Tének has also developed inverse alignment, in which verbal argument marking depends on whether the agent or the object is higher in the hierarchy of speech act participants. A comparison of verbal features in Nahuatl, Tének and Spanish is presented in Table 3.24.

Despite its potential as a compelling area of study, the topic of language contact and convergence between Huasteca Nahuatl, Tének and Spanish, has not been explored in detail. There are no comprehensive studies that focus on structural borrowings in the two indigenous languages of the Huasteca, including e.g. borrowings in nominal morphology, verbal morphology and syntax. My work intends to fill in this gap and the following chapters focus precisely on the structural changes in Huasteca Nahuatl and Tének that stem from contact with Spanish.

Table 3.24. Verbal categories in Nahuatl, Tének and Spanish.

	Feature	Huasteca Nahuatl	Tének	Spanish
1	Prefixing vs. suffixing in inflectional morphology	Equal prefixing and suffixing	Suffixing	Suffixing
2	Inflectional synthesis	Agglutinating	Agglutinating	4-5 categories per word
3	Reduplication	Productive full and partial reduplication	Yes	No
4	Syncretism in verbal person/number marking	No	No	Syncretic
5	Politeness distinction in pronouns	Binary distinction in Classical Nahuatl	Binary distinction in traditional Tének	Binary
6	Position of Tense-Aspect Affixes	Tense-Aspect suffixes	Aspect suffixes	Tense-Aspect suffixes*
7	The future tense	Inflectional as suffixes	Periphrastic	Inflectional future exists
8	The perfect	Morphological <i>-toc/-toqueh</i>	Morphological as suffixes	From possessive
9	Morphological imperative	2nd sg and 2nd pl	With <i>k(a)=</i> subordinator	2nd sg and 2nd pl
10	Noun incorporation	Yes	Limited	No
11	Applicative morphemes	Yes	Yes	No
12	Causative morphemes	Yes	Yes	No
13	Auxiliary verbs	Incorporated in verbal complex	Periphrastic	Periphrastic
14	Directional markers	Yes	No	No
15	Transitivity markers	Yes?	Yes	No
16	Obligatory subject and object markers on verbs	Yes	One slot for either subject or object depending on person hierarchy	No
17	Obligatory plural subject marking on verbs	Depending on animacy	Depending on animacy and person hierarchy	Yes
18	Valence decreasing operations	No true passive, use of indefinite subject or reflexive to express passive idea	Passive, antipassive, middle voice	Passive

Chapter 4: Changes in nominal morphology and the counting system

4.1. Introduction

This chapter explores the changes in nominal categories in Nahuatl and Tének that stem from contact with Spanish. I investigate both matter and pattern borrowing that can be attested in plural marking and possessive marking, as well as in the cardinal numerals. Traditionally both languages showed typically Mesoamerican traits regarding nominal morphology including plural marking depending on the animacy of nouns, optional number marking, presence of absolutive affixes and intimate possession. A strong feature of Mesoamerican languages was also the vigesimal counting system (Campbell et al. 1986). In this chapter I analyse how contact with Spanish brought about a typological change in two nominal categories including plural marking and possessive marking, as well as in the counting system in both languages. First of all, I show that now, as a result of Spanish influence, nouns with inanimate referents can be marked for plural in both Nahuatl and Tének. Moreover, I give examples to demonstrate that in Nahuatl the plural marker *-meh* traditionally only used in the case of absolutive nouns is becoming a universal plural marker that can now be also employed to mark plural of possessive nouns. Secondly, I prove that contact with Spanish and Western culture has caused changes in possessive marking in Tének, in which the alienable/inalienable distinction has been reduced to a few semantic fields including parts of a whole (including body parts), kinship terms and bodily manifestations. Culturally significant items, as a result of contact with *mestizo* culture, are now perceived alienable. In the third part of this chapter I analyse changes in the counting system, and I show how the traditional Mesoamerican vigesimal system first underwent hybridisation, in that many decimal counting patterns were introduced, and then it became almost completely

replaced with Spanish loans, except for very low numerals (up to 4 or 5).

The structure of this chapter is as follows. Section §4.2. analyses number marking in Nahuatl and Tének and assesses the impact of Spanish with respect to the role of animacy and the obligatoriness of plural marking. Section §4.3. deals with the changes in possessive marking in Tének, including contrastive alienable and inalienable possessive marking, with special attention paid to the possessive marking of culturally significant objects, bodily manifestations, consumed items and environmental nouns. Section §4.4. focuses on changes in the counting system, including the emergence of a hybrid decimal-vigesimal system and the replacement of the traditional system with the Spanish numerals. Concluding remarks are provided in §4.5.

4.2. Number marking

4.2.1. Introduction

The aim of the first part of this chapter is to analyse the ongoing changes in the number marking of nouns in Nahuatl and Tének that result from contact with Spanish. After a brief description of types of number, its formal expression and the role of animacy in number marking, I investigate the types of innovations in number marking in both languages. I point out the differences between the grammatical operations relating to number marking in Nahuatl, Tének and Spanish, and I demonstrate how plural marking is no longer sensitive to the animacy of the nominal referent in both languages of the Huasteca and how inanimate nouns are frequently attested in plural forms. I also explore the topic of the plural marking of possessed animate and inanimate nouns, and I show that in Nahuatl the distinct plural suffixes used for absolutive and possessed nouns are gradually being replaced with one universal plural suffix *-meh*. Moreover, I also analyse plural marking on nouns in phrases containing a quantifier or a numeral and I demonstrate, for example, how in modern Nahuatl the use of the plural form of an animate noun no longer requires the use of the plural suffix on a numeral.

4.2.2. Types of number and its formal expression

Most languages have formal ways to indicate nominal plurality. The most common number distinction is a simple two-fold contrast between singular and plural. Other languages can have a more complex number differentiation that, apart from singular and plural, can include dual (two items), trial (three items) or paucal (a few items) numbers (Corbett 2004: 1). Whereas morphological marking of the singular and plural number contrast is common, dual and trial number marking is rare in a noun phrase and it more commonly appears in participant reference marking on verbs (Payne 1997: 960).

Number is a morphological category that expresses quantity by means of inflection or agreement. It is marked in the noun phrase (usually on the noun itself) or/and as agreement within the noun phrase or the verb phrase. In some languages, for example Spanish, nouns, adjectives, demonstratives and articles are declined according to the number of the head noun, which can be either singular or plural. In the Spanish noun phrase *las casas* ‘the houses’ plural number is indicated by the presence of the plural suffixes on both the noun and the article (cf. singular *la casa* ‘the house’). Number agreement is also marked in the majority of languages that have person agreement on the verb. However, the topic of number marking on verbs is not explored in the present chapter.

In most languages that mark number, the singular is usually morphologically less complex than plural, i.e. the singular is unmarked and the non-singular is marked. This is the case in Spanish in which the plural form of a noun receives the plural suffix *-s/-es*, as in *caja* ‘box’ versus *cajas* ‘boxes’. In contrast, other languages, such as the Bantu languages of Africa, mark both singular and plural forms. Other languages do not mark their nouns for number at all and this phenomenon can be referred to as ‘general number’ (Corbett 2004: 9ff).

There are many morphological operations involved in expressing plurality. According to Payne (1997: 98), these may include: prefixation (in e.g. Swahili [Bantu]), suffixation (Spanish, Nahuatl, Tének), infixation (e.g. Ifugao [Austronesian, the Philippines]), simulfixation (i.e. internal sound alternations, in e.g. Arabic: *kitāb* ‘book’

vs. *kutub* ‘books’), apophony (i.e. altering between different vowels, as in English: *foot* vs. *feet*), reduplication (as in Pipil: *kumit* ‘pot’ vs. *kujkumit* ‘pots’), suppletion (Polish: *człowiek* ‘person, human being’ vs. *ludzie* ‘people, humans’), tonality (found e.g. in Ancient Greek), or the use of distinct particles (Australian and Austronesian languages, e.g. Tagalog).

One of the important issues to keep in mind while discussing plural marking is the distinction between overt plural marking and plural meaning. Although number is not a grammatical category in all languages, all languages have means to specify the quantity of referents. Semantic plural can be conveyed without applying overt plural marking. For instance, number can be expressed using such lexical items as numerals (‘two’, ‘three’, ‘twenty’, etc.) or quantifiers (e.g. ‘few’, ‘many’, ‘some’, etc.). An example of a language that expresses quantity solely by lexical means and lacks the category of grammatical number is Khmer (Austroasiatic; Cambodia, Thailand, Vietnam) (Campbell and King 2013: 283). Overt plural marking can also be conditioned by the animacy or topicality of the noun in question. I explore this topic in the section below.

4.2.3. The animacy hierarchy and number marking

Languages differ in whether number has to be obligatorily specified with every count noun. In some languages (e.g. Spanish and English) nouns carry number marking but in other languages one form of a noun can have a singular or plural referent. Some languages only mark plural in the case of certain classes of nouns, such as animate nouns, whereas inanimate nouns can be marked optionally or do not receive plural marking at all. There are also languages that mark only highly ‘topical’ nouns for plural number. A cross-linguistic animacy hierarchy that shows the likelihood of plural marking is presented in Figure 4.1. In this scale, the elements to the left are more likely to be marked for plural, starting with the speaker, followed by the addressee, the 3rd person, kin, other humans, other animate entities, and finally, inanimate objects. The presence of plural marking on an element to the right indicates that the element to its left will also be marked for plural.

4.2.4. Number marking in Nahuatl

Traditional plural marking in Nahuatl, similarly to other languages of the Mesoamerican area, only applied to animate nouns. According to Lockhart (2001: 51), “Nahuatl has never gone over to consistent marking of all plurals”. For example, the expression *polihui in mixtli* should be translated as ‘the clouds disappear’, although both the verb (*polihui*) and noun (*mixtli*) are in singular forms. Traditionally, the most topical entities were divine beings, followed by humans, animals, discrete inanimate beings such as stars or hills, and non-discrete inanimate objects (Figure 4.2).

divine beings > humans > animals > discrete inanimates > non-discrete inanimates

Figure 4.2. The animacy hierarchy in Classical Nahuatl.

Plural marking of unpossessed animate nouns in traditional Nahuatl involved the replacement of a singular absolutive suffix (*-tl*, *-tin*, *-li*, etc., see §3.2.4) with one of the plural absolutive suffixes: *-tin*, *-meh* and *-h* (the glottal stop or fricative). The choice of a plural suffix was phonologically motivated. The suffix *-tin* occurred only after consonant stems, as illustrated in: *macehualtin* ‘commoners’ (singular: *macehualli* ‘commoner’). The plural suffix *-h*, on the other hand, usually appeared after a vowel, as in *tlacah* ‘people’ (singular: *tlacatl* ‘person’) and *cihuah* ‘women’ (sg.: *cihuatl* ‘woman’) (Lockhart 2001: 52). The suffix *-meh* was used both after consonants and vowels, e.g. *totolmeh* ‘turkeys’ (singular *totolli* ‘turkey’) and *ichcameh* ‘sheep (pl.)’ (singular: *ichcatl* ‘sheep’). Another strategy for pluralisation involved the reduplication of the first syllable of the nominal root, as in *totochtin* to~toch-tin (RDPL~rabbit-ABS.PL) ‘rabbits’ (singular: *tochtli* ‘rabbit’), where, apart from the plural absolutive suffix *-tin*, there is also a reduplicated first syllable of the noun stem *to-*.⁸⁸

⁸⁸ Reduplication was probably a very productive formal way of pluralising nouns in Proto-Uto-Aztecan. Hill and Hill (1996) reconstructed a system in which the nouns that denoted humans used reduplication to form the plural, those that denoted non-human animates had a suffixed plural and the inanimate nouns had no plural. In some modern varieties of Nahuatl reduplication is still used as one of the strategies of marking plural number. In Pipil reduplication remains the most common way to express plural number (Campbell 1985), even for inanimate nouns, as illustrated in the following nouns: *uhuhti* ‘roads’ (singular *uhti* ‘road’) and *kahkal* ‘houses’ (singular *kalli* ‘house’).

A distinct way of marking plural number in traditional Nahuatl applies when animate nouns are possessed. The possessive plural suffix *-huan* is added in addition to a possessive pronoun prefix, as in *notatahuan* ‘my parents’ or *mochichihuan* ‘your dogs’. The strategy of using two separate plural suffixes for absolutive and possessed nouns in Nahuatl is different from Spanish, in which the same plural marker *-s/-es* serves for both possessed and unpossessed nouns, as in *perros* ‘dogs’, and *mis perros* ‘my dogs’.

Aside from the above mentioned morphological operations, number can also be indicated in Nahuatl with a specialised number particle (quantifier). The examples of quantifiers include *mochi* ‘all’, *cequi* ‘some’ and *miec/miac* ‘many’. Nahuatl quantifiers could not be possessed or have absolutive suffixes, but they could take nominal absolutive plurals when they referred to animate beings (Lockhart 2001: 53), as in *mochin/mochintin* ‘all’ (pl.), *cequin/cequintin* ‘some’ (pl.) and *miequin/miequintin* (or, *miaquin/miaquintin*) ‘many’. Thus, the noun phrase ‘many people’ could be expressed in Classical Nahuatl as either *miac tlacatl* (in which both the quantifier and the noun are in the singular forms), or as *miaquintin tlacah* (in which both the quantifier and the noun bear plural suffixes). While expressing the plural of inanimate referents, both the quantifier and the noun appear in singular forms, as in *miac xochitl* ‘many flowers’. Similar rules applied when numerals, which are a type of quantifiers, were used. They could take plural suffixes *-n* and *-ntin* (Lockhart 2001: 53) when used in numeral phrases with animate nouns, as exemplified by *caxtoltin cihuah* ‘fifteen women’. Alternatively, an animate noun could be also used with a numeral in its singular form but with a plural referent, as in *caxtolli cihuah* ‘fifteen women’.

Moreover, traditional Nahuatl also made use of numeral classifiers which were compounded with numerals. In (4.1), the noun phrase *chicontetl nochinan* ‘seven *chinampas* (enclosures) of mine’, the possessed noun *nochinan*, despite its singular form, refers to a plural number of *chinampas* since it is preceded by a numeral *chicon-*

‘seven’ and the compounded classifier *tetl*, which in Classical Nahuatl was used while referring to round objects.⁸⁹

- (4.1) Plural meaning marked with a quantifier in Classical Nahuatl
(Lockhart 2001: 51) [my glosses]

Chicon-te-tl *no-chinan*
seven-stone[CLF]-ABS.SG POSS.1SG-field
ni-c-maca-tiuh *in* *no-pil-tzin*
SBJ.1SG-3OBJ.1SG-give-OUTPURP.NPST DET POSS.1SG-offspring-HON
‘I give **seven chinampas** of mine to my child.’⁹⁰

However, the above described traditional plural marking strategies have gradually become Hispanicised since Nahuatl found itself under the influence of Spanish. The changes include pattern borrowing and numerous adaptations of the native system that makes Nahuatl plural marking strategies more similar to the nominal pluralisation found in Spanish.

Early Spanish nominal borrowings acquired in the 16th century were mostly, although not always, subject to Nahuatl pluralisation rules. Example (4.2) shows that early Spanish loanwords denoting animate entities were pluralised in a number of ways, including preserving the Spanish plural marker *-s* (b), adding one of the native Nahuatl plural endings *-meh* or *-tin* to a Spanish noun in its singular form, as shown in (c) and (d), or preserving the Spanish plural marker and adding to it the Nahuatl plural suffix (e).

⁸⁹ The classifier *tetl* was one of the four numeral classifiers that were in use in Classical Nahuatl. The other three classifiers were: *pantli* (lit. ‘flag’) used to indicate rows of people or objects, as in *ompantli* ‘two rows’; *tlamantli* (lit. ‘thing’) used to designate types of things, abstract things as well as pairs or groups of people or objects, as in *etlamantli* ‘three groups’; and finally *olotl* (lit. ‘corn cob’) used to count things which roll, as in *macuilolotl* ‘five rolling things’ (Sullivan 1988: 153-154; Andrews 2003: 307).

⁹⁰ The definition of a *chinampa* provided by Lockhart (1992: 61) is the following: “strips of agricultural land artificially raised out of the water”.

- (4.2) Plural marking of Spanish nominal loans in Classical Nahuatl (Lockhart 2001: 52)
- a. *cahuallo* 'horse'
 - b. *cahuallos* (Spanish plural marker *-s*) 'horses'
 - c. *cahuallotin* (Nahuatl plural marker *-tin*) 'horses'
 - d. *cahuallo^{meh}* (Nahuatl plural marker *-meh*) 'horses'
 - e. *cahuallos^{meh}* (double Spanish *-s* and Nahuatl *-meh* plural markers) 'horses'

In (b) the Spanish loan appears only with the Spanish plural marker and lacks the Nahuatl plural suffix. It is, however, most likely that this form was in fact used by a bilingual Spanish-Nahuatl official and not a monolingual Nahuatl speaker. In most sources plural forms of Spanish borrowings function as singular nouns and receive Nahuatl plural markers.

In early colonial Nahuatl, the pluralisation of possessed Spanish nominal borrowings followed native Nahuatl rules, i.e. the suffix *-huan* was added to nominal roots along with an adequate possessive prefix. Example (4.3) illustrates this morphological operation, in which the possessive plural suffix *-huan* is added to the nominal root which is either in its singular form *caballo* (a) or its plural form *caballos* (b).

- (4.3) Plural marking of possessed Spanish nominal loans in Classical Nahuatl (Lockhart 2001: 52) [my glosses]
- a. *i-cahuallo-huan*
POSS.3SG-horse-POSS.PL
'his/her horses'
 - b. *i-cahuallos-huan*
POSS.3SG-horses[PL]-POSS.PL
'his/her horses'

Number marking in modern Nahuatl, as documented during my fieldwork in the Huasteca, does not conform to the strategies described above. First of all, number marking is no longer sensitive to the animacy hierarchy and plural suffixes appear on nouns that refer not only to animate but also to inanimate entities. In (4.4) the noun *calmeh* 'houses' bears the absolutive plural suffix *-meh*.

(4.4) Plural marking of inanimate nouns in modern Huasteca Nahuatl (EZH)

pan *ni* *tlaltepac-tli* *inca* *Ø-elto-ya* *cal-meh*
surface[RTL] DEM world-ABS.SG NEG SBJ.3SG-be-IPFV **house-ABS.PL**
'In this community there were no houses.'

It should be noted, however, that a significant variation in plural marking strategies by different speakers can also be observed. Many fluent speakers regardless of their age use singular forms to refer to plural referents. Other older speakers (e.g. PRC from Pilateno, Xilitla, 64 years old) use plural forms of inanimate nouns, as shown in example (4.5).

(4.5) Plural marking of inanimate nouns in modern Huasteca Nahuatl (PRC)

Ø-qui(n)-itta-queh *tle* *nochi* *teyohual-meh* *huan*
SBJ.3SG-OBJ.3PL-see-NPRS.PL SR all **village-ABS.PL** company[RTL]
altepe-meh
town-ABS.PL
'They saw it in all villages and towns.'

In the analysed variety of Nahuatl spoken in the Huasteca Potosina *-meh* appears to have become a universal plural marker, for both animate and inanimate nouns. This contrasts with the strategies applied in Eastern Huasteca Nahuatl. In this closely related dialect spoken in the state of Hidalgo and Veracruz nouns are pluralised with the suffix *-meh* only if they are animate, as in *tlacameh* 'men' or *pitzomeh* 'pigs'. Inanimate nouns in this dialect are marked for plural number with the suffix *-tinih*, as in *caltinih* 'houses' or *amatinih* 'papers' (Beller and Beller 1979: 238ff.; Kimball 1990: 200).⁹¹ The choice of the plural suffix in Western Huasteca Nahuatl is no longer phonologically motivated, as was the case in Classical Nahuatl, in which the suffix *-meh* was solely used as a plural inflection for animate nouns in which the stem ended in a vowel. However, the lack of differentiation between the suffixes *-meh* and *-tini* was reported by Croft (1951,

⁹¹ According to John Sullivan (p.c., 16 March 2022), the suffix *-tinih* is only used to pluralise inanimate objects that appear in clumps, e.g. the trees in a clump of trees (*cuatinih*). He also clarifies that in modern Eastern Huasteca Nahuatl spoken around Chicontepec, Veracruz, there is a tendency among younger speakers of 50 years of age and younger to pluralise inanimate nouns with the suffix *-meh*. He, however, points out that many of the younger speakers remember that their grandparents would always use the singular form with inanimate nouns.

1953, 1954) and later also by Lastra de Suárez (1986), so this feature does not appear to be a recent innovation.

In Western Huasteca Nahuatl the plural absolutive suffix *-meh* is also used as a plural suffix on Spanish loan nouns. Unlike in Classical Nahuatl, the more recent Spanish loan nouns typically do not bear both Spanish and Nahuatl plural suffixes, as illustrated in (4.2e) above. Instead, plural number is either marked with the Spanish plural marker (4.6) or the Nahuatl plural marker as in *carrohme* ‘cars, trucks’ (cf. Mexican Spanish *carro* ‘truck’).

(4.6) Plural marking on Spanish loans in modern Huasteca Nahuatl (JAA)

<i>Ø-elto-que-h</i>	<i>cequi-n</i>	<i>cueva-s</i>	<i>catli</i>
SBJ.3PL-be-NPRS-PL	some-PL	cave-PL	SR
<i>ya</i>	<i>Ø-qui-piya-h</i>	<i>miac</i>	<i>año-s</i>
already	SBJ.3PL-OBJ.3SG-have-PL	many	year-PL

‘There were some caves that were very old.’

In the example above, the Spanish loan noun *años* ‘years’ not only has the Spanish plural marker *-s* but is also preceded by the singular native quantifier *miac* ‘many’. Assuming the noun is not an example of a single word code-switching, the use of the singular form of a quantifier before a noun in the plural form violates the traditional Nahuatl rule, as was described above. A similar violation can be observed in (4.7), in which a native Nahuatl inanimate noun in its plural form (*calmeh* ‘houses’) appears after a quantifier in the singular form.

(4.7) Plural marking with a quantifier in modern Huasteca Nahuatl (JFR)

<i>Ax=miac</i>	<i>cal-meh</i>	<i>Ø-elto-ya-h</i>
NEG= many	house-ABS.PL	SBJ.3PL-be-IPFV-PL

‘There were not many houses.’

Significant variation is also attested in number marking in nominal phrases containing a numeral. In the available data representing modern Nahuatl there are numerous attestations of the use of inanimate nouns in both singular (4.8) and plural forms (4.9) in phrases containing a numeral.

(4.8) Marking of plural with a numeral in modern Huasteca Nahuatl (LGA)

nahui lalax-Ø
four orange-ABS.SG
'four oranges'

(4.9) Marking of plural with a numeral in modern Huasteca Nahuatl (ASH)

ome xochi-meh
two flower-ABS.PL
'two flowers'

It should be noted that both nominal phrases in (4.8) and (4.9) were provided by Nahuatl speakers as a result of the application of visual stimuli (i.e. drawings or pictures). Although the avoidance of prompt phrases in Spanish that are normally used in elicitation sessions can often render more traditional constructions, in the case of plural marking in Nahuatl this rule was not confirmed. The speakers provided answers reflecting the Spanish model of expressing plural in which an inanimate noun appears in a plural form also when a numeral is used, as illustrated in (4.9).

Another interesting observation regarding the topic of plural marking in phrases containing a numeral is that a number of speakers reported that the plural form of a noun is only allowed when a quantified noun is animate (4.10a), and not necessary with an inanimate referent (4.10b).

(4.10) Marking of plural with a numeral in modern Huasteca Nahuatl (LGA)

a. *mahtlactli piyo-meh*
ten chicken-ABS.PL
'ten chickens'

b. *macuilli tlaxcal-li*
five tortilla-ABS.SG
'five tortillas'

However, other consultants, such as MMS who is a 74 year old fluent Nahuatl speaker from Pahuayo, claimed that animate nouns can appear both in a singular (4.11a) or a plural form (4.11b) when a quantifier is used.

(4.11) Marking of plural with a numeral in modern Huasteca Nahuatl (MMS)

- a. *nahui tlapiyal-li*
four animal-ABS.SG
'four animals'
- b. *nahui tlapiyal-meh*
four animal-ABS.PL
'four animals'

Note how the expressions presented in (4.10a) and (4.11b) violate the traditional Nahuatl rule in which the use of the plural form of an animate noun also requires the use of the plural suffix on a numeral.

With respect to numeral classifiers, they have disappeared in modern Nahuatl spoken in Xilitla, with the exception of *tlamantli* 'so many kinds/varieties of...' (Launey 2011: 64). This numeral classifier, however, is no longer compounded with numerals which now appear as separate lexical items and are preposed, as exemplified in *eyi tlamantli amoxtli* 'three kinds of books' (Sullivan et al. 2016: vii).

Three significant changes can also be noted in how modern Nahuatl marks the plural of possessed nouns. First of all, as already noticed by Kimball (1990: 201-202) and confirmed in my data, the possessive plural suffix *-huan* is added not only to animate nouns (cf. 3.2b) but also to inanimate possessed nouns (4.12).

(4.12) Marking of plural in possessed nouns in modern Huasteca Nahuatl
(Kimball 1990: 202) [my glosses]
no-axca-huan
POSS.1SG-possession-POSS.PL
'my possessions'

Secondly, the plural absolutive suffix *-meh* can be attested on possessed nouns (4.13).

(4.13) Marking of plural in possessed nouns in modern Huasteca Nahuatl (DLH)
inin-chichi-meh
POSS.3PL-dog-ABS.PL
'their dogs'

Thirdly, although in traditional Nahuatl a plural suffix was required in the case of possessed nouns, in modern Nahuatl it can be omitted when the Spanish plural suffix *-s/-es* appears, as illustrated in (4.14). The latter innovation is attested even in the case of older fluent speakers who use Nahuatl on a daily basis.

- (4.14) Possessive plural noun marking in modern Huasteca Nahuatl (AHL)
- | | | |
|------------|--------------------|-----------------------|
| <i>Ome</i> | <i>i-borrego-s</i> | <i>Ø-quin-huica</i> |
| two | POSS.3SG-sheep-PL | SBJ.3SG-OBJ.3PL-bring |
- ‘She brings two of her sheep.’

All three innovative plural marking strategies, including the marking of both animate and inanimate nouns with the plural suffixes, as well as the replacement of the native morphology for possessed nouns with the Spanish morpheme *-s/-es*, appear to be inspired by contact with Spanish. An example of pattern borrowing from Spanish is also the use of the suffix *-meh* as a universal plural marker for all stems for both absolutive and possessed nouns, which clearly reflects the functions of the Spanish suffix *-s/-es*.

In modern Huasteca Nahuatl the use of the suffix *-meh* has, in fact, also been extended further to the pluralisation of nouns derived from verbs. Whereas the singular form of such nouns is formed by adding the complex absolutive suffix *-quetl* (comprising agentive suffix *-que* and absolutive suffix *-tl*), the plural form was traditionally formed by adding the suffix *-ni*, as illustrated in (4.15).

- (4.15) Traditional pluralisation of agentive nouns in Nahuatl
- | | |
|----|---------------------|
| a. | <i>cocox-que-tl</i> |
| | be.sick-AG-ABS.SG |
| | ‘sick person’ |
| b. | <i>cocoya-ni</i> |
| | be.sick-AG.PL |
| | ‘sick people’ |

An innovative strategy to form a plural form of the agentive nouns involves the use of the plural marker *-meh* that appears after the agentive suffix *-que*, as illustrated in (4.16). This change seems to be also inspired by contact with Spanish, in which the generic plural suffix *-s/-es* would be used to mark plural of agentive nouns.

(4.16) Pluralisation of agentive nouns in modern Huasteca Nahuatl (DLH)

cocox-que-meh

be.sick-AG-ABS.PL

‘sick people’

An even more obvious influence of Spanish in number marking can be seen in the borrowing of the Spanish plural marker. This change, which is an example of matter borrowing, was already recorded in Nahuatl spoken in the Huasteca Hidalguense in the 1970s by Beller (N.) and (Cowan de) Beller (1979, 1984, 1985). In (4.17), a Nahuatl form for directly addressing a man with respect *tateh* ‘father’ is pluralised with the Spanish suffix *-s*.

(4.17) Spanish plural marker in Huasteca Nahuatl

(Beller N. and Cowan de Beller 1984: 81) [glosses modified]

Tonal-ti *tat-e-s*

day-VR father-owner[AG]-PL

‘Good morning, gentlemen!’

Although the borrowing of the Spanish plural suffix *-s* (or its allomorph *-es*) was not found very frequently in my own data, it is, nevertheless, an illustration of a borrowing of a foreign inflectional suffix. This borrowing of the Spanish plural marker is not only restricted to Nahuatl spoken in Hidalgo. Sullivan et al. (2016: 126) list the plural form of *coyoteh* (a noun that comes from Nahuatl [the native form was *coyotl*], which was borrowed by Spanish and later borrowed back to Eastern Huasteca Nahuatl as *coyoteh*) as *coyote-s* (coyote-PL) ‘coyotes, wild dogs’, in which the Spanish plural suffix is attested. Borrowing of inflectional suffixes, such as the suffix *-s/-es* is a rare outcome of language contact that only occurs after nouns, other parts of speech and other suffixes have already been borrowed (Van Hout and Muysken 1994: 41). In the Nahuatl-specific borrowability scale proposed by Field’s (2002), agglutinating-type affixes (e.g. the Spanish plural marker) can only be borrowed after content items and function words have been acquired first. The only type of items which are harder to borrow, according to this scale, are fusional affixes. The borrowing of the Spanish suffix *-s/-es* confirms

the proposed scales. Whereas in Huasteca Nahuatl borrowing of content words and function words (e.g. coordinators, as I show in §6.5.3), can be attested even in colonial times, borrowing of the suffix *-s/-es* is much more recent.

To sum up, plural marking in modern Nahuatl shows a noticeable diachronic change with respect to number marking in traditional Nahuatl, and also a synchronic variation. First of all, nominal pluralisation is no longer sensitive to a noun's position on the animacy hierarchy since both animate and inanimate nouns can be pluralised. Secondly, the use of a plural suffix on an animate noun does not require employing the plural form of numerals or other quantifiers. Thirdly, the plural suffix *-meh* has become the universal plural suffix, and it is used to form the plural forms of not only absolute, but also possessed and agentive plural nouns. This change is a case of pattern borrowing, in which Nahuatl plural marking replicates Spanish, in that all nouns can be pluralised with the same suffix. One instance of matter borrowing involves the borrowing of the inflectional Spanish plural marker *-s/-es*, a type of borrowing that is generally considered a rare outcome of language contact.

4.2.5. Number marking in modern Tének

Similarly to other Mayan and Mesoamerican languages, number tends to be marked in Tének optionally, especially in contexts in which quantifiers or numerals are used. In traditional Tének the unmarked form of a noun may be understood as either singular or plural (Edmonson 1988: 398). For example, the noun *ts''ik'ách* can be translated as 'girl' or 'girls'. In Tének, unlike Nahuatl, the basic form of a noun is unmarked and does not require an absolute affix.⁹² A more marked form of a noun involves an overtly pluralised noun stem with the plural clitic =*chik*, as in *pik'o'chik* 'dogs'.

Similarly to Nahuatl, animacy is an important category related to plural marking in Tének. Edmonson (1988: 404) pointed out the following: "I have the impression, which could be fully documented only by an extensive survey and count of data, that an animacy hierarchy exists with respect to the plural morpheme." She noticed that nouns

⁹² Absolute suffixes can, however, be added to derive generic nouns from inherently possessed nouns. The two suffixes that fulfill this function in Tének are *-láb* and *-lek* (see §3.3.4 for a more detailed description).

that refer to humans are most likely to be pluralised with the plural clitic =*chik*, followed by nouns for domestic and wild animals, plants, inanimate objects and finally, abstract concepts (Edmonson 1988: 405) (Figure 4.3).

humans > animals > plants > inanimate objects > abstract concepts

Figure 4.3. Animacy hierarchy in traditional Tének.

Example (4.18) illustrates the plural forms of two animate nouns which both bear the plural clitic =*chik*. It should be noted that Edmonson regards the plural marker not as a clitic, but rather a suffix. In contrast, in (4.19) the inanimate noun *kajadh dhak'chok'* 'boiled egg' lacks the overt plural marking, despite the fact that it is used with a plural meaning.

- (4.18) Traditional plural marking of animate nouns in Tének
(Edmonson 1988: 404) [glosses modified]

<i>ʔin=ʔolo:m-il=čik</i>	<i>ʔan</i>	<i>ʔinik=čik</i>
A3.PL=pig-POSS=PL	DEF	man=PL
‘the men’s pigs.’		

- (4.19) Inanimate nouns used in plural meaning in traditional Tének
(Edmonson 1988: 462) [glosses modified]

<i>neʔeç</i>	<i>k=u</i>	<i>piθ-č-Ø-i</i>	<i>ʔan</i>	<i>kah-aθ</i>	<i>θak'čok'</i>
go	SR=A1.SG	give-APPL-COMPL-EP	DEF	boil-PTCP	egg
‘I’m going to give them boiled eggs .’					

The preferred way to signal a plural referent in Tének is, however, lexical and it involves the use of a numeral or a quantifier (e.g. *yam* ‘many’, or its variants *yane:l*, *yantom* or *yantalom*, see Edmonson 1988: 398). Similarly to Nahuatl but different from Spanish, a noun does not require plural marking if it appears in a nominal phrase with a numeral or a quantifier, as illustrated in (4.20). Use of the plural clitic on a noun in this kind of phrases would be considered ungrammatical (Edmonson 1988: 399; Ochoa Peralta 1984: 90).

(4.20) Quantifier used to express plural meaning in Tének (Edmonson 1988: 399)

<i>ya:n</i>	<i>ʔa</i>	<i>k'i:ča:</i>	<i>ya:n</i>	<i>ʔa</i>	<i>ʔinik</i>
many	DEF	day	many	DEF	men

‘many days, many men’

Unlike Nahuatl, in Tének there is no distinction in plural markers for absolutive and possessed plural nouns. The plural clitic =*chik* can be used to indicate plural number in both types of animate (alienable) nouns. In the genitive construction in (4.21) the plural clitic appears on both the head noun (the possessor) and the possessum.

(4.21) Plural marking in possessive constructions in Tének (Edmonson 1988: 404) [glosses modified]

<i>ʔin=ʔolo:m-il=čik</i>	<i>ʔan</i>	<i>ʔinik=čik</i>
A3.PL=pig-POSS=PL	DEF	man=PL

‘the men’s pigs’

As for the pluralisation of Spanish loan nouns, two strategies can be mentioned. First of all, a Spanish loan can enter Tének in its singular form and be subject to native pluralisation rules. In example (4.22) an animate Spanish loan (*animal* ‘animal’) receives the Tének plural clitic and becomes the plural form *animalchik* ‘animals’. In the next example (4.23), in which a numeral is used, an inanimate Spanish loan (*manzana* ‘apple’) appears in a singular form.

(4.22) Plural marking on Spanish loans in Tének (Larsen 1972: 100) [my glosses]

<i>An</i>	<i>pacax,</i>	<i>an</i>	<i>tsan,</i>	<i>an</i>	<i>ts'itsin,</i>
DEF	cow	DEF	snake	DEF	bird
<i>an</i>	<i>jajnec</i>	<i>patal</i>	<i>pel</i>	<i>i</i>	animal=chic
DEF	fly	all	COP	DEF	animal=PL

‘Cows, snakes, birds and flies are **animals**.’

(4.23) Lexical plural marking in Tének (Larsen 1972: 33) [my glosses]

<i>Buc</i>	<i>i</i>	<i>manzana</i>
five	INDEF	apple

‘There are seven apples.’

The second strategy involves using the Spanish loan noun in its plural form without the native Tének plural clitic. This strategy, as shown in example (4.24) from the Christian doctrine by a Spanish missionary De la Cruz (1571), was applied in early colonial times.

Although constructions of this kind appear throughout De la Cruz’s work, this fact should not bring us to the conclusion that colonial Tének borrowed the Spanish plural suffix. There are no attestations of the use of this suffix in the speech of native speakers of Tének in other colonial sources that would confirm the borrowing of the Spanish plural suffix.

- (4.24) Spanish plural nouns in colonial Tének
(De la Cruz 1571, after Meléndez Guadarrama 2017b: 223) [glosses modified]

?ana patax u=christiano-s
DEF all B1.PL=**Christian-PL**
‘We are all Christians.’

As a result of the increasing intensity and duration of contact with Spanish, the patterns of number marking in Tének have undergone several changes. First of all, animacy is no longer a category that influences morphological number marking. Although numerous fluent speakers do not use the plural clitic on inanimate nouns, many other speakers do not follow this traditional rule. Several authors of descriptive grammars of modern Tének (e.g. Edmonson 1988: 405; Esteban Martínez et al. 2006: 44) conclude that all nouns in contemporary Tének can be pluralised, including inanimate nouns. Example (4.25) illustrates an inanimate noun with the plural clitic.

- (4.25) Pluralisation of inanimate nouns in modern Tének (Larsen 1972: 108) [my glosses]
- U=ots-e-l a q’uicha patal an huacal=chic*
B3.SG=set-INACC-INCOMPL HON sun every DEF **evening=PL**
‘The sun sets all the evenings.’

The use of plural marking on inanimate nouns is, however, not a recent innovation in Tének. Judging by the comment made by Tapia Zenteno (1767: 9), according to whom “all nouns can have plural forms” (cf. Spanish “todos los nombres admiten plural”, my translation), this change can be traced back at least to the second part of the 18th century. The use of plural marking on inanimate nouns is also confirmed in another colonial work - an anonymous Spanish-Tének phrasebook from the 18th century (Hurch and Meléndez Guadarrama 2020), in which the plural marking appears, however, on an inanimate Spanish loan noun (4.26).

- (4.26) Plural marking of Spanish loans in colonial Tének
(Hurch and Meléndez Guadarrama 2020: 181-182) [my glosses]

<in tonenec anti Dominguchic>

in=t'oj-on-e-enek	tam	i	domingo=txik
B1.SG=work-DRV?-INACC-PFV	when	INDEF	Sunday=PL

‘I’ve worked on Sundays.’

Hurch and Meléndez Guadarrama (2020: 183) comment that although plural marking was optional in colonial Tének, it was a common practice to explicitly mark plural in the case of Spanish loan nouns.

Plural marking on Spanish loans appears also in expressions in which a numeral is used. Example (4.27) illustrates the use of the native Tének plural clitic on an inanimate Spanish loan noun *minuto* ‘minute’. Such use of plural marking violates two rules of traditional Tének, i.e. (1) no plural form is allowed in the case of inanimate noun, and (2) no plural form is allowed if a noun appears with a numeral.

- (4.27) Plural marking with a numeral in Tének (Larsen 1972: 110) [my glosses]

<i>Ox</i>	<i>cuarto-s</i>	<i>hora</i>	<i>in=cu-a'-al</i>	45	<i>minuto=chic</i>
three	quarter-PL	hour	A3.PL=have-TR-INCOMPL	45	minute=PL

‘In three quarters of an hour there are **45 minutes**.’

Contact with Spanish has also changed plural marking in expressions in which a quantifier is used. Although the use of the plural clitic in such constructions was traditionally considered incorrect, it can be widely attested in Tének spoken nowadays. An illustration of this change is provided in (4.28). In example (a) the plural clitic is attached to a noun and in example (b) the clitic is attached to the quantifier.

- (4.28) Lexical plural marking in modern Tének (AFF)

- | | | | |
|----|------------------------|----------|-------------------------|
| a. | <i>yan</i> | <i>i</i> | <i>inik=chik</i> |
| | many | INDEF | man=PL |
| b. | <i>yan=chik</i> | <i>i</i> | <i>inik</i> |
| | many=PL | INDEF | man |
- ‘many men’

Despite the above mentioned numerous pattern borrowings, it appears that Tének has not adopted the Spanish plural suffix. Although this inflectional suffix is present in the Tének data, it can only be found on Spanish loan nouns (example 4.29).

- (4.29) Spanish plural suffix in modern Tének (TSA)
- | | | | |
|-----------------------|-----------|----------|----------------|
| <i>U=kw-a'-al</i> | <i>bó</i> | <i>i</i> | libro-s |
| A1.SG=have-TR-INCOMPL | five | INDEF | book-PL |
- 'I have five books.'

In summary, contact with Spanish has had a significant influence on plural marking in Tének. Contrary to the situation in traditional Tének in which number marking was optional and was only possible on animate nouns, in the post-conquest Tének morphological plural marking became more widely applied. In modern Tének both animate and inanimate nouns can be frequently attested with plural marking. The clitic =*chik* has been attested also on Spanish animate and inanimate loans, including on loans in nominal clauses that bear a quantifier or a numeral. Moreover, the Spanish plural suffix is also present on Spanish loans, but it does not function as a plural marker for native Tének nouns. Finally, analysis of the available data demonstrates that there is a significant variation in nominal number marking in Tének, which indicates that the changes in number marking in this language are ongoing.

4.2.6. Summary

Contact with Spanish caused a number of changes in number marking in both Nahuatl and Tének. As a result of Hispanisation, nouns in Nahuatl and in Tének can now receive plural marking regardless of whether or not they are animate. In Nahuatl the use of plural form of nouns does not require that a quantifier or a numeral also appear in plural form. In modern Tének, on the other hand, the use of a numeral or a quantifier does not prevent the speakers from including plural marking also on nouns. The suffixes that were used in Nahuatl to mark the plural in absolute, possessed or agentive nouns are being replaced with one generic plural suffix *-meh*. Aside from these pattern borrowings, Nahuatl has also borrowed the Spanish plural suffix, which is an example of matter borrowing and a rare occurrence of a borrowing of an inflectional morpheme. A

comparison of changes in Nahuatl and Tének in the area of numeral marking is presented in Table 4.1.

Table 4.1. Changes in number marking in Nahuatl and Tének.

Parameter	Traditional Nahuatl	Modern Huasteca Nahuatl	Traditional Tének	Modern Tének	Spanish
Animacy hierarchy	yes	varies	yes	varies	no
Optional plural marking	yes	varies	yes	varies	no
Singular unmarked	no	no (yes for loan nouns)	yes	yes	yes
Dedicated plural possessive marking	yes	varies	no	no	no
Plural form of numerals for animate nouns	yes	no	no	no	no
Plural form of quantifiers for animate nouns	yes	varies	no	no	no
Plural marking with Spanish loans	native plural markers	Spanish suffix <i>-s/es</i>	native clitic <i>=chik</i>	Spanish suffix <i>-s/es</i>	
Use of Spanish plural markers on native nouns	no	yes	no	no	

4.3. Possession

4.3.1. Introduction

The influence of Spanish on nominal categories is also visible in the marking of possession in Tének. In this part I first give a brief introduction to the topic of possession, with special focus on the concept of alienable and inalienable possession. I then proceed to demonstrate how as a result of language and culture contact possessive

marking in Tének is becoming regularised and simplified. Traditionally in Tének possessive marking was highly sensitive to the alienable/inalienable distinction, and inalienably possessed nouns included not only body parts and kinship terms, but also culturally important items and consumed items. I show how as a result of contact with Spanish, which does not display similar linguistic contrasts, possessive marking in Tének has changed. I provide examples that illustrate that in modern Tének all items of clothing, personal adornments and everyday household objects are now treated as alienably possessed. I also show how consumed items, such as food, are also treated as alienably possessed. Throughout the chapter I demonstrate how the alienable possessive suffix, i.e. *-il*, is becoming the default genitive marker applied in more semantic contexts than in traditional Tének. I show how its use has been extended to include not only traditionally alienable items, but also culturally important objects, non-individuated items and Spanish loans, a process which can be attributed to changes in the lifestyles of the indigenous people of the Huasteca and contact with *mestizo* culture.

4.3.2. Alienable vs. inalienable possession

Possessive noun phrases may include a range of meanings within the broad concept of 'association' between entities (cf. Dixon 2010: 262-265; Aikhenvald 2013: 2-6). The meaning of possession is not restricted to 'ownership', but it can also involve the relationship between whole and parts of animates and inanimates (e.g. body parts, *top of the mountain*), kinship relations (both by birth and through marriage), association in general (e.g. *my hairdresser*), attributes and the classification of people and other entities (e.g. *Lisa's stubbornness, an angel of a woman*), and, finally, quantifications of time and material (e.g. *a kilo of flour*) (Aikhenvald 2019: 8).

In many languages nouns can be divided based on distinctive types of possession, including alienably and inalienably possessed entities. The first type, i.e. alienable, (or, in other words, temporary) possession, involves ownership of worldly things or some other type of loose association. Inalienable possession, on the other hand, involves a closer relation between entities, and a distinctive marking of this type of possession is

typically applied in the case of body parts, whole-part and kinship relations. The semantic fields to which inalienable possession extends may also include “exuviae such as blood, sweat and tears; aspects of the personality including emotions; forms of personal representation such as terms for soul, reputation and name; and concepts involving images of the person such as footprints, shadow, photography, story or song” (Chappel and McGregor 1989: 27). In some languages nouns denoting body parts, kin and part-whole relationship are inherently possessed and their possessor always needs to be specified (Seiler 1983: 4). The conceptual reasoning behind this grammatical feature is that it is hard to conceive of a body part or a part of something as an individuated item. A kinship relationship, on the other hand, involves two entities, and one of those entities can only be defined in terms of its affiliation to the other. Depending on contexts, some nouns can occur in both alienable and inalienable possessive constructions (Seiler 1983: 12). Thus, whereas a leaf on a tree can be treated as part of a tree (i.e. a non-individuated inalienable item), a fallen leaf can be considered an individuated (i.e. alienable) object.

Apart from the semantic differences between alienable and inalienable possession, there may also be morphological contrasts in the expression of the two types of possession. A possessive noun phrase contains at least two elements: a possessor and a possessed item (i.e. a possessum or a possessee). An expression of inalienable possession usually requires less morphosyntactic material, often involving only a possessed item and a pronoun. A typical way to express alienable possession involves a preposition that intervenes between the possessed item and a pronoun referring to the possessor, as illustrated by an example from Ndjuká (Surinam Creole) *a wagi fu mi* (DEF vehicle for 1SG) ‘my car’, where *fu* is the preposition (Payne 1997: 105). Typically, the closer the relationship between the possessor and possessum is, the less formal possessive marking is required. This phenomenon was referred to by Haiman (1980, 1985) as the ‘iconic motivation’.

The meanings encoded within possessive structures often reflect societal practices. In many languages culturally important objects (e.g. jewellery, arrows, parts of clothing, utensils, etc.) are considered inalienable (Bally 1926; Chappell and McGregor 1989).

For Seiler (1983), possession is a ‘bio-cultural’ concept that cannot be explained without referring to extra-linguistic knowledge. This observation refers especially to inalienable possession, which in Seiler’s words (1983: 4) expresses “a relationship between a human being and his kinsmen, his body parts, his material belongings, his cultural and intellectual products.” In some languages the possession class to which a kinship term belongs may reflect the special status of the referent (Ameka 2013: 235). In an example provided by Schokkin (2014: 81-81, after Aikhenvald 2019: 20), in Paluai, an Austronesian language spoken in Papua New Guinea, daughters are considered alienably possessed and sons are inalienably possessed. The distinctive linguistic forms that are used to express different relationships with sons and daughters are a reflection of exogamy in the Paluai society in which daughters leave home when they marry and sons stay with their parents. Another example of culture-specific possession marking comes from Mayan languages where, according to the indigenous world view, environmental terms such as ‘sun’, ‘moon’, ‘land’, and ‘jungle’ are considered impossible to possess (Jensen 1999: 152). There are also languages in which there are classes of nouns that are “highly unfit as possessa” (Lehmann 1998: 60). One of such languages is Yukatek Maya, in which the nouns that cannot appear in their possessed form also include proper names or nouns referring to people, such as ‘person’, ‘woman’ or ‘virgin’ (Lehmann 1998: 60).

Because of its cultural sensitivity, possessive marking is typically susceptible to culture and language contact. In traditional Nanti society, an Arawak-speaking minority in Peru, land could not be conceived of as being possessed or owned (Michael 2013: 165). However, as a result of contact with the Western concepts of land ownership and contact with other ethnolinguistic groups which had been more exposed to *mestizo* culture (e.g. Matsigenka), the Nanti developed the concept of land ownership. Similarly, in Dakota (Siouan) certain animals (e.g. cattle) were treated as impossible to own (Boas and Deloria 1941: 128), and the names of those animals traditionally could not appear with possessive prefixes. However, contact with Western culture, in which animals are treated as property, has influenced possessive marking in Dakota. As I show below, contact with Spanish and *mestizo* culture has also affected the perception of certain

objects and entities in Tének leading to significant changes in possessive marking in this language.

4.3.3. Possessive marking in Tének

Similar to most Mayan languages, Tének possessive marking has traditionally been described as showing an alienable/inalienable contrast (Edmonson 1988: 349ff.) or, following the terminology applied by Maldonado (1994), the ‘extrinsic/intrinsic relationship’. Inalienably possessed nouns include body parts and terms denoting parts, kinship terms (excluding children and spouses), personal attributes (e.g. strength) and certain culturally important items (e.g. traditional clothing and ornaments, everyday objects). Ordinary bodily manifestations associated with the human body, e.g. *u=chik* ‘my urine’ or *u=tsak’ib* ‘my sweat’, are also considered inalienably possessed. In contrast, alienably possessed nouns include items that can be temporarily possessed, such as individuated elements, e.g. *u=ojób-il* (A1.SG=spit-POSS) ‘my spit’, independent entities, or external manifestations of sickness which are conceptualised as unusual, as illustrated in *u=ak’ál-il* (A1.SG=pus-POSS) ‘my pus’. Moreover, in Tének numerous nouns cannot be marked for possession at all, and these include environmental nouns (e.g. *ja* ‘water’), as well as terms for sickness and emotions.

Edmonson (1988: 350-369) distinguished seven types of stem modification, on the basis of which Tének nouns can be classified into seven classes. These include:

Type 1) addition of the possessive suffix *-il/-al*, together with lengthening of the final vowel of bisyllabic base forms, e.g. *hom* ‘incense’ vs. *?u homil* ‘my incense’, *bakan* ‘tortilla’ vs. *?u baka:nil* ‘my tortilla’; possessive constructions in this class involve temporary ownership;

Type 2) nouns in which the base form functions as the possessed form; such nouns are unpossessed with e.g. an absolutive suffix, e.g. *?u ?icik’* ‘my fingernail’ vs. *?icik’lek* ‘fingernail’; possessive constructions in this class indicate an inherent, inalienable or part-whole relationship involving, e.g. body parts, traditional items of clothing, kinship terms (excluding children), names and inherent qualities such as strength;

Type 3) lengthening of the final vowel of the base form, e.g. *lek'ab* 'tongue' vs. *ʔu lek'a:b* 'my tongue'; such constructions involve similar relationships as in type 2), with the exception of items of clothing and kinship terms;

Type 4) addition of the suffix *-li:l/-la:l*, e.g. *haʔ* 'water' vs. *ʔin haʔli:l ʔan lana:š* 'its water, the orange, i.e. its juice'; these constructions involve part-whole relationships;

Type 5) addition of the suffix *-V:l*, with the suffix vowel mirroring the final vowel of the base form, e.g. *ʔic* 'chilli' *ʔin ʔici:l* 'its (i.e. plant's) chilli'; these constructions also involve part-whole relationships;

Type 6) two nouns in her sample with identical possessed and unpossessed forms, e.g. *ka:w* 'word', *ʔu ka:w* 'my word';

Type 7) nouns which are always possessed and never take absolutive or possessed suffixes, e.g. *ʔu k'ima:ʔ* 'my home'; in addition, this class includes nouns used prepositionally.

In Tének the marking of possession depends on the level of proximity between the possessor and possessum. As was already described in §3.3.4, in Tének a typical inalienable possessive construction consists of a Set A (ergative) pronoun and a possessed noun. Since inalienably possessed nouns are zero-marked (as in *u=ok* 'my head') and alienably possessed nouns receive the possessive suffix *-il(-al)* (e.g. *u=ʔik'oil* 'my dog'), this feature of possessive marking in Tének confirms Haiman's (1980, 1985) principle of iconic motivation mentioned above.

Possessive marking in Tének is, however, not only sensitive to semantic and pragmatic factors, but also to sociolinguistic factors such as the age and social mobility of the speakers, which determine their exposure to Spanish. Sobkowiak and Kilarski (2018) investigated changes in possessive marking among the younger generation of Tének speakers and showed that it has been significantly affected by contact with Spanish. Whereas the expression of possession regarding kinship terms or part-whole relationship including body parts still matches the traditional patterns, in other semantic domains it shows more variation and there is a tendency toward the regularisation of the system.

For example, changes can be observed in possessive marking involving bodily manifestations. As noted above, in traditional Tének the marking of possession of such bodily fluids as saliva, spit, sweat and mucus depends on their degree of individuation (Maldonado 1994: 9-13). Thus, sweat that is on the skin of a person is considered intrinsic and in a possessive phrase the noun referring to sweat (*tsak'ib*) is zero-marked (4.30a). In contrast, sweat that is dropping from one's body is thought of as conceptually independent and in this case the noun *tsak'ib* bears the overt possessive marker (4.30b).

(4.30) Possession of bodily manifestations in Tének
(Maldonado 1994: 10) [glosses modified]

- a. *u=tsak'ib*
A1.SG=sweat
'my sweat' (that is still on my body)
- b. *u=tsak'ib-al*
A1.SG=sweat-POSS
'my sweat' (that drops from my body)

However, as found by Sobkowiak and Kilarski (2017: 155), in modern Tének bodily manifestations tend to be treated as inalienable and therefore are zero-marked.

The influence of Spanish on possessive marking in Tének is also noticeable in the marking of culture-specific personal attributes, such as clothing, ornaments and household items. These items were treated in traditional Tének as inalienable and are "cultural prototypic representation of the Tének everyday life, endeavors and traditional activities" (Maldonado 1994: 17). For example, a traditional female decorative poncho (*dhayem*) is considered dependent on its owner and, thus, the possessive phrases in which this noun appears lacks overt possessive marking (*u=dhayem* 'my quechquemitl'). A similar pattern can be observed while referring to a necklace (*u=ow* 'my necklace') or kitchen utensils used daily (e.g. coffee cups). Data from modern Tének suggests, however, that culturally important items are nowadays treated as conceptually independent (alienable) in relation to the possessor (Sobkowiak and Kilarski 2018: 156), as in *u=ow-il* 'my necklace', and *u=dhayem-il* 'my quechquemitl'.

Contact with Western culture also affected the perception of natural resources. Although environmental nouns were traditionally considered impossible to own, in modern Tének these nouns are frequently marked for possession, as shown in (4.31).

- (4.31) Possessive marking of environmental nouns in modern Tének
 (Meléndez Guadarrama 2011: 150) [glosses modified]
N=i ʔaltéʔ-il u=hilkonal níwa
 DET=A3.PL forest-POSS B3.SG=be.located there
 ‘Our forest is located there.’

The distinction between alienably and inalienably possessed objects can also be observed in the case of consumed objects such as food, chewing gum or cigarettes. According to Maldonado (1994: 13), the possessive marking patterns in this semantic domain are predictable and “the closer the relation between possessor and possessum, the stronger the possibility of having a zero marker, while the occurrence of *-il* will coincide with the degree of possessum/possessor individuation”. In example (4.32a) the possessed noun *may* ‘cigarette’ has no overt possessive marking because it is being consumed (i.e. smoked) and, therefore, considered inalienable from its possessor. In contrast, in (4.32b) the same noun is suffixed with the *-il* marker to indicate its independent nature.

- (4.32) Possessive marking of consumed objects in Tének
 (Maldonado 1994: 13) [glosses modified]
- a. *nanaa' an may*
 1SG DEF cigarette
 ‘my cigarette’ (that I’m smoking)
- b. *n=u may-il*
 DET=A1.SG cigarette-POSS
 ‘my cigarette’ (that I have in my pocket)

Although the contrast between the marking of consumed and non-consumed objects (i.e. the inner/outer contrast) was considered ‘consistent’ by Maldonado (1994: 13), this opposition is not found in contemporary Tének (Sobkowiak and Kilarski, 2017: 157). Modern Tének speakers seem to think of consumable items as independent objects and mark them as alienably possessed.

With respect to Spanish loanwords, as observed by Edmonson (1988: 372), in traditional Tének no explicit marking was applied in possessive phrases in which they were used, as in *u=ani:yo* ‘my ring’ (cf. Sp. *anillo* ‘ring’) and *u=pri:mo* ‘my cousin’ (cf. Spanish *primo* ‘cousin’). However, data from modern Tének shows considerable variation in the possessive marking of Spanish loan nouns and the predominant trend is the use of the *-il* suffix, as in *u=anilloj-il* ‘my ring’ (Sobkowiak and Kilarski 2018: 158).

4.3.4. Summary

Traditional Tének displays contrastive possessive marking for inalienable and alienable nouns. However, contact with Spanish triggered several changes in the marking of possession in modern Tének. Thus, in modern Tének traditional clothing, ornaments and other culturally significant objects are no longer perceived as inalienably possessed. Moreover, the intrinsic/extrinsic contrast has been lost in the case of consumable items which are now marked for temporary possession. Also, in modern Tének Spanish loans are usually marked with the *-il* suffix. These changes can be interpreted as a regularisation of possessive marking, in which gradually more nouns can receive the *-il* possessive suffix and are considered alienable (apart from kinship terms, body parts, bodily manifestations and part-whole relations). The *-il* suffix is becoming the default possession marker applied in a wider range of semantic domains which were traditionally zero-marked. A slow regularisation of possessive marking in Tének makes it more predictable and similar to Spanish, in which parallel constructions show much less irregularities and lack the intrinsic/extrinsic possession category altogether.

4.4. Numerals

4.4.1. Introduction

The goal of this part of the chapter is to investigate changes in the counting systems in

Nahuatl and Tének. After a short introduction to the types of numeral systems, including vigesimal, decimal and hybrid counting systems, I proceed to analysing how contact with *mestizo* culture and the cash economy influenced the expression of quantities in the two languages of the Huasteca. Focusing on cardinal numerals, I point out numerous structural borrowings which illustrate the transition towards a hybrid vigesimal-decimal counting system. I demonstrate that in both Nahuatl and Tének the exponentiations of 20 (i.e. 400 and 8,000) have lost their status as a result of contact with the decimal system. I also show how the native numerals referring to 10 and 100 have become lexicalised and have been used as bases for expressing multiplications of 10 and 100 respectively. Moreover, I also demonstrate that, aside from pattern borrowings, Nahuatl and Tének have also been successively acquiring direct borrowings of Spanish numerals, resulting in an almost complete eradication of the native counting systems. Throughout this chapter I point out many parallel changes in the counting systems in both languages and I aim to prove that these are a result of structural convergence. Finally, as a summary to this part of the chapter, I provide a comparison of changes in Nahuatl and Tének and show the principles of counting in each language in three stages: the Mesoamerican stage, the transition stage, and the most recent Hispanicised stage.

4.4.2. Types of numeral systems

A counting system, or the linguistic expressions for numerals, is related to the arithmetic base that is applied in constructing numeral expressions. The ‘base’ in the context refers to the value n which is used in creating the representation of number according to the pattern $xn + y$, in which a numeral x is multiplied by the base, and some other number (y) can be optionally added (Comrie 2013).

The languages of the world use different systems including those based on 10 (i.e., decimal systems), 20 (i.e., vigesimal systems) or hybrid systems that combine elements of both the decimal and vigesimal systems (Comrie 1997, 2013). A very rare type of numeral system, evidenced in only 4 out of 196 languages analysed by Comrie (2013), involves the extended body-part system, in which, in addition to fingers (as in decimal

systems) or fingers and toes (as in vigesimal systems), other parts of the body (e.g. arms) may be employed for counting.

Decimal systems are the prevailing counting systems in the languages of the world. As many as 125 out of 196 languages analysed by Comrie (2013) use the decimal system. Many Indo-European languages, including Spanish and English, use the base-10 system, in which the general formula for constructing numerals is $x10 + y$. For example 56 is expressed as ‘five tens and six’ ($5 \times 10 + 6$). In those languages special status is given to the exponentiation of 10, although its linguistic verbalisation rarely indicates that the number is in fact an exponentiation of the base. In Spanish, for example, 10^2 is referred to with an opaque name *cien* and 10^3 is called *mil*.

A much less frequently found counting system is the vigesimal system. According to Comrie (2013), only 20 out of 196 languages use purely vigesimal system (i.e. without any decimal elements). Comrie (2013) notes that sometimes, as a result of language contact, languages may start to use a hybrid vigesimal-decimal system or they may abandon the base-20 system altogether. Comrie (2013) estimates that 22 out of 196 languages use such a mixed vigesimal-decimal system. Vigesimal counting was one of the shared features of the pre-Columbian Mesoamerican languages (Campbell et al. 1986: 546-547). The system was based on the 20 digits (i.e. 10 fingers and 10 toes) of a human being, and there were four stages in the count including: one hand, two hands, one hand and a foot, two hands and two feet. A traditional pictographic representation of vigesimal counting in Mesoamerican hieroglyphics is shown in Figure 4.4.

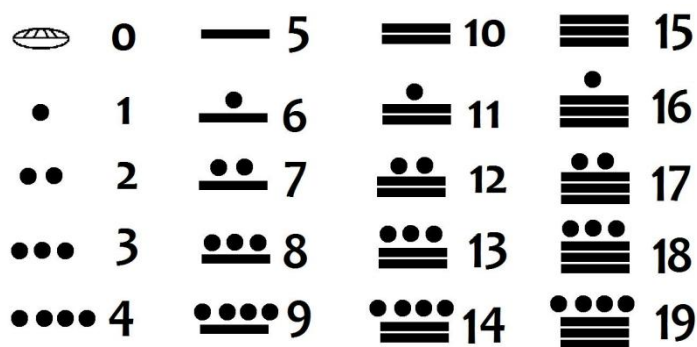


Figure 4.4. Traditional pictographic representation of the Mesoamerican counting system.

The counting base in Mesoamerica was consistently 20 and the general formula for

expressing numerals was $x20 + y$. For instance, 78 was expressed as ‘three twenties and eighteen’ ($3 \times 20 + 18$). The successive orders were one, twenty, four hundred (i.e. 20^2), eight thousand (i.e. 20^3) and so on. However, as I show in the sections below, contact with Spanish has first, caused a hybridisation of the traditional counting system, and recently, has contributed to its near complete substitution with Spanish numerals.

4.4.3. Numerals in Nahuatl

The traditional counting system in Nahuatl follows the Mesoamerican vigesimal pattern. A Nahuatl cardinal numeral is similar to a noun in its absolute form. The basic numerals are 1-4 and the intermediary stages in the traditional Nahuatl count included 5 (*macuilli*), 10 (*mahtlactli*) and 15 (*caxtollī*).⁹³ These correspond to the fingers of one, two and three hands. Thus, the numbers 6-9 are expressed as $5 + y$ (where y equals 1, 2, 3 or 4), the numbers 11-14 are expressed as $10 + y$, and the numbers 16-19 are expressed as $15 + y$. One full count corresponds to 20, or *cempohualli*, which is a compound noun consisting of *cem-*, a combining form *ce*, the numeral ‘one’ and a noun *pohualli* ‘a count’ and it refers to the digits of two hands and two feet taken together (Andrews 2003: 311).

In accordance with the rules of a vigesimal system, numerals over 20 are expressed as multiplications of 20. Thus, 60 is *expoalli*, or literally ‘three counts’. Base 20 raised to the second power (20^2), i.e. 400, has a special status in the Nahuatl counting. Its name *tzontli* ‘hair’ refers to the barbs on a feather, as its symbol used in the codices was a feather. The name of the numerals referring to base 20 raised to the third power (20^3), i.e. 8,000, was *xiquipilli* ‘bag’ and its codex symbol was a sack (Andrews 2003: 312). A list of the names of the numerals in traditional Nahuatl as recorded by Molina (1571a, 1571b) with the original orthography is presented in Table 4.2 and the basic principles of the traditional Nahuatl counting are shown in Table 4.3.

⁹³ According to Andrews (2003: 310), *mā-cuī-l-li* is a compound noun stem derived from a passive patientive stem from the applicative *tla-(mā-cu-ī-ā)* ‘to take a hand in comparison to something’ (lit. ‘something taken as corresponding to a hand’, i.e. ‘something having five members (like a hand)’). The Nahuatl term for ‘ten’, i.e. *mah-tlāc-tli*, consists of a stem *māi-tl* ‘hand’ and the matrix noun *tlāc-tli* ‘torso, upper part of the body’. The compound *mah-tlāc-tli* refers therefore to the fingers of both hands taken together.

Table 4.2. Classical Nahuatl numerals
(after Molina 1571b, 1st part: fol. 118v - 119v.; Molina 1571a, 2nd part: fol. 1v - 2v).

No	Nahuatl equivalent	No	Nahuatl equivalent	No	Nahuatl equivalent
1	<i>ce</i>	11	<i>matlacti once</i> (10+1)	40	<i>ompoualli</i> (2x20)
2	<i>ome</i>	12	<i>matlactliomome</i> (10+2)	60	<i>yepoualli</i> (3x20)
3	<i>yey</i>	13	<i>matlactliomey</i> (10+3)	80	<i>nauhpoualli</i> (4x20)
4	<i>nau</i>	14	<i>matlactlionnau</i> (10+4)	100	<i>macuilpoualli</i> (5x20)
5	<i>macuilli</i>	15	<i>caxtulli</i> (15)	120	<i>chiquacempoualli</i> (6x20)
6	<i>chiquace</i>	16	<i>caxtullionce</i> (15+1)	140	<i>chicompoualli</i> (7x20)
7	<i>chicome</i>	17	<i>caxtulliomome</i> (15+2)	160	<i>chicuepoualli</i> (8x20)
8	<i>chicuey</i>	18	<i>caxtulliomey</i> (15+3)	180	<i>chicunauhpoualli</i> (9x20)
9	<i>chicunau</i>	19	<i>caxtullionnau</i> (15+4)	200	<i>matlacpoualli</i> (10x20)
10	<i>matlactli</i>	20	<i>cempoualli</i> (1x20)	300	<i>caxtulpo[u]alli</i> (15x20)
				400	<i>centzuntli</i> (1x400)
				800	<i>ontzuntli</i> (2x400)
				1,200	<i>etzuntli</i> (3x400)
				8,000	<i>cenxiquipilli</i> (1x8000)

Table 4.3. Counting principles in Classical Nahuatl.

Numeral	Classical Nahuatl	Numeral	Classical Nahuatl
1-5	1-5	30	20+10
6-9	5+n	40	2x20
10	10 (<i>mahtlactli</i>)	100	5x20
11-14	10+n	120	6x20
15	15 (<i>caxtoll</i>)	200	10x20
16-19	15+n	400	400 (<i>tzontli</i>)
20	20 (<i>cempoualli</i>)	500	400+(5x20)
21	20+1	1000	(2x400)+(10x20)
22	20+2	2000	5x400
		8000	8,000 (<i>xiquipilli</i>)

The traditional vigesimal counting present in Mexico before the Spanish conquest has been gradually replaced with the decimal system introduced by the colonisers. Pre-Hispanic measurements were almost completely replaced with European measurements and the traditional hieroglyphic way of representing numbers was substituted with Arabic digits. As a result of evangelisation, The Decalogue, i.e. the Ten

Commandments, began to play a fundamental role as the new set of principles relating to worship and ethics. The rosary which comprises five sets of ten Hail Marys, or decades, became one of the most recited prayers used in the Catholic Church. Rosary beads or knots arranged in sections of ten were used to help say the prayers in the right sequence. In addition, formal schooling in Spanish and the introduction of the cash economy, as well as the frequent use of coins and notes that rely on the decimal counting system, have also contributed to the gradual replacement of the vigesimal counting with base-10 counting.

The most obvious way in which Spanish has influenced counting in Nahuatl are direct borrowings of the Spanish numerals. One such context in which they appear involves making reference to years, as illustrated in (4.33).

- (4.33) Borrowing of dates in modern Huasteca Nahuatl (GHH)
- | | | |
|-----------------------|-----------------|----------------------------------|
| <i>i-pan</i> | <i>xihui-tl</i> | <i>[mil novecientos catorce]</i> |
| POSS.3SG-surface[RTL] | year-ABS.SG | 1914 |
| ‘in the year 1914’ | | |

The use of Spanish numerals when referring to dates is, in fact, not a recent phenomenon. In early colonial annals it was customary to include the dates according to the European division of time and using the Spanish names of the days of the week and months. An illustration of this phenomenon in (4.34) comes from a chronicle written by indigenous Nahuatl speakers entitled *Los Anales de Juan Bautista* (1563-1574). The reference to a date is given in bold. Although it is debatable whether the use of Spanish in this text is a borrowing and not a code-switching, it is nevertheless an example of a language contact phenomenon that has paved the road to the customary use of Spanish in similar contexts in later years.

- (4.34) Spanish dates in colonial Nahuatl (Reyes García ed. 2001: 186)
Oy martes a uno de hebrero de 1564 afñjos / yquac tlateochihualloc yn iglesia mayor ynoma yn arçob[is]po tlateochiuh yhuan in hueueintin teopixque in S[an] Fran[cis]co in S[an] Augustin S[an]to Domingo clerigosmea.
 ‘Today, on **Tuesday, the first of February of the year 1564**, was when the main church was consecrated, the archbishop in person consecrated it, along with the great priests of San Francisco, San Agustín, Santo Domingo, and the clergymen.’

The use of Spanish numerals is, however, not only limited to high numbers, including years, but it also extends to lower numerals. Whereas several speakers of Nahuatl in the region of the Huasteca are able to provide native names of numerals up to 100 (often not without difficulties and self-corrections), they can rarely count in Nahuatl beyond 100. Example (4.35) illustrates a Spanish borrowing that refers to the numeral 109. Note the borrowing of the name of the Mexican currency (*pesos*).

- (4.35) Spanish borrowings for numerals over 100 in modern Huasteca Nahuatl (MMS)
ni-c-piya ciento y nueve pesos
 SBJ.1SG-OBJ.3SG-have **hundred** CONJ **nine** pesos
 ‘I have 109 pesos.’

Although native Nahuatl numerals up to 100 can still be elicited from more fluent older speakers, this fact does not imply that these numerals are used in everyday life. Counting in Spanish is considered to be “faster and easier”, as I was told by one of my consultants. In practice, the use of Nahuatl numerals is limited to numbers 1 to 4 or 5, which shows an almost complete erosion of the native system. Example (4.36) illustrates a heavily Spanish-influenced variety of Nahuatl used by a teenager who, despite her frequent use of Spanish lexical and structural borrowings, still uses the native Nahuatl numeral *eyi* ‘three’. The same speaker was, however, not able to provide me with a native Nahuatl numeral for the numeral ‘six’.

- (4.36) Native numerals in modern Huasteca Nahuatl (MRC)
Ø-el-toc ce tzomi-tl de lalax i-huehca
 SBJ.3SG-be-STAT one tree-Abs.SG PREP orange POSS.3SG-far
de eyi metro
 PREP **three** metre
 ‘There is an orange tree which is three metres high.’

Aside from the above presented examples of direct borrowings of Spanish numerals in Nahuatl, another change that can be observed are pattern borrowings that involve a gradual shift from the vigesimal to the decimal counting system. The process of hybridisation of the system, which combines both vigesimal and decimal characteristics, entails, for instance, the use of native Nahuatl numerals according to the new decimal rules of counting. The powers of 20, i.e. 400 and 8,000, have lost their special status. The native term referring to 400, i.e. *tzontli* has been replaced with *nahui macuilpohualli* (literally ‘four five counts’), and any number over 400 has been expressed as multiplications of a hundred and not according to the formula $x400 + y$.

The expression of the date-numeral 1918 in (4.37) is a clear illustration of a hybrid decimal-vigesimal system in which the decimal features prevail. Whereas the year 1918 in Classical Nahuatl would be represented as $(4 \times 400) + (15 \times 20) + 15 + 3$ (*nauhtzontli ipan caxtolpohualli oncaxtollí omeyi*), in (4.37) the date 1918 is built upon the following formula: $1000 + 9 \times (5 \times 20) + 10 + 8$ (*tzontli huan chicnahui macuilpohualli huan mahtlactli ica chicueyi*).

(4.37) Hybrid vigesimal-decimal counting in modern Huasteca Nahuatl (PRC)

<i>i-pan</i>	<i>xihui-tl</i>	<i>tzon-tli</i>	<i>huan</i>
POSS.3SG-surface[RTL]	year-ABS.SG	tzontli-ABS.SG	company[RTL]
<i>chicnahui</i>	<i>macuil-pohual-li</i>	<i>huan</i>	<i>mahtlac-tli</i>
nine	five-count-ABS.SG	company[RTL]	ten-ABS.SG
<i>i-ca</i>	<i>chicueyi</i>		
POSS.3SG-means[RTL]	eight		
‘in the year 1918’			

It can be seen that *tzontli* is understood in the above example as ‘thousand’, and *macuilpohualli* is understood as ‘hundred’ (lit. ‘five counts’). Despite the fact that the latter numeral in itself follows the vigesimal conventions, it has become a base for the multiplications of 100, one of the main counting bases used in the decimal system. Another interesting feature present in (4.37) involves the innovative use of the word *tzontli* which, as mentioned before, has changed its meaning from 400 to 1,000 in modern Western Huasteca Nahuatl. Although I was not able to find any native speakers

who would associate *tzontli* with its original meaning, I have come across the use of this term as not only referring to ‘one thousand’, but also as an equivalent of ‘one hundred’, as exemplified in (4.38).

- (4.38) Hybrid vigesimal-decimal counting in modern Huasteca Nahuatl (PGR)
- | | | | | |
|----------------------|------------------|----------------|------------|-----------------------|
| <i>Ø-qui-piya</i> | <i>pa</i> | <i>ozto-tl</i> | <i>ome</i> | <i>tzon-tli</i> |
| SBJ.3SG-OBJ.3SG-have | DEM | cave-ABS.SG | two | tzontli-ABS.SG |
| <i>de</i> | <i>huehca~ca</i> | | | |
| PREP | far~RDPL | | | |
- ‘This vertical cave is **200 metres** deep.’

Another manifestation of the process of decimalisation of modern Nahuatl is the use of the numeral *mahtlactli* ‘ten’ as the base. In Western Huasteca Nahuatl numerals 10-19 are expressed according to the formula $10 + y$, as in *mahtlactli huan macuilli* ‘fifteen’, *mahtlactli huan chicuace* ‘sixteen’, *mahtlactli huan chicome* ‘seventeen’, *mahtlactli huan chicueyi* ‘eighteen’, *mahtlactli huan chicnahui* ‘nineteen’. In traditional Nahuatl the formula $10 + y$ was applied only for numerals between 11 and 14, and the numerals 16 to 19 were expressed using the formula $15 + y$, in which 15 (*caxtollli*) was the intermediary base numeral to which numbers 1, 2, 3, and 4 could be added.⁹⁴

The decimalisation of counting in Nahuatl is further exemplified by the use of the numeral 10 (*mahtlactli*) as the base for numerals for 30 and over. Example (4.39) illustrates how a speaker refers to 40 as ‘four tens’ (*nahui mahtlactli*), and not as ‘two counts’ (*ompohualli*), as it would be done in the traditional Mesoamerican system.

- (4.39) Decimalisation of counting in modern Huasteca Nahuatl (PCM)
- | | | | | | |
|-------------------|--------------|-----------------|--------------|--------------------|-------------------|
| <i>Ø-huetzi-z</i> | <i>a-tl</i> | <i>huehcauh</i> | <i>nahui</i> | <i>mahtlac-tli</i> | <i>tona-t-iuh</i> |
| SBJ.3SG-fall-FUT | water-ABS.SG | during | four | ten-ABS.SG | day-LIG-go |
- ‘It will rain for **40** days.’

To sum up, in modern Nahuatl numerals display a considerable influence of Spanish on a number of levels. The evidence of contact with the colonial language is most visible in the direct loans of Spanish numerals, which, depending on the level of language attrition,

⁹⁴ According to the information given in a missionary grammar by Cortés y Zedeño (1765: 49-50), the formula $10 + y$ for numerals 16-19 was applied in the variety of Nahuatl spoken in the bishopric of Guadalajara. The numeral 15 in this variety was, however, referred to as *caxtole* (following Classical Nahuatl) and not according to the pattern $10+5$.

have replaced native Nahuatl numerals from numbers as low as 4 or 5. In some cases, Spanish terms for higher numerals, such as *cien* ‘hundred’ or *mil* ‘thousand’, can be combined with native Nahuatl numerals. Numerals in Nahuatl can still be elicited but usually with great difficulty, errors and with a number of innovations which are a result of a long history of Hispanisation and hybridisation of the system. Whereas traces of the traditional use of 20 as the base can be still attested, many speakers typically introduce decimal elements to the vigesimal system. These include the use of *mahtlactli* ‘ten’ as the counting base for numerals 11-19 and for numerals over 30. Furthermore, the native Nahuatl numeral *macuilpohualli* (5x20) has become lexicalised and serves as the base to express quantities involving multiplications of a hundred. Moreover, the traditional meaning of the term *tzontli*, i.e. (multiplication of) 400, has been forgotten and this term has acquired new meanings referring to quantities including ‘hundred’ or ‘thousand’. These contact phenomena that can be observed in the modern Nahuatl counting system are also shared by other Mesoamerican languages including Tének, as I show in the following section.

4.4.4. Counting system in Tének

Unlike Nahuatl, Tének lacks early detailed colonial documentation of its traditional counting system. However, taking into account that vigesimal counting was a strong trait of all Mesoamerican languages and cultures, it may be assumed that Tének also used a base-20 counting system which followed similar principles as the counting system in Classical Nahuatl described above.

The earliest concise record of Tének numerals, except for isolated numerals documented by De la Cruz (1571) and De Quirós (2013 [1711]), appears in the missionary grammar by Tapia Zenteno (1767). Although the list of numerals presented in this source (and reproduced in Table 4.4 below) lacks Spanish direct loans, it already shows significant influence of the counting patterns found in Spanish. It is not a purely vigesimal system, but, rather, a hybrid vigesimal-decimal system.

Table 4.4. Cardinal numerals in Tének (Edmonson 1988: 416-417).⁹⁵

No	Tének equivalent	No	Tének equivalent	Equation
1	<i>hu:n</i>	21	<i>hun ?inik hu:n</i>	1x20+1
2	<i>ɕa:b</i>	22	<i>hun ?inik ɕa:b</i>	1x20+2
3	<i>ʔo:š</i>	23	<i>hun ?inik ʔo:š</i>	1x20+3
4	<i>ɕe:ʔ</i>	24	<i>hun ?inik ɕe:ʔ</i>	1x20+4
5	<i>bo:ʔ</i>	25	<i>hun ?inik bo:ʔ</i>	1x20+5
6	<i>ʔakak</i>	26	<i>hun ?inik ʔakak</i>	1x20+6
7	<i>bu:k</i>	27	<i>hun ?inik bu:k</i>	1x20+7
8	<i>wašik</i>	28	<i>hun ?inik wašik</i>	1x20+8
9	<i>bele:w</i>	29	<i>hun ?inik bele:w</i>	1x20+9
10	<i>la:hu</i>	30	<i>hun ?inik la:hu</i>	1x20+10
11	<i>lahu hu:n</i>	31	<i>hun ?inik lahu hu:n, etc.</i>	1x20+10+1
12	<i>lahu ɕa:b</i>	40	<i>ɕab ?inik</i>	2x20
13	<i>lahu ʔo:š</i>	41	<i>ɕab ?inik (k'al) hu:n</i>	2x20+1
14	<i>lahu ɕe:ʔ</i>	50	<i>ɕab ?inik la:hu</i>	2 x 20 + 10
15	<i>lahu bo:ʔ</i>	60	<i>ʔoš ?inik</i>	3x20
16	<i>lahu ʔakak</i>	70	<i>ʔoš ?inik la:hu</i>	3x20+10
17	<i>lahu bu:k</i>	80	<i>ɕeʔ ?inik</i>	4x20
18	<i>lahu wašik</i>	90	<i>ɕeʔ ?inik la:hu</i>	4x20+10
19	<i>lahu bele:w</i>	100	<i>boʔ ?inik</i>	5x20
20	<i>hun ?inik</i>	200	<i>ɕab boʔ ?inik</i>	2 x 5 x 20
		300	<i>ʔoš boʔ ?inik</i>	3 x 5 x 20
		400	<i>ɕab boʔ ?inik* (sic)</i>	4 x 5 x 20
		500	<i>boʔ boʔ ?inik</i>	5 x 5 x 20
		600	<i>ʔakak boʔ ?inik</i>	6 x 5 x 20
		800	<i>wašik boʔ ?inik</i>	8 x 5 x 20
		1000	<i>šiʔ</i>	1000
		2000	<i>ɕab šiʔ</i>	2 x 1000
		3000	<i>ʔoš šiʔ</i>	3x1000
		5000	<i>boʔ ?i šiʔ</i>	5x1000
		8000	<i>wašik šiʔ</i>	8x1000
		20000	<i>hun ?inik šiʔ</i>	1x20x1000

As shown in Table 4.4, the terms for numerals from 1 to 10 represent basic nouns and the numerals between 11 and 19 are compounds which follow the pattern: 10 + 1 (for 11), 10 + 2 (for 12), and so on. The term for ‘twenty’ is *inik* ‘man’, and it refers to the total number of the digits of a human being. The numerals between 20 and 119 are

⁹⁵ The numerals are based on information provided by Tapia Zenteno (1767) and reproduced in Edmonson (1988: 416-417) with her original orthography.

expressed as multiplications of 20 according to the pattern $x20 + y$, as in $1x20 + 1$ (for 21), 2×20 (for 40). The multiplications of a hundred, i.e. 200, 300, 400, 500, etc. follow the formula x times $5x20$, which suggests that the system presented by Tapia Zenteno is a Hispanicised vigesimal system. If the numerals provided in Tapia Zenteno's grammar followed the traditional vigesimal counting, 200 would be expressed as $10x20$, 300 as $15x20$ and 400 would have a special name (the equivalent to *tzontli* in Nahuatl). In Tapia Zenteno's missionary work the numeral *bó' inik* is therefore a lexicalised form meaning 'hundred' that is used in compounds that refer to higher numbers in a similar way the term *cien(to)* 'hundred' is used in Spanish.

Further evidence of the Hispanisation of the counting system described in Tapia Zenteno's grammar is the lack of special status for the numerals 400 and 8,000. The equivalent of 400 provided by Tapia Zenteno (1767: 80) is erroneously translated to Tének as *tsáb bó' inik*, literally 'two five twenties' ($2x5x20$), i.e. 200. As noted by Edmonson (1988: 418, fn. 1), this appears to be an obvious error ("it should be *çe:ʔ boʔ ʔinik*").⁹⁶ The fact that Tapia Zenteno does not provide a special (single word) name for 400 suggests that the special status of this numeral as an exponentiation of 20 had probably been lost before 1767. With respect to 1,000, the equivalent of this numeral is, according to Tapia Zenteno, *xi'* (literally 'hair'), which later also appears as part of compounds expressing multiplications of 1,000, as in *waxik xi'* 'eight thousand' ($8x1,000$) (Tapia Zenteno 1767: 76). Given that the meaning of *xi'*, i.e. 'hair', is parallel to the meaning of the Nahuatl word used to refer to 400 (*tzontli*, see §4.4.3), I hypothesise that the original meaning of *xi'* was '400', and not '1,000', as written by Tapia Zenteno (1767: 74). The change in meaning of *xi'* resembles the shift in meaning undergone by *tzontli*, as it was described in the previous section.⁹⁷

The counting system presented in Tapia Zenteno's grammar is therefore a hybrid of the traditional vigesimal system of Tének and the decimal system of Spanish. However, it remains unclear whether the numerals listed by the author were in use among the

⁹⁶ Lorenzana (1896: 24-25) also provides the compound *tsé'bó' iníc* (lit. $4x5x20$) as the native Tének equivalent of 'four hundred'.

⁹⁷ Larsen (1955: X) does not confirm the shift in the meaning of *xi'* as 'thousand'. Instead he provides the compound *lájuj i bó' inikchik* (lit. $10x5x20$) as the Tének native equivalent of 1,000.

native Tének speakers around 1767, or whether the traditional vigesimal counting was used instead. Since it was customary for missionary grammars to follow the Latin model of language description, it is also possible that the Tének equivalents of the Spanish numerals (especially the higher numerals) were guessed by the author and not elicited from native speakers.

The numeral system applied in contemporary Tének shows further changes towards the simplification and decimalisation of the traditional vigesimal system. The breakdown of the old vigesimal system, also noted by Edmonson in the 1980s (1988: 415), has been advancing even further with gradual language attrition. Aside from the pattern borrowings described above, the native word for ‘ten’, i.e. *lájuj*, became a base term used in compounds referring to the multiplications of 10, employed mostly for numerals for 30 and over.⁹⁸ This outcome of contact with Spanish resembles the innovative use of *mahtlactli* ‘ten’ in Nahuatl, as described in the previous section. In example (4.40) the numeral 32 is expressed according to the decimal pattern, i.e. $3 \times 10 + 2$ (a), instead of a more traditional vigesimal formula $20 + 10 + 2$ (b).

(4.40) Decimalisation in Tének (Edmonson 1988: 415-416) [my glosses]

- a. $\rho o:š$ *lahu* $\phi a:b$ ρi *tamub*
 three ten two INDEF time
 ‘32 years ago’ (i.e. $3 \times 10 + 2$)
- b. $\rho inik$ *lahu* $\phi a:b$
 twenty ten two
 ‘32’ (i.e. $20 + 10 + 2$)

The process of decimalisation of the native Tének numerals is also noticeable in the change in meaning of the term *inik*, which traditionally referred to ‘twenty’ and which is now used in reference to the quantity ‘ten’. An illustration of this semantic shift is presented in (4.41), in which the numeral 44 is expressed as *tsé' inik tsé'* which traditionally would translate as $4 \times 20 + 4$, but here the intended meaning of this compound is $4 \times 10 + 4$. Although this innovative use of *inik* could be classified as a

⁹⁸ An innovative use of the numeral *lájuj* was also attested in the Tének dialect spoken in Xilosuchil in Veracruz. Ochoa Peralta (1984: 93) recorded that in this variety ‘twenty’ is expressed as *lájuj lájuj* (literally ‘ten ten’). I was not able, however, to find attestations of a similar construction in modern Tének used in the Huasteca Potosina.

simple error, the use of *inik* as a term referring to ‘ten’ by a different speaker in (4.42) provides another piece of evidence that it is not solely an instance of idiolectal variation, but rather a more widespread phenomenon.⁹⁹ It should be also noted that both sentences (4.41) and (4.42) were elicited from fluent Tének speakers.

(4.41) Decimalisation in modern Tének (LFH)

In=kw-a'-al *tse'* *inik* *tsé'* *i* *tamub*
 A3=have-TR-INCOMPL **four** **ten**[sic] **four** INDEF time
 ‘He is **44** years old.’

(4.42) Decimalisation in modern Tének (AFF)

Wawa' *pél* *waxik* *inik* *ti* *inik*
 1PL COP **eight** **ten**[sic] PREP man
 ‘We are **80** men.’

Apart from pattern borrowings, the influence of Spanish on the counting system in Tének extends to direct lexical borrowings of numerals. First of all, Spanish numerals can be combined with native Tének numerals. Such a situation applies usually to expressions of higher numbers in which such Spanish numerals as *mil* ‘thousand’ or *cien(to)* ‘hundred’ are mixed with lower Tének numerals. In example (4.43) the Spanish numeral *ciento* is multiplied by the Tének native numeral *tsé'* ‘four’ and then complemented by a vigesimally expressed native numeral *tsáb inik lájuj akak* ‘fifty six’ (i.e. $2 \times 20 + 10 + 6$). As is evident in this example, in modern-day Tének spoken in the Huasteca *ciento* has replaced the native numeral *bó' inik* described above. As it was reported by Edmonson (1988: 416), the Spanish loan for 100 was also combined with the Tének word *ts'ejel* ‘half’ to indicate 50 (*ts'ejel ciento* ‘half a hundred’).

⁹⁹ According to John Sullivan (p.c., 18 March 2022), it is possible that *inik*, which traditionally referred to a basic counted set (i.e. 20 in the vigesimal system), continues to refer to the basic counted set but, because of the decimalisation of the entire counting system in modern Tének, it is no longer associated with 20, but rather with 10.

- (4.43) Use of Spanish loan *ciento* in modern Tének (LFM)
- | | | | | | | |
|-----------------------|--------------|----------------|---------------|---------------|--------------|-------------|
| <i>U=kw-a'-al</i> | <i>tsé'</i> | <i>ciento</i> | <i>tsáb</i> | <i>inik</i> | <i>lájuj</i> | <i>akak</i> |
| A1.SG=have-TR-INCOMPL | four | hundred | two | twenty | ten | six |
| <i>i</i> | <i>tumín</i> | <i>tin</i> | <i>dheyáb</i> | <i>an</i> | <i>tumín</i> | |
| INDEF | money | PREP | bag | DEF | money | |
- ‘I have **456** pesos in the wallet.’

Another result of the influence of Spanish on the expression of quantities in Tének is the progressive replacement of native numerals with their Spanish equivalents. Whereas Edmonson remarked in 1988 that all numbers above 25 were borrowed from Spanish (1988: 415), thirty years later it is difficult to hear native Tének numerals for quantities over 4 or 5. Example (4.44) illustrates the Spanish loan for the numeral ‘ten’.

- (4.44) Spanish loan for numeral ‘ten’ in modern Tének (TSA)
- | | | |
|-------------|----------|--------------|
| <i>Diez</i> | <i>i</i> | <i>casas</i> |
| ten | INDEF | houses |
- ‘ten houses’

Although native Tének numerals are rarely used in practice, it is still possible to elicit them with more fluent speakers. The elicitation process may involve, however, a lot of hesitation and frequent errors since the use of the traditional Tének numerals is no longer intuitive. As an example, one of the more fluent speakers would confuse the Tének equivalent of five (*bó'*) with the terms for four (*tsé'*) and six (*akak*).

To summarise, language change in the Tének numeral system is twofold and includes both pattern borrowings, as well as direct Spanish numeral loans. The pattern borrowings reflect the decimalisation of the traditional vigesimal system in which the grouping of objects and people follows the base-10 model. One piece of evidence for the decimalisation of the native numeral system involves the loss of the special status of the exponentiations of 20, i.e. 400 and 8,000. The native term for 400, i.e. *xi'* has shifted its meaning to refer to 1,000. Moreover, multiplications of ten are expressed as compounds in which the native term *lájuj* ‘ten’ is used as the base. The traditional base-20 term *inik* is also gradually changing its meaning to refer to ‘ten’. The transition stage of hybridisation of the native numeral system also involved the use of the native numeral *bó' inik* ‘five twenties, i.e. 100’ as a lexicalised term applied to express

multiplications of 100, in a way similar to the Spanish use of the term *ciento*. Finally, the use of *ciento*, as well as other direct Spanish numerals, is another outcome of contact with Spanish. The Spanish numerals were first used only to refer to powers of 10 and later gradually replaced other numerals, including those as low as 4 or 5.

4.4.5. Summary

Nahuatl and Tének display remarkably similar changes in their expression of cardinal numbers. Both languages have undergone shift from the traditional Mesoamerican vigesimal system first, to a hybrid vigesimal-decimal system, next to a decimal system, and finally, to a near complete replacement of the native system with the Spanish loan numerals. Analogous changes include the loss of the special status of the exponentiations of 20, i.e. 400 and 8,000, and the use of the native terms originally referring to 400 (i.e. *tzontli* in Nahuatl and *xi'* in Tének) as the terms referring to 1,000. In both Nahuatl and Tének the native terms referring to 100 started to serve as base terms to express quantities referring to multiplications of a 100. Moreover, the native Nahuatl and Tének equivalents for 'ten' (*mahtlactli* and *lájuj*, respectively) are also innovatively used as bases. In addition to pattern borrowings, contact with Spanish has resulted in lexical borrowings. Whereas in the transitional stages of contact Spanish loans only replaced the higher native terms to refer to multiplications of 1,000 and then of 100, in more recent times Spanish loan numerals have been adopted for all numerals except for the lowest ones (up to 4 or 5). A comparison of changes in the expression of numbers in Nahuatl and Tének and the principles of counting in the three stages (traditional, transitional and modern) are illustrated in Table 4.5.

Table 4.5. Changes in Nahuatl and Tének numeral system.

Numeral	Classical Nahuatl (traditional)	Transitional Nahuatl	Modern Nahuatl	Traditional Tének	Transitional Tének	Modern Tének	Spanish
1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5
6-9	5+n	5+n		6-9	6-9		6-9
10	10 (<i>mahtlactli</i>)	10		10 (<i>lájuj</i>)	10 (<i>lájuj</i>), or <i>inik</i>		10 (<i>diez</i>)
11-15	10+n	10+n		10+n	10+n		10+n
16-19	15+n	10+n		10+n	10+n		10+n
20	20 (<i>cempoalli</i>)	20		20 (<i>inik</i>)	20 (<i>inik</i>), or <i>lájuj lájuj</i> (10+10)		20 (<i>veinte</i>)
21	20+1	20+1		20+1	20+1		20+1
22	20+2	20+2		20+2	20+2		20+2
30	20+10	20+10, or 3x10		20+10	20+10, or 3x10		30
40	2x20	2x20, or 4x10	Spanish numerals	2x20	2x20, or 4x10	Spanish numerals	40
100	5x20	Spanish, or <i>tzontli</i>		5x20	5x20 (<i>bó' inik</i>), or Spanish		100 (<i>cien</i>)
120	6x20	<i>ciento cempoalli</i> (100+20) or Spanish		?6x20	5x20+20, or <i>ciento inik</i> (100+20) or Spanish		100+20
200	10x20	<i>ome ciento</i> (2x100), or Spanish		?10x20	2x(5x20) or <i>tsáb ciento</i> (2x100), or Spanish		2x100
400	400 (<i>tzontli</i>)	<i>nahui ciento</i> (4x100), or Spanish		?400 (<i>xi'</i>)	4x(5x20) <i>tsé' ciento</i> (4x100), or Spanish		4x100
500	400+(5x20)	<i>macuilli ciento</i> (5x100), or Spanish		?400+(5x20)	5x(5x20) <i>bó' ciento</i> (5x100), or Spanish		5x100
1000	(2x400)+(10x20)	Spanish, or <i>tzontli</i>		?(2x400)+(10x20)	Spanish, or <i>xi'</i>		1000 (<i>mil</i>)
2000	5x400	<i>ome mil</i> (2x1000), <i>ome tzontli</i> , or Spanish		?5x400	<i>tzáb xi'</i> (2x1000), <i>tzáb mil</i> (2x1000) or Spanish		2x1000
8000	8000 (<i>xiquipilli</i>)	<i>chicueyi mil</i> (8x1000) or Spanish		8000	<i>waxik xi'</i> (8x1000) or <i>waxik mil</i> (8x1000) or Spanish		8x1000

4.5. Concluding remarks

Both Nahuatl and Tének have undergone changes in their traditional nominal categories that have made these two Mesoamerican languages more similar to Spanish. Most of the changes can be classified as pattern borrowings, including the replacement of distinct plural markers for absolutive and possessed nouns with one universal marker in Nahuatl. This kind of borrowing is also visible in the process of decimalisation of the traditional Mesoamerican counting system. As a result of contact with Spanish, the number marking of nouns is no longer sensitive to their animacy, either in Nahuatl or Tének. A similar regularisation occurs in the area of possessive marking in Tének, in which almost all nominal referents, aside from body parts, kinship terms and bodily manifestations, are treated as alienable. This change in possessive marking can also be perceived as a linguistic manifestation of cultural changes in Tének society, in which many objects which were previously considered culturally significant and of special value are now treated as easily exchangeable. The influence of *mestizo* culture and Western worldview is also noticeable in the fact that nouns denoting natural resources - despite being considered unfit for possession in traditional Tének - are now attested in their possessive form. In addition to numerous structural borrowings, several lexical borrowings can be attested in the analysed areas of nominal categories. As I have shown, the Spanish plural marker *-s/-es* has been borrowed by both languages, although in Tének it is only used to mark the plurality of Spanish loan nouns. Numerous direct lexical borrowings can be noted in the area of numerals, in which almost all, aside from numerals <5, have been replaced with the Spanish equivalents. A comparison of the changes in nominal categories and numerals in Nahuatl and Tének, and the corresponding features in Spanish is presented in Table 4.6.

Table 4.6. Typological changes in modern Nahuatl and Tének (an asterisk marks an innovation with respect to the traditional system).

Feature	Modern Nahuatl	Modern Tének	Spanish
Absence of plural markers on inanimate nouns	no*	no*	no
Use of overt plural marking with numerals and quantifiers	yes*	yes* (with quantifiers)	yes
Distinct possessive plural suffixes	<i>-huan</i> (disappearing)	no	no
Use of plural suffix <i>-s/-es</i> (Spanish)	yes*	yes* (with Spanish loan nouns)	yes
Alienable vs. inalienable possession	inherent possession but all nouns can appear in the absolutive form	yes	no
Extensions from ego & consumed items marked as inalienably possessed nouns	n/a	no*	no
Vigesimal numeral system	no*	no*	no
Special status of powers of twenty (20, 400, 8,000, etc.)	no*	no*	no

As I have shown in this chapter, the morphosyntactic changes that can be observed in many areas of nominal categories in the two indigenous languages stem from a semantic reorganisation of both systems and mirror many aspects of Spanish grammar. Despite the fact that most of the changes are ongoing and there is a high degree of variation, there is a clear tendency toward the Hispanisation of the traditional Mesoamerican nominal traits. Hispanisation, regularisation and simplification of the traditional Nahuatl and Tének can also be attested in the area of verbal categories which I analyse next.

Chapter 5: Changes in verbal morphology

5.1. Introduction

This chapter explores changes in selected features of verbal morphology in Nahuatl and Tének that can be attributed to contact with Spanish. In particular, I focus on two valency increasing operations: the causative and the applicative, and one valency decreasing operation, i.e. noun incorporation. In addition, I analyse middle voice marking in Tének. In the first part, I demonstrate how Nahuatl and Tének causative suffixes are gradually losing their productivity and are being replaced with periphrastic constructions in which native verbs function as causative auxiliaries following the Spanish model *hacer que* + [verb of effect]. I then move on to explore the changes in applicative marking and I show that, similarly to the changes in causative marking, the marking of the applied object is evolving from a morphological towards a syntactic operation. I demonstrate that the expression of the different semantic functions of the applicative is now performed in prepositional phrases, which are modelled on Spanish and are often headed by Spanish loan prepositions. The third part of this chapter deals with noun incorporation and shows how this process is becoming less productive. I provide examples in which direct generic objects, which were traditionally incorporated in the verbal complex of both Nahuatl and, to a lesser extent, also in Tének, now tend to be expressed in separate nominal phrases. The last feature that is examined in this chapter is middle voice in Tének. I analyse the traditional and contemporary semantic domains in which this operation was typically used, and I demonstrate that contact with Spanish has triggered the use of middle voice in reflexive meanings.

The structure of this chapter is as follows. In §5.2 I analyse changes in causative marking in both Nahuatl and Tének. The next section, §5.3 deals with applicative marking and §5.4 focuses on noun incorporation. Section §5.5, analyses middle voice marking in Tének. Concluding remarks are provided in §5.6.

5.2. Causative

5.2.1. Introduction

The first part of this chapter contains an analysis of changes in the expression of causation in Nahuatl and Tének. I begin with a brief theoretical introduction to the topic of the causative and discuss three main formal ways to express causation, i.e. lexical, morphological and syntactic. I then show how in traditional Nahuatl and Tének a typical causative construction involved a monoclausal expression, in which both the cause and its effect were expressed morphologically as suffixes attached to verb stems. I also briefly discuss the topic of reflexive causatives used in honorific speech in Classical Nahuatl. The traditional causatives in the indigenous languages of the Huasteca contrast with how causation is expressed in Spanish, which applies either lexical or syntactic causation. I show the impact of Spanish on causatives in Nahuatl and Tének by providing several examples that confirm that both languages have developed biclausal causatives that are modelled on the Spanish *hacer que* + [verb of effect] formula. Thus, I demonstrate how Nahuatl uses its native verb *chihua* as a causative auxiliary verb followed by the particle *ma* and a verb in the optative mood. In the case of Tének, the native verb *t'aj* is used in the same function followed by an embedded clause introduced by the particle *ka* and a predicate of effect preceded by a Set B pronominal marker. I also illustrate how certain verbs in Nahuatl are used in the causative sense but without the required causative morphology. I conclude this part of the chapter with a short summary.

5.2.2. Linguistic means of expressing causation

Causative constructions, as in the English *My friend made me smile*, express complex situations with two component events: the causing event (*made me*) and the caused event (*smile*) (Comrie 1989: 165-166; Song 2001: 256-259). The underlying intransitive sentence of the above causative construction is: *I smile*. The causing event involves a causer doing something or initiating something. The caused event, on the other hand,

entails a causee fulfilling an action, or undergoing a change of condition or state which results from the action of the causer. Causative constructions result in an increase of valency of a verb by bringing a new argument (the causer) into a transitive clause of which the original subject becomes the object. Causative constructions can be formed on the basis of either intransitive (e.g. *to smile*) or transitive (*eat* [something], *kick* [something or someone], etc.) underlying sentences.

Languages have different means to express causation. The three main types of causatives are: lexical (semantic); syntactic, i.e. ‘periphrastic/analytic’ in Payne’s terms (1997: 176) or ‘compound’ in Song’s (2013) terms; and morphological. Whereas some languages may use only one type, other languages may apply different means to convey causation. English and Spanish, for example, have both lexical and syntactic forms to express causation. Examples of lexical causative forms in English include the following verbs: *lie - lay*, *rise - raise*, or *die - kill*. Examples of lexical causative forms in Spanish are, e.g. *morir* ‘die’ - *matar* ‘kill’ or *comer* ‘eat’ - *alimentar* ‘feed’.

Some languages can also express causation using syntactic means such as compounds, periphrastic constructions, idiomatic expressions or auxiliary verbs. According to Song (2013), periphrastic causative constructions have three properties: (1) the predicate of cause and the predicate of effect are in two separate clauses, (2) the causative expression is biclausal, and (3) the predicate of cause must be foregrounded and the predicate of effect must be backgrounded. The predicate of cause involves the use of a causative auxiliary verb, which usually derives from such verbs as the equivalents of the English verbs *to do*, *to give*, or *to take* (Heine and Kuteva 2002: 328). For example, in English, the causative auxiliary verb is *to make* or *to cause*. Spanish applies biclausal causative constructions in which the causer’s action is expressed in a separate verb. This verb appears next to a basic verb and no other elements (apart from possibly a negative particle) appear between the basic and the special causative verb in such a way that the two verbs form a single predicate (or, compound causative verb) (Song 2013). An example of such causative construction in Spanish is *Le haré leerlo* ‘I will make her/him read it’, in which an inflected causative verb *hacer* ‘to do’ appears before a basic verb *leer* ‘to read’.

Apart from lexical and syntactic means, there are also morphological devices to convey causation. These include a range of operations such as: prefixing, infixing, circumfixing, vowel or consonant alternation, repetition of a consonant in the basic verb, internal vowel lengthening, reduplication of the basic verb, or a tonal change (Song 2013). Morphological causation was traditionally employed in Nahuatl and Tének. In the following section I describe causative operations in Nahuatl and in the section that follows I deal with the same topic in Tének.

5.2.3. Causative constructions in Nahuatl

Derivation of a causative verb in traditional Nahuatl involves adding the causative suffix directly to a verb stem. In Classical Nahuatl the causative suffix can have several forms including *-tia/-ltia/-itia/-lia/-oa/-altia/-huia/-a*. In (5.1) the basic (non-causative) intransitive sentence is presented in (a) and its causativised variety is shown in (b). The verb in (b) receives not only the causative marker (*-tia*), which indicates that the verb has two arguments, but it is also marked for its subject and object. Both the causer's action (*-tia*), and its effect (*miq-*) are expressed in one verbal complex.

(5.1) Deriving a causative meaning in Nahuatl

- a. *Ø-miqui ce piyoh-Ø*
 SBJ.3SG-die one chicken-ABS.SG
 'A chicken dies.'
- b. *Xochitl Ø-qui-miq-tia ce piyoh-Ø*
 Xochitl SBJ.3SG-OBJ.3SG-die-CAUS one chicken-ABS.SG
 'Xochitl kills a chicken.'

Bartholomew and Mason (1980) distinguish between two types of causatives in Nahuatl: (1) effective causative, which is marked by the suffix *-a*, as in *patlahua* '(s)he widens it' (cf. *patlahui* 'it becomes wide'), and (2) compulsive causative, which is marked by the suffix *-tia/-ltia*, as in *nemitia/nemiltia* 'make live or give life' (cf. *nemi* 'to live').¹⁰⁰ The effective causative implies that a volitional agent does something to an object that

¹⁰⁰ John Sullivan (p.c., 18 March 2022) clarifies that the effective causative in Nahuatl can also be marked with the suffix *-oa*, which is used with intransitive verbs ending in the verbers *-ihui* and *-ahui*, and the suffix *-lia*, which is used with intransitive verbs ending in the verbers *-ti*, *-ya* and *-tiya* (cf. Andrews 2003: 182-210).

results in a change of state (Bartholomew and Mason 1980: 198). The compulsive causative, on the other hand, is added to either a transitive or an intransitive verb stem and it indicates that a volitional agent does something to influence another volitional agent to do something (Bartholomew and Mason 1980: 199). According to this classification, the example in (5.1) illustrates the second type of causative, i.e. the compulsive causative, the type of causative this chapter focuses on.

In Classical Nahuatl the causative was an important tool to express regard or esteem towards a person considered of a superior social standing. The object of a causative used in honorific speech was mostly marked with the 3rd person reflexive prefix *mo-*.¹⁰¹ The use of the reflexive causative communicates that “an honored person caused him- or herself to act” (Bartholomew and Mason 1980: 203), as shown in (5.2).

- (5.2) Reflexive causative in Classical Nahuatl
 (Bartholomew and Mason 1980: 203) [my glosses]
Ø-mo-cochi-tia
 SBJ.3SG-REFL.3SG-sleep-CAUS
 ‘the lord sleeps’ (lit. ‘he causes himself to sleep’)

As it can be seen from the description above, the morphological causativisation strategies in traditional Nahuatl differ from the syntactic causative applied in Spanish. As I show below, contact with Spanish has affected the expression of causation and resulted in, either a complete disappearance of the causative morphology (in the case of some younger speakers), or the replacement of the purely morphological causative with a new type of causative in which morphological and periphrastic characteristics are combined to form a hybrid Hispanicised causative construction.

The loss of causative morphology appears to be a phenomenon present in many varieties of Nahuatl. Flores Farfán (2008), for example, describes changes in the expression of causation in Chilacachapa Nahuatl spoken in Guerrero. Example (5.3) illustrates the loss of the causative suffix, despite the fact that an intransitive verb *miqui*

¹⁰¹ According to John Sullivan (p.c., 18 March 2022), the use of the 1st person *no-* and 2nd person *to-* reflexive prefixes was traditionally also possible in causatives employed in honorific speech.

Similarly, causative morphology is only used in the Nahuatl spoken in the Huasteca Potosina today to signal causation between either two volitional entities or an animate entity acting on an object.¹⁰²

A more recent change in causative constructions involves the introduction of a hybrid causative that displays features of both morphological and periphrastic causative. This innovative expression of causation involves the use of a biclausal causative construction which includes the predicate of cause (verb *chihua* ‘to do’) complemented by the particle *ma* ‘so that’, followed by the predicate of effect. In addition, the native Nahuatl causative suffix appears on the causative auxiliary verb. The construction (*chihua*-CAUS *ma* [verb of effect]) appears to involve a double causative, in which there is not only the obligatory causative morphology on the causing event verb (*chihua*), but also a periphrastic causative construction modelled on the Spanish formula *hacer que* + [verb of effect], as illustrated in (5.7). Note how in Spanish the particle *que* requires the use of a verb in its subjunctive mood. In Nahuatl the particle *ma* is followed by a verb in its optative form, which appears to fulfill the role parallel to the Spanish subjunctive.

(5.7) Hybrid morphological-periphrastic causative in modern Huasteca Nahuatl (GHH)

	<i>Ø-quin-titlan-ti-nen-qui</i>		<i>inin-soldados</i>	
	SBJ.3SG-OBJ.3PL-send-LIG-go.around-NPRS		POSS.3PL-soldiers[PL]	
<i>para</i>	<i>ma</i>	<i>Ø-quin-cui-qui-h</i>	<i>nochi</i>	<i>tioh-meh</i>
for	SR	SBJ.3PL-OBJ.3PL-fetch-INPURP.OPT-PL	all	uncle-PL
	<i>Ø-itzto-z-ce-h</i>		<i>cal-ih-tic</i>	
	SBJ.3PL-be.placed-FUT-NPRS-PL		house-stomach[RTL]	
<i>huan</i>	<i>Ø-quin-chihual-ti-h-ti-nen-que-h</i> ¹⁰³			
CONJ	SBJ.3PL-OBJ.3PL-carried.out.action-VR-CAUS-LIG-go.around-NPRS-PL			
<i>ma</i>	<i>Ø-tequipano-can</i>			
SR	SBJ.3PL-work-OPT.PL			

‘He would go around sending their soldiers so that they come and fetch all the people who would be inside the houses and they would go around making them work.’

¹⁰² Although there are no records of the use of the reflexive causative in Nahuatl spoken in the Huasteca in the pre-Columbian or colonial times, considering how closely related Classical Nahuatl and colonial Huasteca Nahuatl were, it is fair to assume that also Huasteca Nahuatl used causative in honorific speech.

¹⁰³ The original causative suffix in this verbal form was *tih-*, but it became deleted through haplology because of the similarly sounding ligature *ti-* that followed it, resulting in the sequence *tih-ti* becoming *h-ti* (John Sullivan, p.c., 18 March 2022).

This type of an innovative causative construction is frequently attested in modern Nahuatl spoken in Xilitla and is also exemplified in (5.8) below.

- (5.8) Periphrastic causative in modern Huasteca Nahuatl (MMS)
Pedro Ø-qui-chihua-ti ma Ø-tlacua pa Goyo
 Pedro SBJ.3SG-OBJ.3SG-make-CAUS SR SBJ.3SG-eat DEM Goyo
 ‘Pedro made Goyo eat.’

Similar innovations in causative constructions can be observed in modern Tének, as illustrated in the following section.

5.2.4. Causative constructions in Tének

Traditional causative constructions in Tének resemble in many ways those described above in Nahuatl. Tének, as well as Classical Nahuatl, applies the morphological causative expressed by two causative markers, either *-dh* or *-b*. The causative morpheme is usually suffixed directly to the CV(:)C verbal root and precedes a thematic suffix, which is either transitive, inaccusative or inergative (see §3.3.6). Example (5.9) illustrates a typical Tének causative construction, in which an intransitive verb *tsem* ‘to die’ is turned into a transitive verb by adding the causative, transitive and aspectual morphology.

- (5.9) Causative in Tének (Edmonson 1988: 189) [glosses modified]
Tam ka=Ø çem-θ-an-Ø ʔan to:ro leh
 when SB=B3.SG die-CAUS-DER-COMPL DEF bull very
t'učat ʔin=čukul
 full A3.SG=stomach
 ‘When the bull is killed, its stomach is very full.’

An additional example of a causative construction from colonial Tének is given in (5.10).

- (5.10) Causative construction in colonial Tének
 (Tapia Zenteno 1767: 106, after Meléndez Guadarrama 2011: 183) [glosses modified]
 <Ma azitamzamal xitama ana atqualim>
 ma Ø=ʔa=θit'am-θa-a:mal šitama
 INTERR B3.SG=A2.SG=conceive?-CAUS-PFV someone
 ʔana=ʔatkw'alim
 POSS.2SG=family
 'Have you impregnated (made pregnant) someone from your family?'

As for the use of causative constructions in honorific speech, unfortunately this topic has not been explored in the existing studies on Tének. It is, in fact, uncertain if the causative was used in this function in colonial Tének. Causative constructions with an honorific meaning are not used in modern Tének, but it is not possible to establish whether it is an innovation with respect to a more traditional variety of this language or not. There are, however, other novel causative constructions in modern Tének that can be attributed to contact with Spanish.

One of the innovations modern Tének shares with Nahuatl is the emergence of the syntactic causative. The biclausal causative formula in Tének involves the use of the verb *t'aj* 'to make' followed by the subordinated clause in which the caused event is expressed. The subordinated clause is introduced by the particle *k(a)* combined with a Set B pronominal marker (i.e. the K-B Set, as shown in §3.3.7). The periphrastic causative formula illustrated in (5.11) is, in a similar manner to Nahuatl, also patterned on the Spanish biclausal causative construction *hacer que* + [verb of effect].

- (5.11) Syntactic causative in Tének (Edmonson 1988: 242) [glosses modified]
ʔin=t'ah-aʔ-Ø **ka=Ø** **wal(a)b-in-Ø**
A3.SG=make-TS-COMPL **SR=B3.SG** **sin-DER-COMPL**
 ʔa Adán ʔan φan
 HON Adam DEF snake
 'The snake made Adam sin.'

Another periphrastic causative formula involves the use of the same causative auxiliary verb *t'aj* (with an ergative personal marker) followed by an embedded clause introduced not by the particle *k(a)* but by the preposition *abal* 'for', in which the causee is introduced. The last syntactic element is the expression of the caused event that appears

after the *k(a)* subordinator (K-B Set). This type of construction is illustrated in sentence (a) in example (5.12), along with a more traditional expression of the causative presented in (b).

(5.12) Periphrastic causative in modern Tének (AFF)

a. *A* *María* *in=t'aj-a-al* *abal* *in=kwitól-il*
 HON *María* A3.SG=**make**-TR-INCOMPL **for** A3.SG=child-POSS
ka=Ø *chik'-ats*
 SR=B3.SG urinate-COMPL
 'María makes her son urinate.'

b. Morphological causative in traditional Tének

A *María* *in=chik'-dh'-a'-Ø* *in=kwitól-il*
 HON *María* A3.SG=**make**-CAUS-TR-COMPL A3.SG=child-POSS
 'María makes her son urinate.'

To sum up, modern Tének has developed syntactic causative constructions which function together with a more traditional morphological expression of causation. This innovation is undoubtedly a result of contact with Spanish since these biclausal constructions can only be attested in modern Tének and are clearly modelled on the Spanish *hacer que* + [verb of effect] causative formula.

5.2.5. Summary

As a result of contact with Spanish both Nahuatl and Tének have developed an innovative expression of causation that involves biclausal constructions modelled on the Spanish causative formula *hacer que* + [verb of effect]. Thus, in Nahuatl, the verb *chihua* (and its causative form *chihualtia*) has developed into a causative auxiliary verb followed by the particle *ma* and a verb in an optative mood. A similar phenomenon can be seen in Tének in which the verb *t'aj* 'to make' now functions as the auxiliary verb in causative constructions and is followed by a K-B Set marker. A periphrastic causative is gradually replacing morphological causatives in both languages of the Huasteca. Moreover, originally intransitive verbs used in a causative sense without the causative suffix (but with the object prefix) can be attested in modern Nahuatl. Furthermore, reflexive causatives used in colonial Nahuatl in honorific speech have been lost in modern Nahuatl. The innovations that can be observed in causative constructions in

both languages can be interpreted as a move towards a more analytic language structure and a decrease in the morphological complexity of verbs. A further reduction in verbal categories is also evident in another valency increasing operation, namely the applicative. This feature is discussed next.

5.3. Applicative

5.3.1. Introduction

This part of the chapter explores the changes in another valency increasing operation, the applicative. First of all, I explain what the applicative is and what semantic roles can be conveyed by using the applicative marker. I then show how adding the applicative suffix in traditional Nahuatl promotes a peripheral argument of a verb, such as a benefactive or a malefactive, to one of the arguments marked on the verb. I demonstrate how the reflexive applicative was used in honorific speech in Classical Nahuatl, similar to the reflexive causative. Then I discuss changes in applicative marking that can be attested in modern Nahuatl. I show examples that illustrate the loss of the morphological applicative and a gradual move towards a syntactic expression of benefactive, malefactive and other roles previously expressed by the applicative marking. In the second part I analyse the changes in applicative marking in Tének. By showing numerous examples I demonstrate how the morphological applicative is gradually being replaced with a periphrastic applicative, similarly to Spanish. I show that in modern Tének peripheral verbal arguments are now often expressed in prepositional phrases introduced by different prepositions, depending on the semantic role fulfilled by the argument. I finish this section with a brief summary.

5.3.2. What are applicatives

The presence of morphological applicatives, like causatives, is a typical feature of agglutinating and polysynthetic languages. Morphological applicatives are common in

Uto-Aztecan and Mayan languages, including Nahuatl and Tének. They are often found in languages that display a rich verbal morphology and have little or no case marking (Polinsky 2013). Applicatives involve promoting an oblique argument of a verb (e.g. benefactive, locative, instrumental, etc.) to the role of direct object (Payne 1997: 186). This ‘new’ object of a verb marked with the applicative marker can be referred to as the ‘applied’ object (Polinsky 2013). Applicatives typically affect intransitive verbs which become two-argument verbs that have a subject and an applied object. In the case of transitive verbs, a ditransitive three-argument verb is created. The original object of the verb is, however, no longer expressed morphologically and the object affix now refers to the applied object. In ditransitive verbs, adding an applicative is, in fact, not a valency increasing operation since adding the applicative marker does not change the number of arguments of a verb (Payne 1997: 187).

Applicatives share some characteristics with causatives, but there are also many differences between the two operations. Similarly to causatives, applicatives can also be formed from both transitive and intransitive bases, although the latter are less common. In contrast to causativisation, which increases the complexity of the structure of an event (*cause* [verb], instead of [verb], as in *cause to swim*, instead of *to swim*), in the case of applicatives the event structure is not changed, but only a new participant is added. Whereas causativisation adds an agent to the argument structure of the verb and basic transitivity adds the theme (or patient) to the verb, the use of the applicative marking involves adding a peripheral argument different from an agent or a patient.

Many semantic roles can be associated with the applicative. In most cases, the new argument is the benefactive, locative, or instrumental. Additionally, the applicative may be associated with the applied object representing possessor, circumstance/event (time), comitative, or a substitute (expressing that the action is performed on someone’s behalf) (Polinsky 2013). Applicatives can also express malefactive, i.e. the adversely affected object. According to Polinsky (2013), the applicative may be constrained by the hierarchy of semantic roles presented in Figure 5.1. Thus, if a language uses applicatives to express a semantic role to the right (e.g. location), it also expresses a semantic role located to its left (goal, theme and agent).

agent > theme (patient) > goal (recipient, benefactive) > location > other roles

Figure 5.1. Semantic roles associated with the applicative (Polinsky 2013).

In this analysis of changes in applicatives, I mostly focus on the expression of benefactive and malefactive. The traditional applicative marking in Nahuatl will be discussed first, followed by an analysis of changes in the expression of applicative caused by contact with Spanish.

5.3.3. Applicative marking in Nahuatl

In Classical Nahuatl the applicative was a productive operation used to express a wide spectrum of semantic functions. It involved adding the applicative suffix *-ia*, *-lia* or *-huia/-lhuia/-huilia* to either intransitive or transitive verb bases.¹⁰⁴ Example (5.13) illustrates an intransitive verb *pixca* ‘to harvest’ in its non-applicative form (a) and the same verb with the applicative marking (b), which refers to the benefactive of the action of harvesting. The benefactive, i.e. the applied object, is also marked with the object prefix *c-*.

(5.13) Applicative marking on intransitive verbs in Classical Nahuatl
(Lockhart 2001: 14) [my glosses]

- a. *ni-pixca*
SBJ.1SG-harvest
‘I harvest’
- b. *ni-c-pixqui-lia*
SBJ.1SG-**OBJ.3SG**-harvest-APPL
‘I harvest for him/her’

Deriving the applicative from transitive verbs, such as *cohua* ‘to buy’ (example 5.14), involves the promotion of a peripheral argument of a verb to the semantic role of its

¹⁰⁴ Adding the applicative suffix to the verb root involves a number of sound changes. The last vowel of the verbal root is commonly changed, e.g. /a/ changes into /i/, as in *huica* becoming *huiquilia* (Lockhart 2001: 14). Sometimes the applicative forms of verbs can be irregular, e.g. they can lose a vowel, as in *cohua* ‘to buy’, and applicative *cohua* ‘to buy for oneself’. Consonant changes include /s/ turning into /x/, or /t/ and /tz/ becoming /ch/, as in *mati* ‘to know’ vs. *machilia*, *notza* vs. *nochilia* (Lockhart 2001: 15). The applicative form of the verbs ending in *-oa* is *-huia*, in which the /l/ changes its normal position through metathesis, as in *poloa* ‘to lose, spend’ vs. its applicative form *polhuia* (John Sullivan, p.c., 18 March 2022). For further discussion of sound changes involved in benefactive morphology in Classical Nahuatl and Guerrero Nahuatl see Bartholomew and Mason (1980).

specific object. The original direct object of the transitive verb is not expressed. Thus, whereas the object marking *c-* in (a) refers to the direct object, in the applicative construction in (b) the *c-* object marker refers to the applied object (the benefactive).

(5.14) Applicative marking on transitive verbs in Classical Nahuatl

- a. *ni-c-cohua*
 SBJ.1SG-**OBJ.3SG**-buy
 ‘I buy **it**’
- b. *ni-c-cohui-lia*
 SBJ.1SG-**OBJ.3SG**-buy-APPL
 ‘I buy it for **her/him**’

In Nahuatl the semantics of the applicative is determined by the original sense of the verb. In the case of verbs which have a positive or neutral sense, the applicative typically signals the benefactive (examples 5.15). In contrast, in the case of verbs which involve removing or taking something, the applicatives are typically used to express the malefactive, as illustrated in (5.16).

(5.15) Applicative used to express the benefactive in Classical Nahuatl

(Lockhart 2001: 14)

Underlying form	The applicative form
<i>niquitzoma</i> ‘I sew it’	<i>niquitzomilia</i> ‘I sew it for him/her’
<i>nipixca</i> ‘I harvest’	<i>nipixquilia</i> ‘I harvest for him/her’
<i>niccahua</i> ‘I leave it’	<i>niccahuilia</i> ‘I leave it for him/her’

(5.16) Applicative used to express the malefactive in Classical Nahuatl

(Lockhart 2001: 15)

Underlying form	The applicative form
<i>niccui</i> ‘I take it’	<i>niccuilia</i> ‘I take it from him/her’
<i>nicquixtia</i> ‘I remove it’	<i>nicquixtilia</i> ‘I take it away from him/her’
<i>niquelehuia</i> ‘I desire it’	<i>niquelehuilia</i> ‘I want it from him/her’

Often, the sense of the applicative can only be determined by context.¹⁰⁵ In (5.17) the semantic role of the applied object *nocihuaicniuh* ‘my sister’ is ambiguous and it can either refer to the benefactive or the malefactive.

¹⁰⁵ The use of different applicative suffixes can be fixed in a given variety of Nahuatl. For example, in Nahuatl spoken around Chicontepepec, Veracruz, the form *cohuilia* means ‘to buy something from somebody’ and the form *cohuia* is used to express that something is bought for somebody (John Sullivan, p.c., 19 March 2022).

- (5.17) Ambiguity of the semantic role of the applied object in modern Huasteca Nahuatl (LGA)

Ni-c-cohui-li-z *no-cihua-icni-uh*
 SBJ.1SG-**OBJ**.3SG-buy-APPL-FUT **POSS.1SG-woman-sibling-POSS.SG**
 ‘I will buy it **for my sister**’ or ‘I will buy it **from my sister**’

Similarly to the causative, the applicative construction in Classical Nahuatl could also be used in honorific speech. The reflexive benefactive was applied “to express honor and reverence for a socially superior person” (Bartholomew and Mason 1980: 203). In order to achieve this pragmatic function, the second or third person reflexive prefix and the applicative suffix were attached to a transitive verb to imply that a venerable person added something to his or her own benefit. This function of the applicative is illustrated in (5.18a). For comparison, a non-honorific form is shown in (5.18b).

- (5.18) Applicative used in honorary speech in Classical Nahuatl (Bartholomew and Mason 1980: 203) [my glosses]

- a. *∅-[qui]-mo-tlazohti-lia*
 SBJ.3SG-**OBJ**.3SG-**REFL**.3SG-love-**APPL**
 ‘the lord loves him’
- b. *∅-qui-tlazohtla*
 SBJ.3SG-**OBJ**.3SG-love
 ‘he/she loves him/her’

As it can be seen from the description above, the applicative was a productive operation used to express a range of semantic roles and pragmatic functions. Spanish, on the other hand, lacks a dedicated morphology to express the peripheral arguments of a verb and only uses syntactic means to express benefactive, malefactive, etc. However, as a result of intense contact with Spanish, the applicative constructions in Nahuatl have been significantly modified, as I describe below.

First of all, honorific applicatives have been almost completely lost in modern Nahuatl varieties. Bartholomew and Mason (1980: 204) report the loss of the honorific applicatives in Guerrero Nahuatl, except for some vestiges of it in several ‘frozen’ expressions, such as the one presented in (5.19).

- (5.19) Applicative in a fixed expression in modern Guerrero Nahuatl
 (Bartholomew and Mason 1980: 204) [my glosses]
o=Ø-no-miqui-lih
 ANTEC=SBJ.3SG-REFL.3SG-die-APPL
 ‘he died’

Bartholomew and Mason (1980: 204) also reported that the honorific system was still used in Tetelcingo by wives when referring to their husbands. Although honorific applicatives have been fossilised in a number of expressions used in other varieties of Nahuatl, they have been mostly lost in Huasteca Nahuatl. One isolated example of an applicative reverential present in Huasteca Nahuatl spoken around Chicontepec includes the fixed expression *¡amo ximochoquili!* ‘Don’t cry!’, which is usually used when directing a small child with care and affection (John Sullivan, p.c., 19 March 2022). For contrast, the non-reverential form that does not convey similar attitude is *¡amo xichoca!* ‘Don’t cry!’.

Moreover, in some varieties of modern Nahuatl, including Nahuatl spoken in the Huasteca Veracruzana, a gradual loss of the traditional applicative morphology can be noted. In example (5.20a), the verb lacks the applicative suffix despite being used in the applicative meaning. A more traditional form includes the applicative suffix *-lia*, as shown in (5.20b).

- (5.20) Applicative in modern Chicontepec Huasteca Nahuatl
 (Sullivan et al. 2016: 385) [my glosses and translation]
- a. *Pablo Ø-qui-pitzo-namaca i-mimi*
 Pablo SBJ.3SG-OBJ.3SG-pig-sell POSS.3SG-older.brother
 ‘Pablo sells pigs for his older brother.’
- b. *Adrián Ø-qui-pitzo-namaqui-lia i-tatah*
 Adrián SBJ.3SG-OBJ.3SG-pig-sell-APPL POSS.3SG-father
 ‘Adrián sells pigs for his father.’

In modern Huasteca Nahuatl spoken around Xilitla the applicative suffix is gradually being replaced with a periphrastic applicative. The peripheral participant roles, including benefactive and malefactive, are now often expressed syntactically. In such innovative constructions, a verb appears in its regular intransitive or transitive form without the applicative morpheme, and the indirect object is expressed in a prepositional

phrase that follows the verbal complex, as illustrated in (5.21). The prepositional phrase in which the beneficiary is specified is typically introduced by the Spanish loan preposition *para* ‘for’. For comparison, a more traditional expression of the benefactive in this context would have the form presented in (5.22).

- (5.21) Syntactic applicative in modern Huasteca Nahuatl (AGJ)
Ø-qui-huallica-z *para* *na*
 SBJ.3SG-OBJ.3SG-bring-FUT **for** **1SG**
 ‘(S)he will bring it **for me.**’

- (5.22) Morphological applicative in traditional Nahuatl
Ø-nech-hualliqui-li-z
 SBJ.3SG-OBJ.1SG-bring-APPL-FUT
 ‘(S)he will bring it **for me.**’

In the case of intransitive verbs, the only argument that is marked on the verb is the subject and the benefactive is expressed in a prepositional phrase (5.23a). Although the syntactic applicative is gradually replacing the morphological applicative constructions, the latter are still attested and judged correct by native speakers (5.23b).

- (5.23) Applicative constructions in modern Huasteca Nahuatl (AGJ)
- a. *Na ni-pixca* *para* *no-icni-uh*
 I SBJ.1SG-harvest **for** **POSS.1SG-brother-POSS.SG**
 ‘I harvest for my brother.’
- b. *Ni-c-pixqu-ilia* *no-icni-uh*
 SBJ.1SG-OBJ.3SG-harvest-APPL **POSS.1SG-brother-POSS.SG**
 ‘I harvest **for my brother.**’

Another layer of changes in applicative marking in modern Huasteca Nahuatl involves the situation in which the applicative suffix is lost but the applied object is expressed within the verbal complex. In (5.24), similarly to the examples presented above, the verb lacks an applicative suffix and the benefactive is expressed in a prepositional phrase (a). However, a novel phenomenon that can be seen in this example is the presence of the benefactive pronoun prefix (*nech-*) on the verb which refers to its applied object. A more synthetic form of the verbal complex is given in (b) for

comparison. The form in (b) was deemed correct by the consultant in grammatical correctness tests, although the form in (a) appeared in natural speech.

(5.24) Loss of applicative morphology in modern Huasteca Nahuatl (AGJ)

- a. *Xi-nech-cohua ayoh-tli para na*
 IMP-OBJ.1SG-buy squash-ABS.SG for 1SG
 ‘Buy me some squash!’
- b. *Xi-nech-cohui-li ayoh-tli*
 IMP-OBJ.1SG-buy-APPL squash-ABS.SG
 ‘Buy **me** some squash!’

To sum up, the changes in applicative marking in modern Nahuatl illustrate a gradual move towards a more analytic structure. As a result of contact with Spanish, many varieties of Nahuatl have developed a syntactic applicative, in which the peripheral arguments of a verb are expressed in a prepositional phrase introduced by the Spanish loan preposition *para*. Except for a few fixed expressions in which the honorific applicative is preserved in some dialects of Nahuatl, this feature is not attested in modern Huasteca Nahuatl. The expression of the oblique object in modern Nahuatl becomes similar to the parallel operation in Spanish. The same trend can be noticed in Tének, as I show in the next section.

5.3.4. Applicative marking in Tének

Applicative constructions are also a feature of verbal morphology in Tének. The applicative morpheme in Tének is *-ch* (Edmonson 1988: 524), and, similarly to Nahuatl, it also follows the verb stem, as illustrated in (5.25).

- (5.25) Applicative in colonial Tének
 (Tapia Zenteno 1767: 89, after Meléndez Guadarrama 2011: 198) [glosses modified]
 <*ani tacupaculamchi an tuhahualabchic*>
 ?ani ta=k=u pakul-am-č-i ?an tu walab=čik
 CONJ INV=SR=B1.PL forgive-TR-APPL-EP DEF ? sin= PL
 ‘and forgive us our sins’

The applicative morpheme can appear on both transitive and intransitive verbs. It can also be reduplicated. In the case of transitive verbs, the applicative marker takes the

place of the thematic (transitive) suffix but it does not require a thematic suffix of its own (Edmonson 1988: 202). There are also several verbs that do not usually take the applicative marker, including ditransitive verbs such as *bín-a*- ‘give it (to someone)’, *kój-oy*- ‘cover it’ (with something), or *kwé*-*ey*- ‘steal it (from someone)’ (Edmonson 1988: 159-160).

In traditional Tének a reduplicated applicative marker (usually separated by the ligature *-in-*) may be used to indicate a fourth argument of the verb. An illustration of this phenomenon is presented in (5.26). The reduplication may also suggest the plurality of either the subject, the direct object or the indirect object (Edmonson 1988: 205).

(5.26) Reduplication of the applicative suffix in Tének

(Edmonson 1988: 206) [glosses modified]

ʔi=le:ʔ *ʔabal* *tata:ʔ* *ti=k=u* *nuh-č-in-č-Ø-i*
 A1.PL=want that 2SG INV=SB=B1.PL sell-APPL-EP-APPL-COMPL-EP

ʔi=tino:m-il

A1.PL=sugar-POSS

‘We want you to sell our sugar (**to someone**) for us.’

The applicative suffix in Tének is used to express many semantic functions, including the benefactive, malefactive or locative. The traditional expression of benefactive in Tének is presented in (5.27).

(5.27) Benefactive in Tének (Edmonson 1988: 525) [glosses modified]

ʔa *Mari:ya* *t=u* *t’ah-č-Ø-i* *ʔan* *bakan* *wawa:ʔ*
 HON Maria INV=**B1.PL** make-APPL-COMPL-EP DEF tortilla 1PL

‘María made the tortillas **for us**.’

In this example, the applicative morpheme is suffixed to the verb stem and it replaces the transitivity marker. The arguments of this verb are the subject (María, i.e. 3rd person) and the applied object (1st person plural). This argument structure triggers the inverse alignment. Since the 1st person is higher in the hierarchy of SAP than the 3rd person, only the 1st person (in this case, the applied object) is marked in the argument slot (with the inverse alignment marker *t=*). The direct object (*an bakan* ‘tortillas’) is expressed in the noun phrase that follows the verbal complex. The last element in the sentence is the

surface representation of the indirect object (the independent pronoun *wawá*). An illustration of the applicative marker used in the malefactive sense is presented in (5.28).

- (5.28) Malefactive in Tének (Meléndez Guadarrama 2011: 203) [glosses modified]
babá:ʔ t=in kwéʔ-č̣i=č̣ik ʔan kwitáʔ
 3PL INV=B1.SG steal-APPL=PL DET hen
 ‘They stole a hen **from me**.’

Applicative marking can also be used to express location and to convey the meaning ‘do it on something’, as in: *hek’-on-čh-* ‘cross over on (the river, swimming)’ (cf. *hek’-on-* ‘cross over’), or *k’wah-čh-iy-* ‘inhabit’ (cf. *k’wah-i-* ‘be located’). An example of an applicative used as a locative is presented in (5.29).

- (5.29) Locative in Tének (Edmonson 1988: 205) [glosses modified]
ʔu=bel-č̣-Ø-i leh ʔo:w yab ʔu=ʔel-aʔ-Ø hitaʔ
 A1.SG=walk-APPL-COMPL-EP very far NEG A1.SG=meet-TR-COMPL anyone
 ‘I walked it (the road) a long way, but I didn’t meet anyone.’

Apart from the above mentioned functions, applicatives in Tének are also used to convey the so-called ‘dative of interest’, that involves “a more subtle sense of personal involvement in the action of the verb” (Edmonson 1988: 202-203), as illustrated in (5.30).

- (5.30) Dative of interest in Tének (Edmonson 1988: 204) [glosses modified]
ti.weʔe: ʔan pik’oʔ ʔin=k’at’-č̣-Ø-i ʔan č̣akam
 yesterday DEF dog A3.SG=bite-APPL-COMPL-EP DEF child
 ‘Yesterday the dog bit the child.’

As a result of contact with Spanish, many of the semantic meanings that traditionally were expressed by means of the applicative marker have been replaced with periphrastic constructions. The use of prepositional phrases to indicate the benefactive was in fact already reported by Edmonson in the 1980s (1988: 525). In example (5.31) the indirect object (benefactive) is expressed in a prepositional phrase introduced by the native Tének preposition *abal* ‘for’. This way of specifying the benefactive is modelled on the Spanish construction in which the preposition *para* is used. In (5.31) only the subject

and direct object are significant for verb marking (i.e. direct alignment triggered by the 3SG:3SG argument hierarchy). A more traditional version of this sentence, in which the applicative suffix is used and the applied object is marked on the verb, was presented above in example (5.27).

- (5.31) Benefactive expression in Tének (Edmonson 1988: 525) [glosses modified]
ʔa Mari:ya ʔin=t'ah-aʔ-Ø ʔan bakan [ʔabal wawa:ʔ]
 HON Maria A3.SG=make-TR-COMPL DEF tortilla **for** **1PL**
 ‘María made the tortillas for us.’

Similarly to Nahuatl, in Tének the semantic role of the applicative marker often depends on the context. In modern Tének, however, the use of a prepositional phrase to express the indirect object resolves the issue of ambiguity since different prepositions are employed to introduce benefactive, malefactive or other semantic roles. Thus, the native particle *abal* ‘for’ introduces prepositional phrases that specify the benefactive, as shown in (5.31) above and in (5.32) below. In order to express malefactive the particle *k'al* ‘from’ is used (5.33). This kind of differentiation can be regarded as an example of pattern borrowing from Spanish, in which different prepositions introduce benefactive (*para*) and malefactive (*de*).

- (5.32) Benefactive in modern Tének (AFF)
K=a tsa'-ay-Ø abal naná'
 IMP=A2.SG buy-TR-COMPL **for** **1SG**
 ‘Buy it **for me!**’

- (5.33) Malefactive in modern Tének (AFF)
K=a tsa'-ay-Ø k'al naná'
 IMP=A2.SG buy-TR-COMPL **from** **1SG**
 ‘Buy it **from me!**’

Note that neither the benefactive nor the malefactive, which are both in the 1st person, are taken into consideration while choosing the pronominal clitic that appears after the imperative marker *k=*. The two arguments taken into account in (5.32) and (5.33) are only the agent (2nd person) and the object (3rd person), and since the agent is higher in the SAP scale it is marked with the Set A 2nd person marker. In contrast to

constructions in which the benefactive and malefactive are expressed periphrastically by means of the use of different prepositions, an ambiguous traditional Tének sentence which can either express benefactive or malefactive is shown in (5.34).

(5.34) Applicative in traditional Tének (Edmonson 1988: 204) [glosses modified]

Haha:ʔ t=in kwe:ʔ-č-a:mal ʔan ʔolom
 3SG INV=**B1.SG** steal-APPL-PRF DEF pig
 ‘He has stolen the pig **from/for me.**’

In modern Tének there are also attestations of borrowing of the Spanish preposition *para* to introduce a benefactive, as illustrated in (5.35).

(5.35) Spanish preposition *para* in modern Tének (AFF)

Ne'ets k=in nuj-uw-Ø para naná'
 FUT SB=A3.SG sell-TR-COMPL **for** 1SG
 ‘He will sell it for me.’

To sum up, changes in applicative marking in modern Tének include a gradual loss of the traditional applicative morpheme and its replacement with the morphological expression of the benefactive/malefactive by means of a periphrastic construction modelled on Spanish. On the other hand, the introduction of an innovative syntactic benefactive and malefactive marking with separate preposition used for benefactive (native *abal* or the Spanish loan *para*), and another preposition used for the malefactive (*k'al*), can be seen as a change towards eliminating the partly ambiguous morphological marking that was present in traditional Tének.

5.3.5. Summary

Changes in applicative marking in Nahuatl and Tének are remarkably similar and show a gradual loss of the traditionally used morphological applicative and a shift towards a syntactic expression of peripheral verbal arguments. The main motivation behind this change appears to be the simplification of the morphological complexity of verbs in both modern Nahuatl and Tének. Moreover, in modern Tének the different semantic roles of peripheral verbal arguments are signalled by different prepositions (e.g. *abal* for benefactive and *k'al* for malefactive). Such a change from the expression of a peripheral

argument by a universal and context-dependent applicative marker to a prepositional phrase can be interpreted as a move towards a reduction of ambiguity and an increase in transparency. As for the use of the applicative in honorific constructions, this function has been mostly lost in modern Nahuatl. The applicative is not used in this context in Tének either, although without further research it is difficult to establish whether such use of the applicative occurred in traditional Tének. A follow-up study of older colonial texts in Tének needs to be performed in order to gain more information on this topic.

5.4. Noun incorporation

5.4.1. Introduction

Noun incorporation is one of the diagnostic features of Mesoamerican languages and was also a trait of traditional Nahuatl and Tének. In this part of the chapter I analyse how contact with Spanish has influenced the productivity of noun incorporation in both languages of the Huasteca. I begin my analysis by providing a brief theoretical background to the expression and functions of noun incorporation. Next, I describe noun incorporation in Classical Nahuatl and its use to express generic objects, locations and instruments of verbs. I then provide several examples to demonstrate that in modern Nahuatl noun incorporation is being replaced with periphrastic operations, in which objects, locations and instruments are introduced with prepositional phrases modelled on similar constructions in Spanish. After analysing changes in Nahuatl, I briefly describe noun incorporation in Tének. Although this operation is not productive in modern Tének, I provide some clues that suggest that traditionally it probably was a more frequently encountered morphological phenomenon. I conclude this part of the chapter with a brief summary.

5.4.2. Morphosyntax and semantics of noun incorporation

Noun incorporation can be defined as a type of morphological operation “where a nominal lexical element is added to a verbal lexical element; the resulting construction being a verb and a single word” (De Reuse 1994: 2842). Although many scholars, including e.g. Baker (1996: 19) and Mithun (2017b: 243ff.), considered the presence of noun incorporation as one of two defining features for classifying a language as polysynthetic (apart from indexing of core arguments withing the verb), Mithun (2009) claimed that not all polysynthetic languages apply noun incorporation. Non-polysynthetic languages, such as English, can also use formations that resemble noun incorporation. In English these include a limited number of back-formations e.g. the compound verbs *babysit*, in which the noun *baby* expresses the object of the verb *sit*, and the verb *breastfeed*, where the noun *breast* indicates the instrument (cf. Feist 2013).

Noun incorporation can fulfill a number of functions. It is often used to indicate an object of the verb with which the noun is compounded. According to Mithun (1984: 847), there are four types of noun incorporation that also “fall into an implicational hierarchy” that reflects the evolution of this feature in the languages of the world:

- 1) lexical compounding in which a verb incorporates a nominal argument and describes a recurring activity,
- 2) incorporation of the argument into the verb to allow for a new argument to take its place,
- 3) noun incorporation used to background old or established information,
- 4) incorporation involving the development of classificatory compounds, in which verbs are paired with generic nouns to describe properties of an entity, rather than the entity itself.

If a language exhibits any of these types, it always displays all of the lower types as well (e.g. if it has type 3 noun incorporation, it also has types 1 and 2). Incorporation can in turn change into other constructions, such as denominal derivation, applicative, or directional affixes (Mattissen 2006; Mithun 2009).

Noun incorporation is one of the traits of the Mesoamerican linguistic area (Campbell et al. 1986: 550-551), and it is present in, among others, Totonacan, Uto-Aztecan and Mixe-Zoquean languages. Although it is also a morphological operation applied in many Mayan languages including Mam and Yukatek, it is believed that it was not a distinctive trait of Tének (Edmonson 1988: 347). Noun incorporation was also a commonly used operation in Classical Nahuatl, but its productivity has been reduced in modern Nahuatl as a result of contact with Spanish. I now turn to describing noun incorporation in traditional Nahuatl and then I discuss changes that can be observed in contemporary Nahuatl with respect to this feature.

5.4.3. Noun incorporation in Nahuatl

Noun incorporation is a prominent feature of traditional Nahuatl, where it expresses a number of semantic roles, including location or manner. In Classical Nahuatl a noun stem precedes a verb stem which together (as a compound verb) are positioned between verbal prefixes and suffixes. An example of such a compound verb with an incorporated noun is illustrated in (5.36), in which the incorporated noun stem *tlacual* (from *tlacualli* ‘food’) takes on the generic non-referential meaning of an object of the verb *chihua* ‘to make’.

- (5.36) Noun incorporation in traditional Nahuatl
Ni-tlacual-chihua nochi tonal-li
 SBJ.1SG-**food**-make all day-ABS.SG
 ‘I prepare food every day.’

Syntactically speaking, noun incorporation is a valency reducing operation which removes one of the arguments of the verb. Thus, a transitive verb like *chihua* ‘to make’ becomes intransitive when its direct object (*tlacual*) is incorporated into the verbal complex. The only slot that needs to be filled is the subject prefix.

Apart from reducing verbal arguments, noun incorporation can also be used - in some circumstances - to replace one of the verbal arguments with another argument. This purpose of noun incorporation refers to function (2) in Mithun’s (1984) hierarchy listed above. In example (5.37a) the noun *tlalli* ‘dirt, soil’ is the object of the transitive

verb *tema* ‘to pour’ and is represented by the object prefix on the verb. In order for the verb *tema* to accept an oblique object, e.g. *conetocli* ‘small maize plants’ shown in example (5.37b), that could be marked on the verb as a prefix, the original object (*tlalli*) must be incorporated into the verbal complex. The new compound transitive verb *tlaltemi* ‘pour dirt’ can take two arguments: a subject and a new specific direct object. The latter is marked on the verb itself as an object prefix, as well as in a noun phrase (*ne conetocli* ‘these small maize plants’, in which a singular inanimate form of a noun refers to plural meaning).

(5.37) Noun incorporation used for a replacement of verbal arguments in Huasteca Nahuatl

- a. *Ti-c-tema-z-ce-h* *tlal-li*
 SBJ.1PL-**OBJ.3SG**-pour-FUT-NPRS-PL **dirt-ABS.SG**
 ‘We pour **dirt**.’
- b. (Beller N. and Cowan de Beller 1985: 4) [glosses modified]
Ti-c-tlal-tem-i-z-ee-h *ne* *cone-toc-tli*
 SBJ.1PL-**OBJ.3SG-dirt**-pour-APPL-FUT-NPRS-PL DEM **child-maize.plant-ABS.SG**
 ‘We will pour **dirt** next to **small maize plants**.’

Apart from the expression of a generic object of an action, the incorporated noun can also fulfill other semantic functions. In some contexts the incorporated noun can refer to a location. In (5.38) the location where the action of working is done (*tequiti*) is *milli* ‘milpa, corn field’. The location refers to a non-specific field.

(5.38) Noun incorporation used to express location in Huasteca Nahuatl

- (Beller and Beller 1979: 231)
Ø-mil-tekiti
 SBJ.3SG-**field**-work
 ‘He does field-work (works **in the field**).’

A noun can also be incorporated into a verbal complex in order to describe the manner in which the action denoted by the verb is performed. In this case, the incorporated noun acts as an adverb. Example (5.39), which illustrates this function, refers to a popular male Nahuatl name *Cuauhtemoc*, which means ‘he dives like an eagle’. The verb in this example is *temo* ‘to descend’ which is conjugated in the preterite tense and becomes an

agentive noun, i.e. ‘a descender’. The incorporated noun stem *cuauh* (from *cuauhtli* ‘eagle’) functions as an adverb of manner.

(5.39) Noun incorporation used to express manner in Classical Nahuatl

Ø-Cuauh-temo-c

SBJ.3SG-**eagle**-descend-NPRES

‘he is a diver, **in the manner of an eagle**’

Although noun incorporation was highly productive in traditional Nahuatl and was applied to express many semantic functions, the importance of this morphological operation has diminished as a result of contact with Spanish. In Nahuatl spoken in the Huasteca Potosina noun incorporation is now often replaced with a syntactic operation, in which a generic object or a location are expressed in a separate noun phrase that follows the verb. As an example, in (5.40) the generic object *tlacualli* ‘food’ appears in a noun phrase and the verb receives the object marking that refers to this non-specific object. Although the noun *tlacualli* used in this context would traditionally be incorporated into a verbal complex and have the form *tlacualchihua* Ø-tlacual-chihua (SBJ.3SG-food-make) ‘(s)he prepares food’, in modern Nahuatl a syntactic operation based on a parallel construction in Spanish (*hace comida* ‘(s)he prepares food’) is used instead (a). As I was told by one of the informants, in order to express that the object of an action is generic, an indefinite article *ce* (grammaticalised in modern Nahuatl from the numeral ‘one’) can also be used (b). The use of the article *ce* appears to be modelled on the Spanish indefinite article *un/una*, which has also been grammaticalised from the numeral ‘one’.

(5.40) Expression of generic object in modern Huasteca Nahuatl (AGJ)

- | | | | |
|----|-------------------------------|---------------------|---------------------|
| a. | <i>Ø-qui-chihua</i> | <i>tlacual-li</i> | |
| | SBJ.3SG-OBJ.3SG-make | food -ABS.SG | |
| | ‘she prepares food ’ | | |
| b. | <i>Ø-qui-chihua</i> | <i>ce</i> | <i>tlacual-li</i> |
| | SBJ.3SG-OBJ.3SG-make | one | food -ABS.SG |
| | ‘she prepares a dish ’ | | |

Whereas in traditional Nahuatl different syntactic operations were used to distinguish between generic and specific objects, in which noun incorporation was used for the

former and a noun phrase was used for the latter, in modern Nahuatl this distinction is expressed with different determiners placed before a noun. Thus, as mentioned above, the indefinite article *ce* is used to express a generic object, and a specific object is conveyed by the presence of such demonstratives as: *ni* ‘this’ (example 5.41), *ne* ‘that (visible)’ (example 5.37b), or *nopa* ‘that (out of sight)’. These Nahuatl demonstratives fulfill a similar function to the Spanish demonstratives *este/a/o*, *ese/a/o* and *aquel/lla/llo*.

(5.41) Expressing specific object in modern Huasteca Nahuatl

<i>Ø-qui-chihua</i>	<i>ni</i>	<i>tlacual-li</i>
SBJ.3SG-OBJ.3SG-make	DEM	food-ABS.SG
‘she prepares the dish ’		

In modern Nahuatl the presence or lack of nominal possessive marking on a noun can also determine whether the noun is used as a generic or a specific object of an action. The presence of the 3rd person singular marking on the noun *cha(n)tli* ‘house’ in (5.42) suggests that the noun is used in a specific sense.

(5.42) Use of possessive marking to indicate a specific object in modern Huasteca Nahuatl (ABN)

<i>Ø-qui-chih-que-h</i>	<i>i-chan</i>
SBJ.3PL-OBJ.3SG-make-NPRS-PL	POSS.3SG-house
<i>Ø-qui[n]-pix-que-h</i>	<i>inin-cone-hua</i>
SBJ.3PL-OBJ.3PL-have-NPRS-PL	POSS.3PL-child-POSS.PL
‘They made their house , they had their children.’	

Noun incorporation in modern Nahuatl is also less commonly used to indicate location. In (5.43) the place of the action (*cuatitlamitl* ‘field’) expressed by the verb (*tequipano* ‘work’) is expressed in a prepositional phrase introduced by the particle *pa(n)*.¹⁰⁶ This lexical element originally functioned as a relational noun (see §3.2.4) but, as a result of contact with Spanish, its syntactic function has been modified and it now serves as a preposition with a range of meanings, including ‘in, on’.

¹⁰⁶ In Xilitla communal *milpas* ‘fields’ are often located in the woods, and although the literal translation of the word *cuauhtitlamitl* is ‘the woods’, in this case it refers to the plot of land on which someone grows corn, squash, and other crops or collects wild fruit or mushrooms.

- (5.43) Expressing location in modern Huasteca Nahuatl (SAB)
Ya Ø-tequipano pan ce cuatitlami-tl
 3SG SBJ.3SG-work surface[RTL] one woods-ABS.SG
 ‘He works **in the field.**’ (cf. Spanish *Él trabaja en la milpa.*)

This kind of periphrastic construction used to express location that replaced a more traditional morphological operation is, once again, an example of a pattern borrowing from Spanish.

Moreover, in Classical Nahuatl noun incorporation was also used to indicate an instrument. An example of such use of noun incorporation includes, e.g. the verb *tepiyopahtia Ø-te-piyo-pahtia* (SBJ.3SG-OBJ.HUM-chicken-cure) ‘he/she cures with a chicken’. However, also in this context, noun incorporation is less frequently used in modern Nahuatl, in which an analytical expression of an instrument is preferred (example 5.44). The instrument of the activity is expressed in a prepositional phrase using the particle *ca* ‘with’, which evolved to function as a preposition from its traditional category of a relational noun in Classical Nahuatl. Additionally, the numeral *ce* ‘one’ is used as an indefinite article suggesting a generic meaning of the instrument. Although this sentence describes a traditional indigenous healing practice, the construction is a calque from the Spanish expression *cura con un pollo* ‘cures with a chicken’.

- (5.44) Expressing instrument in modern Huasteca Nahuatl (MMS)
Ni te-pahtih-que-tl Ø-te-pahtia ca
 DEM OBJ.HUM-cure-AG-ABS.SG SBJ.3SG-OBJ.HUM-cure means[RTL]
ce piyo
one chicken
 ‘This healer cures **with chicken.**’

As seen from the examples presented above, it can be assumed that noun incorporation is no longer a productive operation in modern Nahuatl. The contemporary Nahuatl spoken in the Huasteca has developed innovative strategies to indicate the generic object, the location and the instrument of a verbal activity, which in traditional Nahuatl would be expressed by incorporating a noun into a verbal complex. The loss of productivity of noun incorporation is further evidence of the decrease in morphological

complexity in modern Nahuatl and a move towards the adoption of a more analytical structure.

5.4.4. Noun incorporation in Tének

According to Edmonson (1988: 347-348), noun incorporation was not frequently attested in Tének used in San Luis Potosí at the time she did her fieldwork. The few examples of this process that she documented, including (5.45) presented below, show that the incorporated noun (in bold) typically appears after the verb stem and before the inflectional suffixes.

- (5.45) Noun incorporation in Tének (Edmonson 1988: 348) [glosses modified]
- | | | | |
|----------------------|---------------------------|----------------|--------------|
| <i>ʔin=he'-</i> | <i>o:k'-n-aʔ-Ø</i> | <i>ʔin=ʔat</i> | <i>çakam</i> |
| A3.SG=place.face.up- | head-TR-TS-COMPL | A3.SG=fellow | child |
- ‘He pushed his companion so that he fell face up.’

However, there are also examples of noun incorporation in which a noun is prefixed to a verb, as in the compound verb *kuxkit* *kux-kit* (back-carry) ‘carry on the back’ (Larsen 1947: 4), in which the noun *kux* ‘back’ appears before the verb *kit* ‘carry’.

Unfortunately, because of the scarcity of examples of noun incorporation and a lack of studies dedicated to this phenomenon, it is difficult to assess whether this operation was more productive in a more traditional variety of Tének. There are, however, at least two arguments that speak in favour of the hypothesis that noun incorporation was more frequently used in older Tének than it is now. First of all, noun incorporation is a commonly found operation in other Mayan languages. Secondly, noun incorporation appears to be a relatively productive process used in colonial Tének to create new terms for novel concepts referring to the Christian faith. For example, one such neologism includes the compound verb *pujal* ‘to baptise’, which involves an incorporation of the noun *ja* ‘water’ into the verbal complex along with the verb *pu* ‘put’, as shown in (5.46).

- (5.46) Noun incorporation in neologisms referring to Christian faith in colonial Tének
 (De Quirós 2013 [1711]: 161)
 <inpujal>
 in=pu-**ja**-ay-al
 A3.SG=put-**water**-TR-INCOMPL
 ‘he baptises’ (lit. ‘he puts **water**’)

Although, noun incorporation was probably a fairly productive process in older Tének, I was not able to find any attestations of this process in the Tének data that I collected in the Huasteca Potosina.. However, since so little data is available on this phenomenon, it would not be fair to draw conclusions about the loss of noun incorporation in Tének or contact with Spanish as the main cause of this loss.

5.4.5. Summary

Although noun incorporation was a very productive process in traditional Nahuatl (and probably also Tének), it is less frequently attested in modern Nahuatl and not attested in Tének. In modern Nahuatl nouns referring to generic objects of habitual actions, which traditionally were incorporated into the verbal complex, can be expressed in prepositional phrases that follow the verb. Additionally, modern Nahuatl has developed an indefinite article which is used to indicate a generic object of the action expressed by a verb. In contrast, specific objects of verbs are indicated by the use of a demonstrative or a possessive form of a noun. The ongoing loss of noun incorporation can be considered further evidence of the reduction of morphological complexity of modern Nahuatl and a shift towards a more analytic structure. Although contact with Spanish appears to be responsible for the reduction of productivity of noun incorporation constructions in modern Nahuatl, it remains unclear whether a similar reason can be given as the cause of the loss of noun incorporation in Tének.

5.5. Middle voice

5.5.1. Introduction

This part of the chapter deals with the influence of Spanish on the expansion of semantic functions covered by middle voice in Tének. This valency decreasing operation is used to express such meanings as spontaneous change of state or movement, emotions and the reflexive, among others. These contexts of use of middle voice are very similar to contexts of use of the reflexive passive in Spanish and, although it is not likely that middle voice in Tének developed as a result of contact with Spanish, it is possible that its use to express the reflexive meaning has been influenced by Spanish. In this section I focus on the role of Spanish in including reflexive meanings within the range of operations involving middle voice. In order to investigate this topic, I first introduce the concept of middle voice and its functions, and then I describe the use of middle voice in various domains in Tének (including the reflexive). Next, I present the arguments in favour of the hypothesis that contact with Spanish contributed to the frequent use of middle voice with a reflexive meaning in contemporary Tének.

5.5.2. What is middle voice

A middle voice construction is a valency decreasing operation that involves a semantically transitive process (not an action) that is undergone by the patient (Payne 1997: 216). Middle voice constructions are neither active nor passive, but instead, they are ‘in between’, hence their name ‘middle voice’ (Payne 1997: 216). The agent in middle voice is not expressed. Kemmer (1993: 7) observed that middle voice constructions are associated with a set of ‘semantic/pragmatic contexts’, among which she listed grooming, change in body posture, non-translational and translational motion, emotion, cognition, spontaneous event, reflexive, reciprocal, impersonal, passive and facilitative. These middle voice situation types in Spanish in which the reflexive pronoun *-se* is used are presented in Table 5.1.

Table 5.1. Middle voice situation types in Spanish.

Semantic/pragmatic context	Spanish	Gloss
grooming	<i>afeitarse</i>	‘shave’
change in body posture	<i>levantarse</i>	‘stand up’
non-translational motion	<i>girarse</i>	‘turn’ (intransitive)
translational motion	<i>moverse</i>	‘move’ (intransitive)
emotion	<i>enojarse</i>	‘get angry’
cognition	<i>imaginarse</i>	‘envisage’
spontaneous event	<i>derretirse</i>	‘melt’
reciprocal	<i>besarse</i>	‘kiss’
reflexive	<i>quemarse</i>	‘get burnt’
impersonal	<i>se va</i>	‘one goes’
passive	<i>se vende</i>	‘is sold’
facilitative	<i>se prepara (facilmente)</i>	‘it is easy to prepare’

Kemmer (1993: 53-56) noted that the common semantic property of the contexts in which middle voice is used is ‘low degree of elaboration of events’, which can be observed in the situation types listed above. An updated and based on a bigger sample of languages definition of middle voice was suggested by Inglese (2021: 6), who using the term ‘middle markers’ (in short, ‘MM’) proposes the following three characteristics typical to this process:

- (i) it occurs with bivalent (or more) verbs to encode one or more of the following valency changing operations: passive, anticausative, reflexive, reciprocal, antipassive;
- (ii) the same construction is also obligatory with some (at least monovalent) verbs that cannot occur without MM;
- (iii) the semantics of (at least some of) the verbs in (i) does not match that of those in (ii) or vice versa (Inglese 2021: 6)

Many scholars, including both Kemmer (1993) and Inglese (2021), admit that there are many semantic similarities between middle voice and passives. Numerous languages, including English or Spanish, do not distinguish between the two operations, i.e. they do not apply distinct morphology to express passives and middle voice. However, there are also other languages, such as the Mayan languages, that consistently treat middle constructions as different from passives, as shown in an example from K’iche’ (5.47).

(5.47) Active, passive and middle voice in K'iche' (England 1988: 74)

Active:	<i>ch'ay</i>	'hit'
Passive:	<i>xch'aay</i>	'be hit (by someone)'
Middle:	<i>xch'aayik</i>	'become hit'

Middle voice constructions also display many similarities with reflexives. In both operations it is the subject that controls the action and it is also its affected participant (Payne 1997: 218). In many languages the reflexive and middle voice are, in fact, expressed with the same morphosyntax (Payne 1997: 218), and according to Kemmer (1993), the reflexive marker is, in fact, the most common source of the middle voice marker. In Spanish for instance, reflexive morphology is frequently used with both a middle and a passive function (Keenan and Dryer 2007: 353), as illustrated in (5.48).

(5.48) Use of the reflexive marker in Spanish

<i>Se</i>	<i>quemó</i>	<i>la</i>	<i>comida</i>
REFL	burn.COMPL.3SG	DEF	food

'The food was/got burnt.'

Although the characteristics of middle voice in Tének confirm some of the features described above, it is also used in some more specific contexts, which I deal with next.

5.5.3. Middle voice in Tének

Middle voice constructions are present in all varieties of Tének, which has evolved the most elaborate middle voice of all of the Mayan languages (Kondic 2011: 114). Tének has both passive and middle voice constructions, but it is middle voice that is more productive. As noted by Kondic (2011: 138), the higher productivity of middle voice over passive in Tének contradicts the prediction made by Kemmer (1993: 149) who claimed that if a language has both passive and middle voice constructions, the former are more frequently used.

In Tének the middle voice marker can occur with transitive and intransitive verbal bases. In the case of transitive verbs, the middle voice marker detransitivises a verb and it replaces the transitive marker. In the case of intransitive verbs, the verb affected

remains a single argument verb. The middle voice marker *-In* follows the CV(:)C verbal root and precedes aspect suffixes, as illustrated in (5.49). The subject of a verb in middle voice is marked with a Set B absolutive marker.

- (5.49) Middle voice in Tének
Ø=le'ch-on-Ø
B3.SG/PL=burn-MV-INCOMPL
'get burnt'

There are many theories regarding the origin of the middle voice marker in Tének. According to Kaufman (1990: 104), it is likely that the marker evolved from the absolutive antipassive marker *-n* present in Proto-Mayan and that Tének later developed a new antipassive marker. This hypothesis is supported by the fact that many of the verbs which in other Mayan languages would be expressed with antipassive, like the equivalents of the English verbs 'chat', 'cry' or 'scream', in Tének are expressed with the middle voice marker. According to another hypothesis, middle voice in Tének might have evolved as a result of contact with another Mesoamerican language, although no languages that Tének is known to have contact with (Mixe-Zoquean or Totonacan) have middle voice (Kondic 2011: 139). In yet a different hypothesis, as suggested by Kemmer (1993), who studied the origin of middle voice in many languages, there may also be an independent semantic motivation behind the development of middle voice in Tének. However, as noted by Kondic (2011: 140), the hypothesis that middle voice in Tének evolved from the Proto-Mayan antipassive seems most plausible.

Tének uses middle voice to encode a broad spectrum of meanings. A crucial semantic property of middle voice constructions is the notion of 'subject-affectedness' (Kondic 2011: 122), in which the agent-subject performs the action upon itself, as in *xalk'un* 'change oneself' or *luklin* 'get dirty'. Kondic (2011) lists the following contexts in which middle voice is typically used in Tének:

- 1) spontaneous change of state,
- 2) change of position/movement (both translational, i.e. involving changing place, and non-translational),
- 3) expressions of mental processes and emotions,

- 4) atmospheric changes,
- 5) impersonal and personal passive events, and
- 6) reflexive meanings including self-grooming.

First of all, middle voice constructions express a change of state involving non-volitional, spontaneous acts of involuntary action, in which the only participant acts upon itself (Kemmer 1993: 19), as illustrated in (5.50).

- (5.50) Middle voice used to express change of state in Tének
 (Kondic 2011: 129) [glosses and translation modified]
- | | | | | | |
|-----------------------------------|-----|----------|--------|----------|----------|
| \emptyset =och-k- an -al | a | k'iixaaj | ne'ech | k=u | kal-ej |
| B3.SG=set-DER-MV-INCOMPL | HON | day | HABIT | SB=B1.PL | go-COMPL |
- 'We used to go (home) at sunset (when the sun sets).'

Secondly, middle voice is used to express a change of body position and movement, or, in Talmy's (1985) words, the 'translational' meaning (e.g. *balk'in* 'enter' and *k'adhpan* 'go up quickly'). A contextualised example of such use of middle voice is presented in (5.51).

- (5.51) Middle voice used in translational meaning in Tének
 (Kondic 2011: 131) [glosses modified]
- | | | | | | |
|---------|-------|-------------------------------|-----|------|-------|
| N-a | Jwaan | \emptyset =kwajl- an | an | ti | olip |
| DET-HON | Juan | B3.SG=fall-MV.COMPL | DEF | PREP | river |
- 'Juan fell into the river.' (cf. Spanish *Juan se cayó en el río.*)

According to Kemmer (1993: 20), it is cross-linguistically common for verbs of motion, such as the English equivalents of the verbs 'climb', 'go' or 'leave' to be expressed in middle voice. In Tének, however, some movement verbs, especially the ones with cognate objects expressed by morphologically related forms (e.g. in English *swim a swim, run a run, dance a dance*) appear in the antipassive form (Kondic 2001: 131), as in *in=ádih-il- \emptyset* (B1.SG =run-ANTIP-INCOMPL) 'I run (a run)'.

The third function of middle voice concerns expression of emotions and mental processes, as illustrated in (5.52).

(5.52) Expressing emotions with middle voice marking in Tének

(Kondic 2011: 132) [glosses modified]

$\emptyset=t'e'p$ -**in-ének** *an* *ti=\emptyset* *k'waj-at*
 B3.SG=sad-MV-PRF DEF SR=B3.SG be.located-INCOMPL
 'He has been very sad.'

Middle voice marking is also commonly used when talking about spontaneous or inchoative events. These events can appear with “non-human subjects that cannot act volitionally to perform an action to affect themselves” (Kondic 2011: 133), as illustrated in (5.53).

(5.53) Middle voice used to express spontaneous events in Tének

(Kondic 2011: 133) [glosses modified]

An wii'lep $\emptyset=map$ -**un**
 DEF door B3.SG=close-MV.COMPL
 'The door closed (**by itself**).'

In Tének middle voice is also used when the agent is unknown or unimportant, and as such, not expressed. The English equivalents of such constructions are e.g. *I was given a dog* or *bread is made from flour*. These constructions contrast with the canonical passive in which the agent is known and it can be expressed as oblique (Kondic 2011: 135). An example of such use of middle voice in Tének is illustrated in (5.54).

(5.54) Middle voice making in constructions with a specified agent in Tének

(Kondic 2016a: 32) [glosses modified]

Ejtal jaach naa' $\emptyset=junk$ -**un-al** *t=in* *k'ima'*
 all that RTL B3.PL=gather-MV-INCOMPL PREP=A3.SG house
ninaa' chemenek
 RTL deceased
 'All this is collected at the house of the deceased.'

Finally, middle voice is a very productive tool to convey reflexive meanings. These include self-grooming events, as illustrated in (5.55), and other actions with reflexive meaning (5.56).

Spanish ‘segunda conjugación’), provides examples of its use in the same contexts as described above, apart from the reflexive meaning. The latter, according to him (1767: 28), is expressed with the reflexive pronominal *bá*, as illustrated in (5.58).

(5.58) Reflexive in colonial Tének (Tapia Zenteno 1767: 28) [my glosses]

<*utahjal túbâ*>

u=t’ah-a’-al

t=u

bá

A1.SG=make-TR-INCOMPL

PREP=A1.SG

REFL

‘I’m preparing **myself**.’ (cf. Spanish *Yo me hago*.)

Although the use of middle voice with reflexive meanings might have been simply omitted by Tapia Zenteno, it appears also plausible that the middle voice marker was not applied for reflexive meanings in colonial times. If the second course of reasoning is true, another question that arises is what has triggered the use of middle voice in this additional context in Tének? Despite the fact that arguments may be provided in favour of its emergence as a result of an internal development, the similarity of the semantic contexts in which Spanish uses reflexive morphology in passive functions to middle voice structures in Tének speaks in favour of an extension in the use of middle morphology as a result of contact with Spanish. As I show in Table 5.1, the use of middle voice in Tének often corresponds to the use of reflexive morphology in Spanish.

Table 5.1. Contexts of use of middle voice and reflexive in Tének and Spanish.

Context	Means of expression in		Example in Spanish
	Tének	Spanish	
spontaneous change of state			<i>Se encerró la puerta</i> ‘The door closed (by itself)’
change of position/movement			<i>Juan se cayó en el río</i> ‘Juan fell in the river’
expressions of mental processes and emotions	middle voice	reflexive	<i>Me entristece esto</i> ‘This makes me sad’
atmospheric changes			<i>Y cuando el sol se pone, hay oscuridad</i> ‘And when the sun sets, there’s darkness’
impersonal and personal passive events			<i>Me ensució con el lodo</i> ‘I got dirty with the mud’
reflexive			<i>Me peino</i> ‘I comb myself’

The examples presented above appear to confirm my hypothesis that an extension in the use of middle voice in Tének to reflexive meanings is likely to be a pattern borrowing from Spanish. The use of middle voice in Tének has been associated with the use of reflexive passive constructions in Spanish and, as a result of this connection, the use of middle voice has been extended from its more traditional contexts to include reflexive meanings. At the same time, a more traditional and typical Mayan construction used to express reflexive meanings, i.e. the *t=Set A bá*, has been falling out of use.

5.6. Concluding remarks

As I showed in this chapter, the influence of Spanish on the verbal morphology of Nahuatl and Tének is significant and involves mostly pattern borrowings. In the data I analysed there were no Spanish matter borrowings except for Spanish loan verbs and prepositions that appear in prepositional phrases, which have replaced traditional morphological operations. Structural borrowings that can be attested in causative, applicative and noun incorporation involve the use of native Nahuatl and Tének resources in new functions that are modelled on Spanish. Whereas contact with Spanish has caused a reduction in productivity of causative and applicative marking, as well as noun incorporation, it has reinforced the use of middle voice in Tének. This change can also be classified as pattern borrowing since middle voice marking has been expanded to mirror the use of the reflexive passive in Spanish. As I show in the following chapter, the effects of contact with Spanish go beyond nominal and verbal morphology, and can also be visible on the syntactic level, which displays many characteristics of contact-induced restructuring.

Chapter 6: Contact phenomena in syntax

6.1. Introduction

In this chapter I demonstrate how contact with Spanish has brought about syntactic reorganisation in such features as word order, nominal and locational structures, possessive constructions and coordinating strategies. First of all, I show how the Mesoamerican predicate-initial word order traditionally found in Nahuatl and Tének was changed to the SVO order also present in Spanish. Moreover, I show how animacy and definiteness ceased to be significant in the ordering of constituents in modern Tének. Next, I demonstrate how nonverbal predicates are gradually replaced with constructions in which copulas are used. I discuss the origin of the Tének existential copula *pél*, and I show that Nahuatl has developed a universal locational copula used for both animate and inanimate subjects. In my analysis of possessive constructions, I mostly focus on the issue of the replacement of Mesoamerican nonverbal constructions of the formula ‘his-dog (the) man’ with predicative constructions of the type ‘(the) man has a dog’. In that part, I trace the semantic changes that the Nahuatl verb *piya* and the Tének verb *kó’yal* had undergone before they became generic possessive copulas. Lastly, I analyse changes in coordination strategies, and I demonstrate how the preferred traditional unmarked strategy evolved into a strategy that consistently uses overt coordinators, which are either Spanish borrowings or native lexical items adapted as coordination markers.

The structure of this chapter is the following. First, in §6.2, I investigate changes in word order and in §6.3 I focus on nominal and locational structures. Next, in §6.4, I analyse changes in possessive constructions and in §6.5 I study coordination strategies in modern Nahuatl and Tének. Finally, concluding remarks are provided in §6.6.

6.2. Word order

6.2.1. Introduction

One of the structural changes that can be observed in modern Nahuatl and Tének concerns ordering of constituents in transitive and intransitive clauses. As I show in this part of the chapter, both of these languages have shifted from the verb-initial basic word order to the SVO word order, the dominant ordering of constituents found in Spanish. Before I move on to discussing changes in the ordering of constituents in Nahuatl and Tének, I first provide some basic information regarding types of word order, as well as the principles regarding establishing dominant word order. I then proceed to analysing the changes in the ordering of constituents in Nahuatl. I demonstrate how the verb-initial order found in transitive clauses in traditional Nahuatl varieties has been changed to the SVO order. I also show that in modern Nahuatl the order is more flexible in intransitive clauses, and both SV or VS orders are considered grammatical. Next, I move on to analysing word order in Tének. I demonstrate how, in a similar way to Nahuatl, this Mayan language has mostly abandoned verb-initial ordering and now uses the SVO order. Moreover, I show that the ordering of constituents in Tének is no longer sensitive to the animacy or definiteness of arguments and that modern Tének has lost the syntactic ergativity that was found in the traditional variety of this language.

6.2.2. Basic word order

Basic word order refers to the dominant ordering of a verb and its arguments (either subject and object in the case of transitive clauses, or just the subject with respect to the verb in the case of intransitive clauses). The terms commonly used to refer to verbal arguments, i.e. ‘subject’ and ‘object’, were refined by Dixon (1972), who distinguished between the arguments of a transitive verb: the more agent-like element (A) and the object (O), and the single argument of an intransitive clause (S). Comrie (1978) later modified this distinction and replaced the argument referred to by Dixon as ‘object’ (O) with ‘P’, that refers to the more patient-like element of the transitive clause. Although

Dixon's and Comrie's distinction of verbal arguments appears more accurate while analysing different word orders, for the purpose of my analysis of changes in word order in Nahuatl and Tének, as well as in this introductory section to the topic of word order, I use the terms 'subject' for both the agent (A) of transitive clauses and the single argument of intransitive clause (S), and 'object' for O/P.

Languages can be classified as either rigid order or flexible order languages, depending on whether they have a dominant type of word order or not (Dryer 2013a). The first type includes languages in which all orders but one are either infrequent, ungrammatical or used in very restricted pragmatic contexts. Many languages, however, allow all (i.e. SVO, SOV, VSO, VOS, OSV and OVS) or some of the six logically possible orders in the case of transitive clauses, or two orders, i.e. SV and VS, in the case of intransitive clauses.¹⁰⁷ These languages are considered flexible order languages. Whereas some of the flexible order languages may have one dominant order (e.g. Russian has SVO dominant order), other languages may allow greater flexibility in the ordering of constituents. In Syrian Arabic, for example, both SVO and VSO orders are possible and none of them appears to be dominant (Cowell 1964: 411). Other languages, including many Mayan languages, are verb-initial and allow both VSO and VOS orders, but the position of subject and object is pragmatically determined, and depends on such features as animacy and definiteness, as I explain in the section below. Finally, a number of languages lack a dominant word order. This is a common feature found in numerous languages native to North America and Australia (Dryer 2013a).

The choice of word order in the languages with flexible word order that lack a dominant word order may be syntactically determined. For example, languages may have one order for main clauses and a different order for subordinate clauses. Andrade

¹⁰⁷ According to the data presented by Dryer (2013a), out of the six logically possible word orders in transitive clauses, subject-initial orders (SOV and SVO) are cross-linguistically most common and are represented in 1,052 languages (564 are SOV dominant and 488 are SVO dominant) out of the 1,376 analysed languages. Verb-initial orders are also common and are found in 120 languages (95 are VSO and 25 are VOS). The VSO order is common in, among others, the Pacific Northwest and in Mesoamerica. The rarest word orders are object-initial. OVS was found in only 11 languages (5 of which are located in the Amazon basin in South America) and OSV was found in 4 languages. As many as 189 languages were classified as lacking a dominant word order in transitive clauses. With respect to intransitive clauses (Dryer 2013b), SV order is more common (1192 out of 1496 analysed languages) and VS order is the second most frequently found (194 languages out of 1496). VS order is very common in the languages of the Mesoamerican linguistic area, as well as in the Pacific Northwest.

(1933: 278) reports that Quileute (Chimakuan, Washington State, USA), uses VSO in main clauses and SVO in subordinate clauses. Ch'orti' (Mayan), on the other hand, employs SVO order in main clauses and VOS in subordinate clauses (Quizar 1979). Moreover, there are also languages that may use one order in main clauses without an auxiliary verb and another order in subordinate clauses that contain an auxiliary (Dryer 2013a). Dinka (Nilotic, Sudan) employs SVO order in main clauses, SAuxOV in main clauses with an auxiliary, VSO in subordinate clauses without an auxiliary and AuxSOV in subordinate clauses with an auxiliary (Nebel 1948: 9, 25, 42, 75, 82).

With respect to intransitive clauses, the position of the subject with respect to the verb is usually the same as in transitive clauses, although this need not be the case (Dryer 2013a). In some languages there may be a dominant order for transitive subjects, but not for intransitive subjects, as in Spanish which uses SVO order in transitive clauses and SV or VS in intransitive clauses. Other languages, on the other hand, may have a dominant order for intransitive subjects, but the position of transitive subjects may vary. One of such languages is Ostuacan Zoque, a Mixe-Zoquean language spoken in Mexico (Engel and Longacre 1963: 335-336). Yet other languages may exhibit a 'split intransitive pattern' (Dryer 2016b), "where more agentive intransitive subjects pattern with transitive subjects in preceding the verb while less agentive intransitive subjects pattern with objects in following the verb." This phenomenon can be observed in e.g. Arawak (Arawakan, Suriname), which displays SVO order in transitive clauses, SV in intransitive clauses with a more agentive subject and VO in intransitive clauses with a less-agentive subject (Pet 1987: 108, 109, 161).

The position of the subject in transitive and intransitive clauses is different in languages that have word order that follows an ergative pattern. In this kind of languages, the position of the absolutive argument in a transitive clause is the same as the position of the single argument of an intransitive clause. The first type involves languages that have Ergative-Verb-Absolutive (SVO) in transitive clauses and Verb-Subject (VS) in intransitive clauses. This type of word order is common in Mesoamerica, including the Huave language (Stairs and Hollenbach 1981: 335). Syntactic ergativity was also reported for Tének (Edmonson 1988: 565), as I explain in

§6.2.4. The other type includes languages with Absolutive-Verb-Ergative (OVS) order in transitive clauses and Subject-Verb (SV) order in intransitive clauses. As noted by Dryer (2013b), word order in the languages that follow the ergative pattern may, however, be far more complicated since it may be sensitive to the presence of additional noun phrases or prepositional elements.

Establishing basic word order in a language may be a challenging task and, although several rules regarding the methodology applied in analyses of word order in languages have been proposed, these principles are not universal and should be adjusted to the particular language under study. Brody (1984, summarised in England [1991: 446ff.]), for example, suggested that, among other rules, only simple (and not complex, e.g. embedded), frequently occurring and least marked sentences which use full nouns (and not pronouns) for nominal constituents should be taken into consideration.

Brody's criteria, however, have been proven inadequate for a number of reasons. For instance, as noted by DuBois (1987), finding sentences that contain both a lexical subject and object may be difficult since this kind of sentences is usually rare in naturally occurring speech. This situation is typical to both Nahuatl and Tének which commonly express subjects pronominally (as markers on verbs), and in which sentences with lexically expressed arguments may not be easy to find in spoken language. Furthermore, as noted by Dryer (2013c), in "some languages pronominal objects occur in a different position from lexical objects" (or subjects). In Spanish, for instance, lexical objects typically follow the verb (*Yo veo a él* 'I see him') and pronominal objects normally precede the verb (*Yo lo veo* 'I see him').¹⁰⁸ Another issue concerns languages with pragmatically or syntactically motivated word order. England (1991: 450) observed, for example, that it is common for Mayan languages (including Tének, as I explain below) to have a variety of possible word orders which are sensitive to syntactic and pragmatic criteria, and that the basic order may in fact not be the order most commonly attested in a given language.

¹⁰⁸ The solution to this issue proposed by Dryer (1997) is to only include two (and not three) basic features that represent arguments that are more often expressed lexically in a language. He suggests classifying such languages as SV or VS, or OV or VO.

Moreover, data collection methods should be chosen carefully when analysing basic word order. This is especially important in the case of minority and indigenous languages under strong influence of dominant languages, since the use of the latter in e.g. elicitation sessions can affect the ordering of words in the minority language. Whereas Phrao Hansen (2010) stresses the importance of using spontaneous speech data in research on word order, England (1991) claims that

elicitation is necessary to test the limits of the grammatical system. Syntactic or grammatical word order must be of greatest functional importance where semantic and pragmatic clues to meaning are absent or minimal, and the artificially constructed but grammatical elicitation sentences are critical for discovering word order facts in these contexts since they are unlikely to occur in naturally produced discourse. (England 1991: 450)

Taking into consideration the above mentioned issues, in my research on changes in word order in Nahuatl and Tének a variety of data (both elicited and spontaneous) have been used. This methodology allows for a more complete picture regarding natural language use and a more objective assessment of the influence of Spanish on the structures of Tének and Nahuatl.

6.2.3. Word order in Nahuatl

As was already mentioned in §3.2.6, traditional Nahuatl was a highly agglutinating and polysynthetic language which allowed for the formation of ‘sentence words’. Nahuatl is characterised by the obligatory head-marking of phrasal arguments on their phrasal heads (Baker 1996) and, although single-word sentences (in which verbal arguments were only expressed pronominally) were not the only type of sentences used in older varieties of Nahuatl, they can be attested in colonial documents. Moreover, traditional Nahuatl was also a pro-drop language, which permitted omitting either independent pronouns or noun phrases that express verbal arguments or subjects of nominal predicates. Independent pronouns in traditional Nahuatl were usually only expressed in order to add emphasis. It was also possible to incorporate objects into verbs (see §5.4.3). Because of these typological traits, Classical Nahuatl is generally considered a

non-configurational language. As summarised by Lockhart (2001: 81), “the order of components in a Nahuatl utterance is extremely fluid”.

However, multiple-word sentences were also widely attested in Classical Nahuatl and several observations about the ordering of constituents in such constructions can be made. Lockhart (2001: 81) mentions the following order of elements in Nahuatl used between the 16th to 18th centuries: “1) particles and adverbial elements; 2) the nuclear complex; 3) the specified subject and object in the form of nouns or verbal clauses”. According to Lockhart, the position of subject and object in Nahuatl depends on their weight and shorter elements are usually located closer to the nucleus. Topicalisation of elements in which a subject or object is brought to the front of the sentence, i.e. preceding the verb, is also possible (Lockhart 2001: 81). The most pragmatically neutral word order in Classical Nahuatl was, however, the verb-initial word order (Launey 1992). VSO word order was the most common word order for transitive sentences, and it was also a feature of Proto-Nahua and Southern-Uto-Aztecan languages (Campbell 1987: 274ff.).¹⁰⁹

Apart from Classical Nahuatl, verb-initial word order has also been reported for other more modern varieties of Nahuatl. This ordering is, for example, present in Pipil described by Campbell (1978, 1985, 1987). Hill and Hill (1986) also report that verb-initial word order occurs in Malinche Nahuatl, and Pharao Hansen (2010) mentions that the same tendency can be found in Hueyapan Nahuatl in Morelos. Huasteca Nahuatl, as described by Beller and Beller (1979), was also a variety with verb-initial ordering of constituents. Since Huasteca Nahuatl is the focus of this study, it is useful to summarise what Beller and Beller observed about word order in this variety of Nahuatl.

Word order in Huasteca Nahuatl spoken in the 1970s was usually VSO (Beller and Beller 1979: 206). The predicate (abbreviated to PRED in Figure 6.1 below) could be preceded by an introducing element (ITD), such as an adverb for example, or a quotative (QUOT), e.g. the inflected verb *quiihtohua* ‘he/she says it’. The predicate was followed

¹⁰⁹ According to Langacker (1977: 24), the VSO word order replaced the former SOV basic word order found in Proto-Uto-Aztecan.

by the subject, then the indirect object (IOBJ) and the object. The preferred order was therefore VS(IO)O. Other orders, including SV(IO)O and V(IO)OS, were also possible, although the indirect object would always come before the direct object in all orders. Additional constituents, such as time, manner (MAN) or locative (LOC) did not appear in a fixed order, but the purpose constituent (PUR) typically would come last before the quotative, if the latter closed the clause (Beller and Beller 1979: 206). The ordering of constituents in Huasteca Nahuatl spoken in the 1970s is visualised in Figure 6.1 below.

ITD	PRED	SBJ	IOBJ	OBJ	BEN	TIME	MAN	LOC	PUR	QUOT
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Figure 6.1. Word order in Huasteca Nahuatl (Beller and Beller 1979: 206).

The above mentioned word order in Huasteca Nahuatl is illustrated in example (6.1) below which includes the verb form *kikowili* Ø-ki-kowi-li (SBJ.3SG-OBJ.3SG-buy-APPLIC.PAST) ‘he bought it for her’ marked for all of its arguments, i.e. the subject, object and indirect object (the applied object). The noun phrases that follow the predicate (*Roberto, isiwa* ‘his wife’ and *seh pico* ‘a pig’) are added for emphasis and are co-referenced with the argument morphemes that are obligatorily marked on the verb.

- (6.1) Predicate-initial word order in Huasteca Nahuatl
(Beller and Beller 1979: 206) [glosses modified]
- | | | | |
|------------------|---------------------------------|----------------|--------------------------|
| ITD | PRED(V) | SBJ | IOBJ |
| <i>Wahka</i> | <i>Ø-ki-kowi-li'</i> | <i>Roberto</i> | <i>i-siwa</i> |
| therefore | SBJ.3SG-OBJ.3SG-buy-APPLIC.PAST | Roberto | POSS.3SG-wife |
| OBJ | TIME | LOC | QUOT |
| <i>seh pitso</i> | <i>yahwaya</i> | <i>nepa</i> | <i>tiankis Ø-tletowa</i> |
| one pig | yesterday | there | market SBJ.3SG-say |
- ‘Therefore Robert bought his wife a pig yesterday there at the market, so he says.’

Word order that can be attested in modern Nahuatl spoken around Xilitla, however, has been transformed and the changes that can be observed are at least twofold. First of all, in my data there are several attestations of verbal forms which lack obligatory argument marking. This phenomenon is illustrated in (6.2a) below in which the 3rd person object

prefix *qui* is missing. For comparison, a more traditional form of the verb *cohua* ‘to buy’ in (b) displays both arguments marked on the verb.

(6.2) Argument marking in verbal complex in modern Huasteca Nahuatl (FRF)

- a. *Xochitl* **Ø-cohua** *ce amoch-tli*
Xochitl **SBJ.3SG-buy** one book-ABS.SG
 ‘Xochitl buys a book.’
- b. *Xochitl* **Ø-qui-cohua** *ce amoch-tli*
Xochitl **SBJ.3SG-OBJ.3SG-buy** one book-ABS.SG
 ‘Xochitl buys a book.’

Secondly, the loss of morphological complexity appears to affect the ordering of constituents of modern Huasteca Nahuatl, and a tendency for the word order to become more fixed and SVO order to become most frequently used can be observed. The change from verb-initial order to SVO order was also reported in many other Nahuatl varieties including Tetelcingo Nahuatl (Tuggy 1979), North Puebla Nahuatl (Brockway 1979), Southeast Puebla Nahuatl (MacSwan 1998) and Michoacán Nahuatl (Sischo 1979).

Although SVO order is common in many modern dialects of Nahuatl and is also the basic order in Spanish, Spanish influence as the source of change from verb-initial to SVO word order has been debated. For instance, Campbell (1987: 274) claims that changes in basic word order in Pipil do not stem from contact with Spanish, but rather, from contact with neighbouring Mayan and Xincan languages. Pharaoh Hansen (2010), on the other hand, attributes the high frequency of SVO word ordering to weak methodology, in which either Spanish is used in elicitation of Nahuatl phrases or data comes from written sources. As noted by Pharaoh Hansen (2010), those who learned to write in Nahuatl, learned about writing not in Nahuatl but in Spanish and are likely to use the word order of Spanish.¹¹⁰ Moreover, Pharaoh Hansen (2010) remarks that variation in word order is very likely to correlate with the age and competence of speakers. According to him, the more innovative traits in the ordering of constituents

¹¹⁰ Mithun (2006) has pointed out how bilingual authors of didactic textbooks of Mohawk use a syntax that is more similar to English syntax than to the syntax of spoken Mohawk.

tend to be found in the speech of younger, less proficient Nahuatl speakers, or older speakers who are Spanish-dominant. Although the arguments presented by Pharaoh Hansen (2010) may be valid for some varieties of modern Nahuatl, in Western Huasteca Nahuatl a clear tendency towards SVO order can be observed in both written sources and spontaneous speech, and the age or competence of speakers does not seem to affect the ordering of the verb and its arguments.

SVO order is the preferred word order found in transitive clauses and it appears in both written Nahuatl (6.3), and in the samples of spontaneous speech which were collected using visual stimuli without any prompts in Spanish (6.4).

(6.3) Word order in transitive clauses in written modern Huasteca Nahuatl (DJH)

S		V		O
<i>Nochi</i>	<i>macehual-meh</i>	<i>Ø-qui-tequihua-h</i>		<i>ni a-tl</i>
all	commoner-ABS.PL	SBJ.3PL-OBJ.3SG-use-PL		DEM water-ABS.SG
‘Everybody used this water.’				

(6.4) Word order in transitive clauses in modern Huasteca Nahuatl (LGA)

S		V		O
<i>Ceyoc</i>	<i>tlaca-tl</i>	<i>Ø-qui-hualica</i>		<i>ce tlapiyal-li</i>
another	man-ABS.SG	SB.3SG-OBJ.3SG-bring		one animal-ABS.SG
‘Another man is bringing an animal.’				

As for word order in intransitive clauses, it appears to be more flexible. Intransitive sentences have both VS order, which would be considered a more traditional word order (6.5), and SV order (6.6). It is worth noticing that both examples come from the same competent speaker who uses both VS and SV orders interchangeably. The data collection method involved visual stimuli without the use of Spanish.¹¹¹

¹¹¹ As pointed out by John Sullivan (p.c., 12 April 2022), the use of SV or VS order may be related to the presence or absence of a relational phrase. He suggests that in modern Nahuatl a verb is more likely to appear after the subject and before the relational phrase due to, what he calls, ‘an equilibrium/balance principle’, according to which the constituents of a verb tend to be evenly distributed before and after the verb.

(6.5) Word order in intransitive clauses in modern Huasteca Nahuatl (LGA)

V	S	
<i>Ø-tzahtzi-h</i>	<i>cuapele-meh</i>	
SBJ.3PL-crow-PL	rooster-ABS.PL	

‘The roosters are crowing.’

(6.6) Word order in intransitive clauses in modern Huasteca Nahuatl (LGA)

S	V	
<i>Ce cihua-tl</i>	<i>Ø-ixtemo</i>	<i>i-pan</i>
one woman-ABS.SG	SBJ.3SG-walk.down	POSS.3SG-surface[RTL]
<i>ce oh-tli</i>		
one road-ABS.SG		

‘A woman is descending on a road.’

The examples above do not confirm Beller and Beller’s (1979) claim about word order in Huasteca Nahuatl. Whereas, according to their data, the word order in transitive sentences is VSO, my data suggests that the ordering is SVO in transitive sentences and either VS or SV in intransitive sentences. Similarly, their finding that the indirect object appears after the subject and before the direct object (VSIOO) is not corroborated in my data, in which the indirect object follows the object that appears after the verb (VOIO). An illustration of such ordering is presented in example (6.7), which comes from a confident bilingual native speaker and was collected using visual stimuli.

(6.7) Word order in ditransitive clauses in modern Huasteca Nahuatl (LGA)

	V	O
<i>Aman Ø-yah-qui</i>	<i>Ø-qui-huiqu-ilih</i>	<i>a-tl</i>
now SBJ.3SG-go-PST	SBJ.3SG-OBJ.3SG-bring-APPL	water-ABS.SG

IO
i-tlahuical
 POSS.3SG-spouse
 ‘Now she went, she brought water to her husband.’

To sum up, modern Huasteca Nahuatl displays change not only with respect to word order in traditional colonial Nahuatl, but also with respect to word order in Huasteca Nahuatl as spoken in the 1970s. The ordering of constituents in intransitive clauses in Nahuatl spoken around Xilitla is either VS or SV, and the same speakers often use both orders interchangeably. Word order in transitive phrases, on the other hand, is

consistently SVO. The preference for SVO word order is reflected in the speech of both older speakers and teenagers who have different levels of competence in Nahuatl. Moreover, this word order appears not only in written sources, but also in spontaneous language use, which suggests that the change to SVO is more established than it was claimed by Pharao Hansen (2010) for Hueyapan Nahuatl. The shift to SVO ordering, which can be observed in many modern varieties of Nahuatl, is most likely linked to contact with Spanish, which also has SVO. Whether a similar tendency can be observed in contemporary Tének will be explored next.

6.2.4. Word order in Tének

Tének, similarly to Nahuatl, marks verbal arguments on a verb with optional specification of arguments in separate noun phrases. Although Tének, as well as other Mayan languages, can be classified as non-configurational languages with flexible word order, some tendencies can, nevertheless, be observed in the ordering of constituents in both Tének and related languages.

Mayan languages are usually considered verb-initial, although there is variation in the ordering of the subject and object in transitive clauses. England (1991) divided all Mayan languages into two groups: (1) those which have rigid VSO word order, and (2) other languages that are less rigidly VOS and permit orders including VOS, VSO and SVO.¹¹² Note that both groups have the verb-initial order and deviations from this basic order are allowed, although they would be considered pragmatically marked.

The variable word order in Mayan languages depends on animacy and definiteness of arguments of the verb (Norman and Campbell 1978: 146). In Mayan languages the most semantically neutral sentence is one in which the object is lower on the animacy hierarchy than the subject (for example, it includes an animate subject and an inanimate

¹¹² Mayan languages with fixed VSO order include Mam, Tektiteko, Awakateko (Norman and Campbell 1978), Ixil of Nebaj and Chajul (Ayres 1980), Q'anjob'al, Jakaltek and Chuj of San Sebastián. The languages with predominantly VOS order include the 20th century Yukatek (Durbin and Ojeda 1978; Hofling 1984), Itza' (Hofling 1984), Mopan (Hofling 1984), Lacandon (Hofling 1984), the 16th century Yukatek (Hofling 1984), Tojol-ab'al (Brody 1984), Tsotsil (Aissen 1987), Tz'utujil of San Juan and Santiago (Dayley 1985) and Ixil of Cotzal. The languages that display mixed VOS-VSO word order are Chuj of San Mateo, Kaqchikel, K'iche', Tz'utujil, Akateko, Mocho', Tének and Tseltal. One example of a Mayan language with a predominant SOV order is Ch'orti' (Quizar 1979).

object). In such a case, the word order is VOS (Campbell and Kaufman 1976: 191; Norman and Campbell 1978: 146). When the subject and object are equal on the animacy scale (e.g. they are both humans), then the order is VSO. The VOS languages permit VSO when the object is marked for animacy, definiteness or ‘complexity’ (England 1991: 484). According to England (1991), Proto-Mayan was a VOS language.¹¹³ However, Quizar (1979) questioned the animacy of constituents as the factor controlling basic word order in Mayan languages, and she claimed that it is definiteness of constituents more than animacy that influences the ordering. This observation was confirmed by DuBois (1987), who showed that in many Mayan languages there are grammatical restrictions against indefinite subject NPs. There are no such constraints, however, with respect to indefinite transitive objects.

The rarest word order in Mayan languages is SVO. England claimed that the SVO order, which she considered “presumably innovative and recent” (1991: 455), is usually only used to disambiguate between the subject and the object (1991: 449). Moreover, the SVO order is usually associated with topicalisation or focus and it should not be considered a neutral word order in most Mayan languages (England 1991: 449). While several languages of this family permit the SVO order, only Ch’orti’ (Quizar 1979) and Kaqchikel (England 1991: 472) are classified as SVO languages. Although it appears that contact with Spanish might have played a role in establishing the SVO order as one of the possible word orders attested in Mayan languages, this claim was questioned by Rodríguez Guaján (1989). According to him, the SVO order was already present in Kaqchikel in the 16th century and probably was not the result of contact with Spanish. Quizar (1979: 230) hints at influence of other Mesoamerican languages, such as Nahuatl or Mixe-Zoquean languages, combined with “internal structural pressures” related to the preverbal topic or focus position as the reason behind the word order change.

As for Tének, it was considered by Norman and Campbell (1978) and England (1991) a verb-initial language with mixed VOS-VSO basic word order, in which the exact position of verbal arguments depends on their animacy and definiteness. Example

¹¹³ According to Norman and Campbell (1978: 144), Proto-Mayan was verb-initial.

(6.8) illustrates the VSO word order in which S and O refer to animals and are equally animate. Example (6.9), on the other hand, shows an ordering for a case in which the subject is higher on the animacy hierarchy than the object. In this case the word order is VOS.

(6.8) Ordering of animate constituents in Tének
 (Norman and Campbell 1978: 145, after England 1991: 463) [my glosses]

V	S	O
<i>In=k'at'-uw-Ø</i>	<i>an pik'o'</i>	<i>an olom</i>
A3.SG=bite-TR-COMPL	DEF dog	DEF pig

‘The dog bit the pig.’

(6.9) Ordering of animate constituents in Tének
 (Norman and Campbell 1978: 145, after England 1991: 463) [my glosses]

V	O	S
<i>in=k'oj-ow-Ø</i>	<i>oox i ajan</i>	<i>an inik</i>
A3.SG=pick-TR-COMPL	three INDEF ear.of.corn	DEF man

‘The man picked three ears of corn.’

However, contrastive observations about basic word order in Tének were made by scholars who based their studies of Tének on extensive fieldwork. For example, according to Edmonson (1988: 565), the preferred word order in modern Tének is SVO for transitive sentences. Kondic (2013), on the other hand, lists four word orders found in South Eastern Tének of Veracruz: SVO, OVS, VOS and VSO. She claims that out of these possible orders, the most commonly attested are SVO and OVS (see examples 6.10a&b). While both Kondic (2013) and Edmonson (1988) confirm that the SVO ordering is common in Tének, neither of them mentions verb-initial word order as the basic order. It is surprising, however, that Kondic (2013) considers the OVS order as one of the two most common orders in South Eastern Tének, as no other author apart from her has made a similar observation.

(6.10) Variable word order in South Eastern Tének (Kondic 2013) [glosses modified]

- a. **S** **V** **O**
n-a *Beatriis* *in=koo'-y-al* *juun* *i* *mixtun*
 DET-HON Beatriz A3.SG=have-TS-INCOMPL one INDEF cat
 ‘Beatriz has got a cat.’
- b. **O** **V** **S**
juun *i* *mixtun* *in=koo'-y-al* *n-a* *Beatriis*
 one NM cat A3.SG=have-TS-INCOMPL DET-HON Beatriz
 ‘Beatriz has got a cat.’
- c. **V** **O** **S**
in=koo'-y-al *juun* *i* *mixtun* *n-a* *Beatriis*
 A3.SG=have-TS-INCOMPL one INDEF cat DET-HON Beatriz
 ‘Beatriz has got a cat.’

Contrary to what has been said by Campbell (1978) and England (1991), the ordering of constituents in modern Tének documented by Kondic (2013) is therefore sensitive to neither the animacy nor the definiteness of the arguments of the verb. In the set of examples in (6.10), the subject and object are not equal on the animacy scale (the subject is human and the object is an animal). In more traditional Tének, as described by Norman and Campbell (1978) and England (1991), the expected word order in this configuration of the animacy of constituents would be VOS, and not SVO or OVS. Even if definiteness of arguments were taken into account in the above examples (subject is definite and object is indefinite), we would also expect to have the VOS word order as the most conventional order preferred over SVO or OVS.

With respect to ditransitive verbs, the position of the indirect object appears to be flexible. According to Kondic (2013), the indirect object can appear as a final argument (6.11a&c), between the verb and the object (6.11b), or as the initial argument (6.11d). For comparison, the order for ditransitive sentences in San Luis Potosí Tének is SVOIO, in which the indirect object follows the direct object (Edmonson 1988: 565).

to Esteban Martínez et al. (2006: 18), the indigenous authors (and native speakers) of the San Luis Potosí Tének grammar, SVO is the basic word order in their variety (6.14a). Other orders, i.e. VOS and VSO (6.14b&c) are also permitted, but the object-initial order is not grammatical (Esteban Martínez et al. 2006: 18).

(6.14) Possible word orders in modern Tének (Esteban Martínez et al. 2006: 18)

- a. **S** **V** **O**
A *Juan* *in=k'ap-al* *an tsanek'w=chik*
HON Juan A3.SG=eat-INCOMPL DEF bean=PL
‘Juan is eating beans.’
- b. **V** **O** **S**
In=k'apal *an tsanek'w=chik* *a* *Juan*
A3.SG=eat-INCOMPL DEF bean=PL HON Juan
‘Juan is eating beans.’
- c. **V** **S** **O**
In=k'apal *a* *Juan* *an tsanek'w=chik*
A3.SG=eat-INCOMPL HON Juan DEF bean=PL
‘Juan is eating beans.’

The SVO ordering in modern Tének is attested in both elicited and spontaneous language use. In grammatical correctness tests targeting word order, the SVO order was also chosen by the speakers as the most correct and natural. Neither the animacy of verbal arguments nor their definiteness appear to play any role in the ordering of constituents in modern Tének. The order remains SVO when the subject is animate (human) and the object is inanimate (6.15), and also when both arguments are animate (6.16). In more traditional Tének the ordering of constituents in the first case would be VOS and in the second case it would be VSO.

(6.15) Word order in modern Tének when S is animate and O is inanimate (AFF)

- S** **V** **O**
A *Paula* *in=k'ak'-dh-al* *an ja'*
HON Paula A3.SG=warm-CAUS-INCOMPL DEF water
‘Paula warms the water.’

- (6.16) Word order in modern Tének when both S and O are animate
(Kondic 2016a: 80) [glosses modified]

S	V			
<i>Pwees</i>	<i>wawaa' jachtaam'</i>	<i>baa'</i>	<i>wa'</i>	<i>i=elt-ow-al</i>
so	1PL therefore	NEG	1PL	A1.PL=can-TR-INCOMPL
O				
<i>k=i</i>	<i>uktx-iy</i>	<i>n-a</i>	<i>dyoos</i>	
SR=A1.PL	forget-TR(COMPL)	DET-HON	God	
‘We can’t forget God.’				

The word order remains SVO also regardless of whether the arguments are definite or indefinite. Example (6.17a) illustrates a sentence in which the subject is definite and the object is indefinite. In example (6.17b), on the other hand, both arguments are definite. The word order attested in both of these examples is SVO.

- (6.17) Word order with definite arguments in modern Tének (LFH)

a.	S		V	
	<i>In=tataj</i>	<i>a</i>	<i>Juan</i>	<i>in=kw-a'-al</i>
	A3.SG=father	HON	Juan	A3.SG=have-TR-INCOMPL
O				
	<i>jún</i>	<i>in</i>	<i>abát</i>	
	one	INDEF	messenger	
‘Juan’s father has a personal assistant.’				
b.	S	V	O	
	<i>An pita'</i>	<i>in=pun-uw-its</i>	<i>an dhak'chok'</i>	
	DEF hen	A3.SG=lay-TR-EMPH	DEF egg	
‘The hen has already laid eggs.’				

The SVO order is also applied in situations in which the subject is indefinite and the object is definite, as illustrated in (6.18).

- (6.18) Word order in modern Tének when the subject is indefinite and the object is definite (Kondic 2016a: 144) [glosses and translation modified]

			S			V
<i>Juun</i>	<i>i</i>	<i>k'ij</i>	<i>juun</i>	<i>i</i>	<i>uxum</i>	<i>in=koo'-oy</i>
one	INDEF	time	one	INDEF	woman	A3.SG=have-TR(COMPL)
O						
<i>an</i>	<i>altelomaach</i>					
DEF	diarrhea					
'One time a woman had diarrhea.'						

Despite the above mentioned evidence for contact with Spanish as the most likely reason behind a shift from the verb-initial to SVO order in Tének, Meléndez Guadarrama (2022: 116, fn. 6) questions this explanation. The argument she presents is that SVO order was already attested in Tének in the work by De la Cruz (1571), and as such, is unlikely to have been motivated by contact with the colonial language. Such reasoning is, however, not valid since De la Cruz was not a native speaker of Tének and the structures he used in his translation of the Christian doctrine were very likely influenced by his native language, i.e. Spanish. Because there are no known sources written by a native speaker in the 16th century Tének, for the time being it remains impossible to verify whether SVO was indeed the preferred word order in transitive clauses in early colonial Tének.

To sum up, word order in modern Tének is consistently SVO. Although other orders are also permitted, they are not frequently attested in spontaneous speech. In grammaticality correctness tests, on the other hand, these orders are considered correct but not very natural. The animacy and definiteness of verbal arguments, which affected the ordering of constituents in conservative Tének and other Mayan languages, no longer influence the position of subject and object in modern Tének. SVO became the default order no matter whether verbal arguments are equal on the animacy scale or not, or whether they are definite or not. The word order in intransitive sentences is SV, which also replaced the more traditional VS order. Syntactic ergativity is no longer present in modern Tének since the subjects of both intransitive and transitive sentences appear in the same pre-verbal position. Whether the change to SVO and SV orders can be classified as an internal development or a result of influence of Spanish is a matter of

debate. However, the fact that changes in the ordering of constituents in modern Tének are also accompanied by a departure from the ordering that depends on the animacy and definiteness of subject and object can suggest that the shift to the SVO word order has indeed been triggered by contact with Spanish.

6.2.5. Summary

The changes that can be observed in word order in modern Nahuatl and Tének are remarkably similar. The word order in transitive clauses in both languages is more fixed and the SVO order replaced a more traditional verb-initial ordering. However, more variation can be found in intransitive clauses. Whereas in Nahuatl the position of a subject with respect to an intransitive verb is variable and can be either VS or SV, in Tének it is SV. Another innovation that can be observed in Tének, is the ordering of constituents that is no longer sensitive to the animacy and definiteness of verbal arguments, as traditionally was the case. Moreover, the subjects of both intransitive and transitive sentences in modern Tének appear in the pre-verbal position, which proves the lack of syntactic ergativity. Although this change can be attributed to internal development, a more likely source can be sought in contact with Spanish. This hypothesis is supported by the fact that the non verb-initial word order appears to be the preferred ordering even in data representing spontaneous language use.

6.3. Nominal and locational predicates

6.3.1. Introduction

The aim of this part of the chapter is to investigate how contact with Spanish affected the encoding of nominal and locational predicates in modern Nahuatl and Tének. First of all, I briefly present available strategies for encoding these types of predicates, including a shared, a split and a mixed strategy. Then, I proceed to a comparison of the traditional and innovative strategies in Nahuatl. I show how the use of copula in

nominal predicates depends on the tense of the expression. I also demonstrate how in traditional Nahuatl different locational verbs are used for animate and inanimate subjects. I then provide examples to demonstrate that this distinction has been neutralised in modern Nahuatl, and that the copula *itztoc* became the universal verb used in all locational predicates. Moreover, this verb is now widely used in predications describing temporary states. I then move on to an analysis of changes in nominal and locational predicates in Tének. I show that the copula *pél* has been introduced in nominal predicates in modern Tének, and that it replaced the former verbless constructions. In my analysis, I show how the verb *k'wajat* is used as a locational copula for all kinds of subjects and how this verb also extended its use to serve as a supportive verb in predications indicating non-permanent states.

6.3.2. Encoding nominal and locational predicates

Nominal and locational predicates typically belong to nonverbal predicates which lack a semantically rich lexical verb (Payne 1997: 112). Whereas in some languages all nominal and locational predicates require the presence of a copula verb (such as the English copula *to be*), other languages use verbless constructions. Depending on whether nominal and locational predicates are encoded with the same strategy, a language can be called a ‘share-language’ if it uses the same strategy for both types of predicates, or a ‘split-language’ if it applies different strategies (Stassen 1997). English, for example, uses the verb *to be* as both a nominal copula and a locational support verb. Spanish, in contrast, is a split-language since it uses two distinct verbs for nominal and locational predicates, i.e. the verb *ser* to encode nominal predication (to describe more permanent attributes, such as professions, religion, gender, relationships, time, origin, etc.), as illustrated in (6.19a), and the verb *estar* as the locational verb (6.19b).

(6.19) Encoding of nominal and locational predicates in Spanish

- | | | |
|----|----------------------------------|---------------------------|
| a. | <i>Rita es enfermera</i> | ‘Rita is a nurse.’ |
| b. | <i>Eduardo está en Edimburgo</i> | ‘Edward is in Edinburgh.’ |

In certain contexts Spanish also employs the so-called ‘mixed encoding’, in which the locational support verb (*estar*) can act as a copula for nominal predicates, in addition to the copula *ser* (Stassen 2013a). The double encoding of nominal predications is often correlated with the notion of time stability (Givón 1984), or permanency (Stassen 1997). Thus, whereas nominal constructions with the copula *ser* indicate permanent class membership, nominal constructions with the copula *estar* suggest temporary class membership or states such as emotions, conditions, actions, short-term jobs, etc. An example of such a use of *estar* is presented in (6.20).

- (6.20) Use of locational copula in nominal predicates in Spanish
Rocío está de enfermera en Donostia
‘Rocío works (temporarily) as a nurse in Donostia.’

The split strategy can also involve the use of a supportive verb for locational predication, and either not using any verb or only using a linking element for nominal predication (the so-called ‘zero-copula’). This strategy, as I explain in the following sections, was applied traditionally in both Nahuatl (in present tense) and in Tének. In fact, as it has already been mentioned in §2.4.3, verbless nominal predicates are a Mesoamerican trait (Campbell et al. 1986).¹¹⁴

6.3.3. Nominal and locational predication in Nahuatl

The form of traditional nominal and locational predicates in Nahuatl is not only sensitive to the semantics of the expression, but also to its tense and the animacy of the subject. Because of these features, Nahuatl nominal and locational predicates do not easily fit into the basic typology of either the shared-type, split-type or mixed-type predicates mentioned above. Furthermore, it appears that a variation in non-verbal predicates can be found in different dialects of Nahuatl. Thus, whereas some modern varieties of Nahuatl (e.g. Tetelcingo Nahuatl, cf. Tuggy 1979) use patterns similar to the ones present in older varieties of Nahuatl, other dialects (including Huasteca Nahuatl)

¹¹⁴ Split languages include, among others, Huichol, Misantra Totonac, Isthmus Zapotec, and several Mayan languages such as Tsotsil, Jakaltek, Mam, Tz’utujil (Stassen 2013a).

use distinct structures. Moreover, non-verbal predicates have also been affected by contact with Spanish, which is very likely to be the source of, e.g. the loss of the traditional use of distinct copulas for animate and inanimate subjects of locational predicates, as I demonstrate below.

The varieties of colonial Nahuatl had distinct ways of expressing nominal and locational predication (Sullivan 1988: 189ff.). As was already mentioned in §3.2.4, all nouns in Classical Nahuatl could appear in existential predicative function, in which case they bore subject prefixes (6.21). Such zero-copula nominal predication was, however, only possible in the present tense. In tenses other than present, the copula *cah/ye* was used. This copula was also used in locational predicates, as illustrated in (6.22).

(6.21) Verbless nominal predicate in Classical Nahuatl

Nehhuatl ni-cihua-tl
 1SG SUB.1SG-woman-ABS.SG
 ‘I am a woman.’

(6.22) Locational predicate in Classical Nahuatl

Nican ni-cah
 here SUB.1SG-**be**
 ‘I am (located).’

Thus, the system of nominal and locational predication used in Classical Nahuatl applied split strategies when the nominal expression was in the present tense, but the shared strategy was used when the nominal expression referred to the past or the future. An illustration of this phenomenon appears in a testament from Toluca dated 1733, in which the copula *ye* ‘to be’ is used in a nominal predication in future tense (6.23).

(6.23) Use of copula *ye* in nominal predication in the future tense in Classical Nahuatl (Pizzigoni 2007: 55) [my glosses, translation modified]

no-mortaxa ye-z
 POSS1SG-shroud **be-FUT**
 ‘**it will be** my shroud’

The system applied in colonial Nahuatl can therefore be classified as mixed tense-sensitive. This kind of solution is not applied in Spanish, since in this language the strategies are not tense-sensitive. Instead, the choice of the verb is governed by the permanence of state to which the predicate refers, and not by the tense of the expression.

Nominal and locational predications in Huasteca Nahuatl resemble in some respects equivalent constructions in Classical Nahuatl, but there are also significant differences. Huasteca Nahuatl applies zero-copula sentences in existential constructions in the present tense, as illustrated in (6.24). An innovation with respect to Classical Nahuatl is, however, the use of the numeral *ce* ‘one’, which has been grammaticalised as an indefinite article.

(6.24) Existential predicate in modern Huasteca Nahuatl (SAB)

<i>Na</i>	<i>ce</i>	<i>ni-cihuatl</i>
1SG	one	SBJ.1SG-woman-ABS.SG
‘I am a woman.’		

The presence of an article in a nominal predicate is likely to have been influenced by Spanish, which uses articles in many existential constructions in the same syntactic position as modern Huasteca Nahuatl, such as in *soy una mujer* ‘I am a woman’. This hypothesis is supported by the fact that Tének also uses a numeral *jún* ‘one’ grammaticalised as an article in existential structures, as I show in the next section.

The presence or absence of a copula in nominal predication in Huasteca Nahuatl is also sensitive to the tense of the expression, as was the case in Classical Nahuatl. Nevertheless, whereas in Classical Nahuatl the copula *cah/ye* was used in non-present tense nominal predicates, in Huasteca Nahuatl the copula *eli* ‘be, become’ is applied instead. However, this copula normally only appears in the form *eltoc*, which Andrews (2003: 91) refers to as “preterite-as-present tense” (example 6.25) or the future tense form *eliz* (6.26).

(6.25) The stative copula *eli* in Huasteca Nahuatl
 (Beller and Beller 1979: 214) [glosses modified]
Noha Ø-el-tok seh Ø-tla-mač-tih-ke-tl
 still SBJ.3SG-be-STAT one SBJ.3SG-OBJ.NHUM-understand-CAUS-AG-ABS.SG
 ‘He is still a teacher.’

(6.26) The stative copula *eli* in Huasteca Nahuatl
 (Beller and Beller 1979: 214) [glosses modified]
Ø-ki-neki Ø-eli-s seh te-pah-tih-ke-tl
 SBJ.3SG-OBJ.3SG-want SBJ.3SG-be-FUT one OBJ.HUM-medicine-VR-AG-ABS.SG
 ‘He wants to be a doctor.’

The same copula *eli* (in its stative form *eltoc*) is also used in Huasteca Nahuatl to indicate the location of inanimate referents (6.27). In contrast, locational predicates of animate subjects use the copula *itztoc* (6.28).¹¹⁵

(6.27) Locational predicate with an inanimate subject in Huasteca Nahuatl
 (Beller and Beller 1979: 214) [glosses modified]
Ø-el-tok no-tomin i-pan mesah
 SBJ.3SG-be-STAT POSS.1SG-money POSS.3SG-surface[RTL] table
 ‘My money is on the table.’ (Spanish: ‘*Mi dinero está sobre la mesa.*’)

(6.28) Locational predicate with an animate subject in Huasteca Nahuatl
 (Beller and Beller 1979: 215) [glosses modified]
Ø-its-tok-eh miak tosa-meh i-pan
 SBJ.3PL-be-STAT-PL many mole-ABS.PL POSS.3SG-surface[RTL]
no-mila
 POSS.1SG-field
 ‘There are many moles in my field.’

Nominal and locational predication in traditional Huasteca Nahuatl is therefore much more complex than in Spanish. In Nahuatl nominal predications in non-present tenses and locational predications describing the location of inanimate referents share the same copula *eli*. In certain configurations *eli* can, therefore, function as a copula for both nominal and locational predicates, namely, as *eli* in non-present tense nominal

¹¹⁵ The locational copula *itztoc* is a stative form of the verb *itz*, which - in turn - is a stem form of the intransitive verb *itta* ‘to see’. Although the verb *itta* is transitive, *itz* appears in some constructions without an object prefix. Karttunen (1992: 109) translates *itztoc* as ‘something visible’, or as ‘to be sleepless’ in the Nahuatl dialect from Sierra de Zacapoaxtla in the state of Puebla.

predicates, and as *eltoc* in locational predicates for inanimate subjects. In other configurations, i.e. when the nominal predication is in the present tense, the Nahuatl system resembles the split system with the zero-copula in nominal predication, and two distinct locational copulas in locational predications depending on the animacy of the referents. The Huasteca Nahuatl system is summarised in Table 6.1 below.

Table 6.1. Nominal and locational predicates in Huasteca Nahuatl.

	Present	Non-present
Nominal predicate	Ø	<i>eli (eltoc, eliz)</i>
Locational animate	<i>itztoc</i>	<i>itzto- (itztoya, itztoz etc.)</i>
Locational inanimate	<i>eltoc</i>	<i>elto- (eltoya, eltoz etc.)</i>

Changes in the modern Huasteca Nahuatl used by the younger generation of speakers are mostly attested in the case of locational predicates. One phenomenon that can be attested is the use of the copula *itztoc* for both animate and inanimate subjects of locational predicates. Example (6.29) illustrates the innovative use of *itztoc* as the locational predicate of an inanimate subject (*uztutl* ‘cave’). For comparison, a more traditional expression of a location of an inanimate subject attested in the speech of an older speaker of Nahuatl involves the use of the copula *eltoc* (6.30).

- (6.29) Locational predicate with an inanimate subject in modern Huasteca Nahuatl (CAH)
- Ø-qui-ihtohua-h habitantes que Ø-itz-toc ce uztu-tl*
 SBJ.3PL-OBJ.3SG-say-PL inhabitants SB SBJ.3SG-be-STAT one cave-ABS.SG
huan i-teno de ne Ø-itz-to-ya
 company[RTL] POSS.3SG-outside[RTL] PREP DEM SBJ.3SG-be-STAT-IMPRF
ce cua-ni-liz-tli
 one eat-?-ACNNR-ABS.SG
 ‘The inhabitants say that **there is a cave** and outside of it there was an animal [that eats people].’

- (6.30) Locational predicate with an inanimate subject in modern Huasteca Nahuatl (SAB)
- Pan ni teyoual-li Ø-el-toc uztu-tl*
 surface[RTL] DEM village-ABS.SG SBJ.3SG-be-STAT cave-ABS.SG
 ‘In this village **there is a cave.**’

The use of *itztoc* with inanimate subjects is an innovation which most likely results from contact with Spanish. In Spanish the same copular verb *estar* (which has the form *está* in the 3rd person singular) is used in the case of both animate and inanimate subjects.

The copula *itztoc*, apart from becoming the default locational copula, is also acquiring new functions that further reflect the use of *estar* in Spanish. Thus, the use of *itztoc* has been extended to predicates describing non-permanent states, as illustrated in example (6.31), in which *itztoc* is used in the meaning ‘to be in the state of’.

- (6.31) Copula *itztoc* used to express non-permanent states in modern Huasteca Nahuatl
 (RFR)
¿Ti-itz-toc cualli?
 SBJ.2SG-be-STAT well
 ‘Are you well?’

Moreover, the copula *itztoc* is also used to denote non-permanent states of inanimate subjects (6.32). Whereas in traditional Nahuatl this expression would be verbless or expressed with a verb in its preterite form (VERB-*toc*), in modern Nahuatl it bears a copular verb. A similar expression in Spanish would include the copular verb *estar*, so the use of *itztoc* in this context can be considered a calque from Spanish.

- (6.32) Copula *itztoc* used to express non-permanent states in modern Huasteca Nahuatl
 (FRF)
Cal-ihti-(c) Ø-itz-toc mante cecec
 house-stomach-place[RTL] SBJ.3SG-be-STAT very cold
 ‘It is very cold inside.’ (cf. Spanish: *Está muy frío dentro de la casa.*)

To sum up, many changes that can be observed in nominal and, especially, in locational predicates in modern Huasteca Nahuatl can be attributed to contact with Spanish. The copula *itztoc* has developed as the Nahuatl equivalent of the Spanish locational copula *estar*. The copula *itztoc* is not only applied as a universal locational copula used for all types of subjects, both animate and inanimate, but it also serves as a copula used in

describing non-permanent states. Parallel changes also occurred in nominal and locational predication in Tének, as I show in the following section.

6.3.4. Expressing existence, state and location in Tének

Similar to other Mayan languages, in Tének nouns, adjectives and numerals may be used predicatively. In this function, they denote a temporary or permanent state and bear an absolutive (Set B) personal marker indexing the subject rather than a TAM marker, as those are restricted to verbs only (Polian 2017: 221). In most Mayan languages a personal marker is expressed as a post-predicate pronominal suffix, as illustrated in example (6.33) from Yukatek Maya.

- (6.33) Nonverbal predicate in Yukatek Maya (Armstrong 2009: ex. 2b) [glosses modified]
K'oja'an-Ø in suku'un
 sick-B3 A1 older.brother
 'My older brother is sick.'

In Tének, however, personal markers appear as pre-predicate pronominal prefixes, as illustrated in example (6.34), in which a nominal Spanish loan *christianos* 'Christians' (in a plural form) is used in a predicative function. The use of a numeral (*bó* 'five') as a predicate is illustrated in (6.35).

- (6.34) Nominal predicate in colonial Tének
 (De la Cruz 1571, after Meléndez Guadarrama 2017b: 223) [my glosses]
?ana patax u=christianos
 DEF all B1.PL=Christians[PL]
 'We are all Christians.'

- (6.35) Nominal predicate in colonial Tének (Tapia Zenteno 1767: 92) [my glosses]
In=tzalle taquixtal à Mim à Santa Iglesia, Ø=Bo
 A3.PL=supreme precept HON mother HON holy church B3.PL=five
 'There are five precepts of the church.' (cf. Spanish: *Los mandamientos a la Santa Madre Iglesia son cinco.*)

Unlike in existential predicates, which are verbless, in locational predicates an existential verb is needed in Mayan languages. Example (6.36) illustrates a locational sentence in Mam, in which the verb *at* 'to exist' is used.

(6.36) Locational predicate in Mam (England 1983: 246) [glosses modified]

at-at zluu'
exist-ENCL here
 'You are here'

Locational predicates in Tének contain minimally a Set B pronoun and, additionally, the locative verb *k'wajat*, which represents a participial form derived from the verb *k'waj-iy-* 'inhabit, be in a place'. In contrast with traditional Nahuatl, which uses different locational copulas, in Tének the copula *k'wajat* is used for both inanimate (6.37) and animate subjects (6.38).

(6.37) Locational predicate in Tének (Larsen 1972: 13) [my glosses]

Tana' Ø=c'uaj-at i ata
 there **B3.SG=be.located-INCOMPL** INDEF house
 'Over there **there is** a house.'

(6.38) Locational predicate in modern Tének (LFM)

<i>Ti</i>	<i>al</i>	<i>an</i>	<i>atáj</i>	<i>Ø=k'waj-at</i>	<i>jún</i>
PREP	inside	DEF	house	B3.PL=be.located-INCOMPL	one
<i>i</i>	<i>inik</i>	<i>ani</i>	<i>jún</i>	<i>i</i>	<i>uxum</i>
INDEF	man	CONJ	one	INDEF	woman

'**There is** a man and a woman inside the house.'

Since Tének applies different strategies in expressing nominal and locational predicates, this language can be described as a split system language. Moreover, the copula *k'wajat*, unlike in Nahuatl, is not sensitive to the animacy of the subject. As for nominal predicates, these are verbless in all aspects, including the irrealis mood, as shown in (6.39). This feature of Tének contrasts with Nahuatl, in which zero-copula nominal predication is only possible in the present tense.

(6.39) Verbless predicate in irrealis mood in modern Tének (LFM)

Ti tamub 2015 an ko'nel Ø=tsakamej-ak
 PREP year 2015 DEF animal **B3.SG=young-IRR**
 'In the year 2015 the animal was young.'

In modern Tének several ongoing changes concerning nominal predicates can be observed. Although verbless nominal (and adjectival) predicates are attested in the speech of many Tének users, there is a growing tendency to use the copular verb *pél* ‘to be’ in these expressions, as illustrated in (6.40).

(6.40) Nominal predication in modern Tének (LFM)

<i>Nan</i>	<i>pél</i>	<i>in=Tének</i>	<i>ani</i>	<i>tatá'</i>	<i>pél</i>	<i>it=dhakchám</i>
1SG	COP	B1.SG=Tének	CONJ	2SG	COP	B2.SG=Nahua

‘I am Tének and you are a Nahua (person).’

Although, according to Esteban Martínez et al. (2006: 13), the use of the copula *pél* is optional in stative expressions, there is a preference to include a verbal element in nominal predicates.

The original meaning of the copula *pél*, that has been grammaticalised in Tének to serve as the equivalent of the Spanish verb *ser*, has not been investigated well. It is possible that this lexical item derived from a numeral classifier. Although classifiers are still present in modern Mayan languages, they are not used in modern Tének. There is no data available on what numeral classifiers Tének applied in the past and this topic, to the best of my knowledge, has not been well researched by historical linguists. The notion that *pél* might have originally been a numeral classifier is, nevertheless, supported by the fact that in Yukatek Maya, a related language, a cognate lexical element *p'éel* serves as the inanimate numeral classifier (6.41) along with *túul*, the animate numeral classifier.

(6.41) Inanimate numeral classifier in Yukatek Maya (Pfeiler 2009: 92) [glosses modified]

<i>hun-p'éel(h)</i>	<i>xanab</i>
one-CLF	shoe

‘one shoe’

Moreover, in Yukatek Maya the inanimate classifier *p'éel* is becoming the default classifier used for both animate and inanimate classification (Pfeiler 2009). It has also been proven in the previous investigation on the acquisition of number by Pfeiler (1998), as well as by Blaha Pfeiler and Carrillo Carreón (2001), that the classifier *p'éel* is

applied with the meaning ‘one’. The same phenomenon is attested in modern Tseltal (Polian 2006). In fact, this tendency is also present in Tének documented by Larsen (1972). In (6.42) *pél* is used to refer to the singular subject of a nominal predicate, and in (6.43), in which the subject is plural (‘two chickens’), *pél* is no longer used and the numeral *tsab* ‘two’ is used instead.

- (6.42) Use of copula *pél* in nominal predicates with a singular subject in Tének (Larsen 1972: 31) [my glosses]

Pel *i* *tsacam* *pita*
 COP INDEF small chicken
 ‘It is a chick.’

- (6.43) Numeral *tsab* used as predicate in Tének (Larsen 1972: 31) [my glosses]

Tsab *i* *tsacam* *pita*
 two INDEF small chicken
 ‘There are two chicks.’

In modern Tének, the use of the copula *pél* is, however, not restricted to singular subjects. As shown in (6.44), in the case of plural subjects the plural clitic =*chik* attaches to the copula *pél*.

- (6.44) Use of copula *pél* in nominal predicates with a plural subject in Tének (Edmonson 1988: 536) [glosses modified]

Pel=čik *ʔi* *ušum*
 COP=PL INDEF woman
 ‘They are women.’

In Tének, the use of *pél* with reference to singular subjects of nominal predicates is sometimes reinforced by the use of the numeral *jún* ‘one’ that appears between the copula and the predicate, as illustrated in (6.45). The use of the numeral *jún* in such constructions can be considered parallel to the use of the Spanish singular indefinite article *un(o)/una* ‘one’. Contact with Spanish is likely to have contributed to this modification in nominal phrases.

(6.45) Use of copula *pél* in modern Tének (LFM)

<i>Tank'anhuits</i>	<i>pél</i>	<i>jún</i>	<i>i</i>	<i>pulik</i>	<i>kwenchaláb</i>
Tancanhuitz	COP	one	INDEF	big	locality

‘Tancanhuitz **is** a town.’

Further changes in Tének nominal predicates, apart from the use of the copula *pél* and the addition of the numeral *jún* as the indefinite article, involve the use of the Spanish copular verb *ser*, e.g. in the 3rd person singular form *es*, as illustrated in (6.46). However, since this kind of construction is only possible in the speech of bilingual speakers, insertion of the Spanish copula may potentially be considered an instance of a single-word code-switching.

(6.46) Use of Spanish inflected copula *ser* in nominal predicates in modern Tének (Meléndez Guadarrama 2017a: 90) [glosses modified]

<i>N-a</i>	<i>mo:ʃaʃito</i>	<i>es</i>	<i>hu:n</i>	<i>ʔi</i>	<i>ʃ'ifin</i>
DET-HON	mochachito	COP	one	INDEF	bird

‘The mochachito **is** [a kind of] a bird.’ (cf. Spanish *El mochachito es un pájaro.*)

Another innovation with respect to stative predicates in modern Tének that can be attributed to contact with Spanish involves employing the copula *k'wajat* when describing changeable states. The use of *k'wajat*, which traditionally was applied in locational predicates with the meaning of ‘to be placed’, has now been extended to predicates expressing changeable states of animate (6.47) and inanimate subjects (6.48).

(6.47) Expression of changeable states of animate subjects in modern Tének (Esteban Martínez et al. 2006:13) [my glosses]

<i>Tatá'</i>	<i>it=k'waj-at</i>	<i>kulbél</i>
2SG	B2.SG=be.located-INCOMPL	happy

‘You are happy.’

(6.48) Expression of changeable states of inanimate subjects in modern Tének (Meléndez Guadarrama 2017a: 71) [glosses modified]

<i>ʔan k'apnel</i>	<i>Ø=k'w'ah-at</i>	<i>k'a:k</i>
DEF food	B3.SG=be.located-INCOMPL	hot

‘The food is hot.’

The changes found in modern Tének are therefore comparable with those in modern Nahuatl. The functions of the locational copulas in both languages have been extended and these copulas are used in predications describing changeable states. Since this innovative use of the copulas *k'wajat* in Tének and *itztoc* in Nahuatl mirrors the use of the Spanish copula *estar*, I argue that it was most likely motivated by contact with Spanish.

6.3.5. Summary

The changes that can be observed in nominal and locational predication in Nahuatl and Tének are remarkably similar because of a parallel development of both languages that stems from contact with Spanish. As for nominal predicates, Huasteca Nahuatl uses verbless predicates in the present tense and the conjugated copula *eli* in non-present sentences. This strategy has not been changed in the modern Nahuatl spoken in Xilitla. In Tének, on the other hand, verbless predicates are gradually being replaced with structures in which the copula *pél* is employed. The use of *pél* in expressions denoting permanent states in Tének is probably a result of contact with Spanish since constructions with *pél* are used in the same contexts as existential constructions with *ser* in Spanish. Another significant change that is attested in modern Huasteca Nahuatl is the use of *itztoc* as the default locational predicate for both animate and inanimate subjects. This copula was previously only applied in locational predicates with animate subjects. Furthermore, the range of the use of *itztoc* has been extended further to stative predicates that describe non-permanent states, such as feelings and emotions. In traditional Nahuatl and Tének this type of constructions would usually be expressed with nonverbal predicates. Interestingly, also in Tének the locational verb *k'wajat* has evolved to become the copula used in expressions denoting temporal states, such as illness or happiness. The use of *itztoc* and *k'wajat* while denoting temporal states and location is, most likely, a result of contact with Spanish since also in this language *estar* is present in such contexts. In fact, these two verbs, *itztoc* and *k'wajat*, are used in many collocations and contexts in which *estar* appears in the Spanish equivalents of such

expressions. The two verbs form part of many calques in modern Nahuatl and Tének, mirroring the use of *estar* in Spanish.

6.4. Predicative possession

6.4.1. Introduction

In this section I deal with changes in expressing possession in Nahuatl and Tének. I show how the verbless possessive construction of the formula ‘his-noun1 (the) noun2’ is being gradually replaced with a clausal predicative possessive construction, in which the Nahuatl and Tének equivalents of the possessive verb ‘to have’ are used. In my analysis I trace the extension of the semantics of the Nahuatl verb *piya* and the Tének verb *kó’yal* (and its form *kwa’al*) before they became generic verbs applied to express a broader concept of possession and association. In addition, I show how the word order of possessive constructions has changed from the Mesoamerican possessee-possessor to the Hispanicised possessor-HAVE-possessee. Moreover, I show that the innovative predicative clausal possessive construction applies not only to alienably possessed nouns, but also to inalienably possessed nouns in both Nahuatl and Tének. I also give examples that demonstrate that contact with Spanish resulted in the loss of the traditionally required possessive morphology. For instance, I show how in clausal possessive constructions the possessed nouns can appear in their absolute and not possessive forms.

6.4.2. Types of predicative possession

Whereas many languages express the relationship of possession by using verbless adnominal possession (including many Mesoamerican languages that apply the construction ‘his-noun1 (the) noun2’), other languages use clausal possessive constructions in which a special possessive verb appears. Four types of predicative alienable possession have been distinguished: (1) HAVE-Possessive, (2) Oblique

Possessive, (3) Topic Possessive, and (4) Conjunctional Possessive (Clark 1978; Seiler 1983; Heine 1997; Stassen 2001).¹¹⁶ The first strategy, i.e. the HAVE-Possessive strategy, involves a transitive construction in which the possessor noun phrase functions as the subject and the possessed noun phrase functions as the direct object of a ‘have’-verb, which typically derives from such verbs as ‘take’, ‘grasp’, ‘hold’, or ‘carry’ (Stassen 2013b). This strategy is applied in such languages as English and Spanish, which use the verbs *have* and *tener* respectively, as in Spanish *Benjamin tiene un juguete* ‘Benjamin has a toy’ in which the conjugated form *tiene* ‘has’ acts as a predicate.¹¹⁷

The remaining three types are constructions which are syntactically intransitive, and they involve one argument predicate with a locational or existential meaning, which could be translated to English as ‘to be at’, ‘to be there’ or ‘to exist’ (Stassen 2013b). Thus, in the Oblique Possessive the possessed noun phrase is the subject of the verb ‘exist’ and the possessor noun phrase is constructed in an oblique form.¹¹⁸ An example of this type of construction comes from Tz’utujil (Mayan) (6.49).

(6.49) Clausal possessive construction in Tz’utujil (Aissen 2017: 314) [glosses modified]

Ja n-ata’ xa r-ek ee k’ooli
 DET A1-father only A3-chicken B3 exist

‘My father has only chickens.’ (lit. ‘My father, only his chicken exist.’)

The distinguishing feature of type (3), i.e. the Topic Possessive, “lies in the encoding of the possessor NP, which is constructed as the topic of the sentence. As such, the possessor NP indicates the ‘setting’ or ‘background’ of the sentence” (Stassen 2013b). A paraphrased English example of such a type would be, e.g. *With regard to Dante, he has two houses*. The last type, the Conjunctional Possessive, involves a possessor noun

¹¹⁶ Stassen (2013b) mentions that other types of predicative possession can develop as a result of grammaticalisation. These usually involve a drift from one of the basic intransitive types towards the transitive HAVE-Possessive type. In the Conjunctional type, the conjunctional marker can be, for instance, incorporated into the existential predicate thus forming a new transitive existential predicate.

¹¹⁷ Alternative verbs, such as *possess* or *belong* can also be used in English, and in Spanish such verbs as *pertenecer* also express the idea of ownership.

¹¹⁸ Stassen (2013b) distinguishes two subtypes of the Oblique Possessive: the Locational Possessive in which the basic meaning involves a specification of a relation of location, and the Genitive Possession in which the possessor noun phrase is typically constructed as an adnominal modifier phrase to the possessed noun phrase.

phrase acting as the subject of the existential predicate, and a lexical element that typically acts as a comitative marker ‘with’, as in a paraphrased English expression: *She is with a skirt*. Since the Topic Possessive and the Conjugational Possessive are not relevant to the analysis in this part of the chapter, they will not be dealt with in more depth (for further discussion see Stassen 2013b).

Expression of possession is yet another feature that is prone to language change stemming from contact. According to Stassen (2013b), the HAVE-Possessive is the most frequently occurring type found in many languages of the world, and more languages are shifting to this strategy as a result of contact with a language in which it is applied. As I show in the section below, this is also the case with the two indigenous languages studied in this work.

6.4.3. Predicative possession in Nahuatl

Under the influence of Spanish, the expression of possession in Nahuatl has been gradually evolving from a traditional verbless noun phrase of the type ‘his dog (the) man’ to a predicative possessive construction ‘(the) man has (a) dog’. Most modern Nahuatl varieties, including Huasteca Nahuatl spoken around Xilitla, apply the verb *piya* ‘to have’ as a generic verb used to express the notion of ownership or association. The replacement of the Mesoamerican zero-copula construction with a Hispanicised clausal one has triggered a number of other changes that stem from the calquing of parallel constructions in Spanish. Before I proceed to provide a more detailed analysis of those innovations, I first describe the transition from a Uto-Aztecan to Mesoamerican possessive marking in Nahuatl.

The possessive marking that can be attested in the records of Classical Nahuatl shows both Proto-Uto-Aztecan, as well as Mesoamerican characteristics. In Proto-Uto-Aztecan the possessor was expressed with an accusative marker and the possessed noun was marked with the possessive pronoun referring to the possessor, according to the formula ‘man-ACC his-dog’ for ‘man’s dog’ (Campbell et al. 1986: 545). Some contemporary Uto-Aztecan languages, including the Cupan languages of southern California (Langacker 1977; Rosenthal 1981), as well as Cora and Nahuatl,

have lost the accusative case marking. Furthermore, as a result of contact with the Mesoamerican languages, several languages of the Uto-Aztecan family, including Nahuatl, have developed a reversed word order, i.e. possessee-possessor order, as illustrated in (6.50).

- (6.50) Verbless expression of possession in Classical Nahuatl
 (Sullivan 1988: 29) [my glosses]
i-cal *cihua-tl*
 POSS.3SG-house woman-ABS.SG
 ‘the woman’s house’

In addition to verbless expression of possession, there are also several examples in the Classical Nahuatl corpus that show that early colonial Central Mexican Nahuatl also made use of existential predicative possession (Olko et al. 2018: 497). This type of construction is illustrated in example (6.51).

- (6.51) Existential predicative possession in Classical Nahuatl
 (Olko et al. 2018: 497) [glosses modified]
on-cat-eh *no-cone-huan*
 OUTDIR-be-PL POSS.1SG-child-POSS.PL
 ‘I have children.’ (lit. ‘There are my children.’)

The verbless Mesoamerican formula for expressing possession that was far more frequently attested than existential predicative possession was gradually replaced with the predicative HAVE-possessive type when Nahuatl came into contact with Spanish. This Indo-European language uses either a genitive expressed with a preposition *de* ‘of’ (‘noun1 of noun2’), as in *la casa de la mujer* ‘the woman’s house’, or a predicative construction using the verb *tener* ‘to have’, as in *la mujer tiene la casa* ‘the woman has the house’. The latter construction inspired a number of pattern borrowings in post-colonial Nahuatl.

The first of such pattern borrowings involved a change in the meaning of the native Nahuatl verb *piya*. In Stage 2 colonial Nahuatl (Lockhart 1998: 39), dating approximately from the mid-16th to the mid-17th century, the native verb *piya* started to

be used in possessive predicative constructions modelled on the Spanish verb *tener*. The traditional meaning of the verb *piya* (preterite *pix*) was ‘to protect oneself from something; to take care of someone or something, to have stewardship of something, to hold something’ (Karttunen 1992: 199), and it referred to specific objects, land, goods, domesticated animals, etc. As a result of contact with Spanish, the meaning of the verb *piya* extended and it started to be used as a generic verb ‘to have’, mirroring the Spanish verb *tener*.¹¹⁹ For example, the verb *piya* was used to refer to a certain number of children or speaking about the age (6.52).

- (6.52) The verb *piya* used in a possessive construction in Classical Nahuatl in 1583 (Lockhart 1992: 457-458) [my glosses]
 <ca tellamo miac nicpia noconeuh>
 ca tel a(h)mo miac ni-c-pi(y)a-Ø
 truly but NEG many SBJ.1SG-OBJ.3SG-have-SG
 no-cone-uh-Ø
 POSS.1SG-child-POSS-SG
 ‘I don’t have many children.’

Since colonial times the verb *piya* has been used in more lexical and morphosyntactic contexts. In modern Nahuatl this verb occurs in many calques of the Spanish expressions in which *tener* is used. Thus the verb *piya* is used to indicate possession of all kinds of possessible nouns, including alienable and inalienable referents. In example (6.53) the verb *piya* indicates inalienable possession of body parts. A more traditional verbless equivalent of a possessive expression involving body parts is shown for contrast in (6.54).

- (6.53) Possession of body parts in Huasteca Nahuatl (Beller and Beller 1979: 217) [glosses modified]
 Ø-ki-piya i-nakas weh~weyi
 SBJ.3SG-OBJ.3SG-have POSS.3SG-ears RDPL~big
 ‘He has big ears.’

¹¹⁹ The Spanish verb *tener* ‘to have’ is itself the product of reinterpretation and grammaticalisation of a verb meaning ‘hold, grab, take, carry, obtain, acquire’, which originates in the Latin verb *tēnere* ‘hold, retain, maintain’ (Corominas 1961: 563 and Heine 1997: 48–49, after Aikhenvald 2012: 28).

- (6.54) Possession of body parts in traditional Nahuatl
Hueh~huei i-nacaz ni tlacatl
 RDPL~big POSS.3SG-ear(s) DEM man-ABS.SG
 ‘This man has big ears.’

Furthermore, structural borrowing involving Hispanicised predicative possession has triggered the loss of obligatory possessive pronoun marking on the possessee. Example (6.55) shows a possessive clause in which an alienable noun *tomin* ‘money’ lacks the possessive prefix *i-*, which would be required in traditional Nahuatl (6.56).

- (6.55) Possession of alienable nouns in Huasteca Nahuatl
 (Beller and Beller 1979: 216) [glosses modified]
Ø-ki-pia miak tomin
 SBJ.3SG-OBJ.3SG-have much money
 ‘(S)he has a lot of money.’

- (6.56) Possession of alienable nouns in traditional Nahuatl
Miac i-tomi ni cihua-tl
 much POSS.3SG-money DEM woman-ABS.SG
 ‘(S)he has a lot of money.’

The use of the verb *piya* has extended to other meanings in which the Spanish possessive verb *tener* is applied. Example (6.57) illustrates a Nahuatl calque of the Spanish clause *ya tiene muchos años* ‘many years ago’.

- (6.57) Nahuatl calque of a fixed Spanish phrase in modern Huasteca Nahuatl (JFR)
Ni inca yancuic ni Ø-hualla huan
 DEM NEG new DEM SBJ.3SG-come company[RTL]
Ø-ehua ya Ø-qui-piya miac xihui-meh
 SBJ.3SG-start already SBJ.3SG-OBJ.3SG-have many year-ABS.PL
 ‘This is not new, this came and started many years ago.’ (cf. Spanish: *Esto no es nada nuevo, esto viene e inició, ya tiene muchos años.*)

Although several Mesoamerican languages have not evolved an equivalent of the Spanish verb *tener* (e.g. Yukatek Maya or Tojol-ab’al, see the section below), the change towards a more analytic clausal expression of possession is common across this

linguistic area. Apart from Nahuatl, this change can also be attested in Tének, as I show below.

6.4.4. Predicative possession in Tének

As in Nahuatl, the history of changes in the expression of possession in Tének reflects Mayan, Mesoamerican and Spanish characteristics. In Tének, as well as in Nahuatl, contact with Spanish resulted in a shift from verbless expression of possession to predicative possession, as well as the emergence of a generic possessive auxiliary verb used in numerous calques based on the Spanish constructions in which the verb *tener* appears. Before I move on to discussing innovations in Tének, I briefly introduce the topic of traditional possessive marking in Mayan languages.

Proto-Mayan, the ancestor language of Tének, had two possessive constructions: a phrasal-level verbless attributive construction and a clause-level predicative construction (Smith-Stark 1976: 49). The attributive construction in Tének, for example, contains the possessed noun inflected for possession with a Set A possessive marker (possessee), followed by the possessor noun that can be preceded with an article. If a noun is alienable a possessive suffix *-il* also appears (6.58).

(6.58) Verbless possessive construction in Tének

in=pik'o'-il an inik
A3.SG=dog-POSS DEF man
'the man's dog'

The formula of the attributive construction in Tének is therefore 'his-dog (the) man' (or, Set A=noun1-(POSS) (DEF) noun2). This pattern reflects the head-marking Mesoamerican possessive construction. This type of constructions in Tének was explored in more detail in §4.3.3 above.

The second type of possessive construction in Proto-Mayan involved a clausal predicative construction of the Oblique Possessive type. It consisted of an intransitive existential verb and a possessed noun as its only argument. The formula for expressing

possession was ‘it-exists his-noun1’ (e.g. ‘it exists his dog’), as illustrated in example (6.49) from Tz’utujil above.¹²⁰

The two types of possessive constructions are retained in many modern Mayan languages which have not developed an equivalent of the Spanish verb *tener* ‘to have’. Campbell et al. (1986: 556) did not find equivalents of this verb in K’iche’an, Mam, Chol, Tseltal or Yucatek Maya, for example. Although modern Tének also applies both clausal and predicative possessive constructions, it does not use an existential verb to express possession but, rather, it has developed an equivalent of the verb ‘to have’, i.e. *kó’oyal*. In the variety of Tének spoken in San Luis Potosí, the form *kwa’al* tends to be used instead of the form *kó’oyal*.¹²¹

Although there are no studies specifically dedicated to determining the origin of *kó’oyal* as the generic possessive verb, one plausible hypothesis explaining this question can be suggested. Since existential verbs are commonly used in other Mayan languages to express possession, it is very likely that this verb developed from an existential intransitive verb. Moreover, the Tének verb *kó’oyal* bears significant phonetic similarity with the Tz’utujil existential verb *k’o(oli)* (see §6.4.2). If such an explanation is correct, then the change in predicative possessive constructions in Tének can be classified as a shift from an intransitive existential possessive of the Oblique type towards the HAVE-Possessive type. As suggested by Stassen (2013b), such an outcome is cross-linguistically relatively common in predicative possessive constructions.

¹²⁰ In modern Mayan languages these existential verbs may be cognate or not. For example, they are related and have the form of *y(a)an* in Yucatek, *ya(a)n* in Itza’, *yaan* in Southern Lacandon and *yan* in Mopan (Hofling 2017: 725-726). Other Mayan languages can show more variation. Whereas the existential verb in Tz’utujil is *k’o(oli)* (Aissen 2017), in Tojol-ab’al the copula *ay* and in Chol the existential verb *añ* are used to express existence, possession and location (Coon 2017: 653).

¹²¹ The exact difference in use between the forms *kwa’al* and *kó’oyal* is rather unclear. Modern data suggests that *kwa’al* is preferred in San Luis Potosí and *kó’oyal* is used in dialects spoken in Veracruz but it is also understood in San Luis Potosí. *Kwa’al* used to be applied, however, at least in the Eastern Tének variety spoken in Veracruz, since it is recorded in *Conversación en lengua huasteca* (Hurch and Meléndez Guadarrama 2020), based on a manuscript from the first decades of the 18th century. According to the editors of this manuscript, the forms *cuaal* and *coho* are alternative forms of the verb *kó’oy* or *kó’ol* (Hurch and Meléndez Guadarrama 2020: 219). Whereas the form *cuaal* appeared in the Tének phrase *Jita in cuaal an chubastaláb* (‘Who is right?’; cf. Spanish: *¿Quién tiene razón?*) in the 18th century source, this form was corrected by a modern Eastern Tének speaker with whom Hurch and Meléndez Guadarrama worked while editing the manuscript to the form *koo’oyal (tama’ nin koo’oyal an txubaxtalaab* ‘Who is right?’).

It remains unsolved when the shift in meaning and argument structure of the verb *kó'oyal* exactly occurred. It appears that *kó'oyal* began to be used as a transitive verb expressing possession at least as early as at the beginning of the 18th century. De Quirós (1711 [2013]: 235) lists the conjugated form *in kó'oyal* (spelled *incollal*) as the equivalent of the Spanish verb *tener* in his grammar and dictionary of Tének spoken in Tanlajás (San Luis Potosí). The verb *kó'oyal* is later also used in possessive constructions in Tapia Zenteno's Tének grammar book and the Christian doctrine (1767) in several instances, as shown in example (6.59) below.¹²² In both cases this verb is used with a Set A pronominal marker, suggesting that it is a transitive verb.

- (6.59) Clausal possessive construction in colonial Tének
 (Tapia Zenteno 1767: 112) [my glosses]
 <Anixahue queat vxum acoyal?>
 ani xowé k'e'at uxum a=kó'-oy-al
 CONJ now other woman A2.SG=have-TR-INCOMPL
 'And now **you have** another woman?' (cf. Spanish: ¿Y ahora **tienes** otra mujer?)

Later sources, including Larsen's dictionary (1955: 11), also translate *kó'oyal* (in its conjugated form *in cō'oyal*) to Spanish as *lo cuida*, *lo tiene* '(s)he looks after it, (s)he has it'.¹²³ Therefore, the meaning of *kó'oyal* listed by Larsen appears to be parallel to the meaning of the Nahuatl verb *piya*. This resemblance suggests another explanation behind the semantic change of *kó'oyal* from 'to look after' to 'to have'. This similarity may potentially suggest that the extension in the meaning of *kó'oyal* was triggered by a parallel change occurring in Nahuatl, a co-territorial language already influenced by Spanish. However, this explanation is only valid if *kó'oyal* was already a transitive verb meaning 'to look after', before acquiring a more generic meaning. Judging by the fact that this prerequisite is quite unlikely, the former hypothesis, i.e. the drift from an

¹²² Interestingly, in the dictionary part of his *Noticia*, Tapia Zenteno (1767: 84) provided the Tének translation of the Spanish verb *tener* as *teyna*, and not *kó'oyal*. The meaning of *teyna* is probably 'grasp', since the word *teyna* appears to be related to *in teyōm*, which Larsen (1955: 92) translates as *lo empuña*, *lo agarra* '(s)he grabs, holds it') and Martínez Hernández (2008: 189) translates it as *lo tiene en la mano* '(s)he has it in her/his hand'.

¹²³ Larsen (1955: 12) translates the verb *kwa'al* (in its conjugated form *in cua'al*) as a Spanish equivalent of *lo tiene* '(s)he has it'.

existential verb to a transitive verb seems more plausible. Whichever explanation is correct, however, the change seems to be the result of language contact with Spanish.

In modern Tének, like in Nahuatl, the Mesoamerican verbless possessive constructions have been gradually replaced with predicative clausal possessive constructions, together with changes in the ordering of the possessor and the possessee. The verbs *kó'oyal* and *kwa'al* are very productive not only in possessive constructions expressing ownership and general association, but also in other contexts in which the Spanish verb *tener* would be applied. The word order of a possessive clause in modern Tének is also reversed, with the possessor expressed first (S), then the possessive verb (V) and finally the possessee (O), as illustrated in (6.60).

(6.60) Clausal possessive marking in modern Tének (body parts) (RSR)

U=kwa'-a-l *u=k'ubak*
 A1.SG=have-TR-INCOMPL A1.SG=hand
 'I have a hand.' (lit. 'I have my hand.')

This order reflects the SVO basic word order in modern Tének (see §6.2.4). The possessee is preceded by a conjugated verb 'to have' according to the formula Set A=*kwa'al* Set A=possessee. An article can be optionally applied before the possessee, as illustrated in (6.61).

(6.61) Clausal possessive marking in modern Tének (alienable nouns) (RSR)

U=kwa'-a-l *u=ts'ulél-il*
 A1.SG=have-TR-INCOMPL A1.SG=field-POSS
 'I have my milpa.'

In traditional Tének, according to the Mesoamerican formula, the possessee preceded the possessor. In modern Tének clausal predicative possession is used to express all types of possession, including inalienably possessed nouns, as illustrated in (6.60) and alienably possessed nouns, as shown in (6.61).

Changes in the expression of possession in modern Tének, however, go much further. The clausal possessive construction is also applied when expressing possession of indefinite alienably possessed objects. In such constructions, a possessed noun is

preceded by the numeral *jún* ‘one’ in conjunction with an indefinite article *i*, as illustrated in (6.62).

- (6.62) Clausal possessive marking in modern Tének (AFF)
U=tsakam-il in=kwa'-a-l jún i dhuch-lab
 A1.SG=child-POSS A3.SG=have-TR-INCOMPL **one INDEF** letter-GENR
 ‘My son has **a** book.’

Note how the generic possessed noun *dhuchlab* ‘book’ lacks the suffix *-il*, which would traditionally be required in expressions of possession of concrete alienably possessed nouns. This type of construction is very clearly modelled on the Spanish structure *tengo un(a)* [generic noun] ‘I have a [generic noun]’, in which the predicate is followed by an indefinite article.

An innovative possessive construction is also applied in the case of inalienable possession. An obligatory ergative Set A marker, that was traditionally required before the possessed noun, is replaced by an indefinite article, as illustrated in (6.63).

- (6.63) Clausal possessive marking in modern Tének
 (Meléndez-Guadarrama 2017a: 84) [glosses modified]
ʔan k'apne:l ʔin=ko:ʔ-o-l ʔi ʔat'em
 DEF food A3.SG=have-TR-INCOMPL **INDEF** salt
 ‘The food has salt.’ (cf. Spanish *La comida tiene sal.*)

To summarise, the most prominent change that can be observed in the expression of possession in modern Tének involves the shift from a verbless construction towards a clausal construction that uses the verb *kwa'al* or *kó'oyal*, depending on the Tének variety. The traditional word order possessee-possessor is also changed to possessor(S)-verb(V)-possessee(O). In modern Tének any type of possession can be expressed using a generic formula, modelled on Spanish, which is not sensitive to the alienability/inalienability contrast. A very commonly used alienable and inalienable predicative possession in modern Tének follows the formula ‘noun1 Set A=*kwa'al jún i* noun2’, in which the numeral *jún* in conjunction with the native indefinite article *i* have been grammaticalised to mirror the Spanish indefinite article *un(a)* ‘a’, as in ‘noun1

tener un(a) noun2'. This construction is replacing the traditional formula in which the alienable possessive marker *-il* was required on the possessed noun. This change may indicate a slow erosion of the traditional formal distinction in expressing inalienable and alienable possession. A comparison of traditional and modern formulas of expressing possession in modern Tének is given in Table. 6.2.

Table. 6.2. Possessive marking in traditional and modern Tének.

	Traditional Tének		Modern Tének			
Inalienable possession	<u>SetA=noun1</u>	<u>noun2</u>	<u>noun1 SetA=<i>kwa'al</i> (numeral) SetA=<u>noun2</u></u>			
	↓ (possessee)	↓ (possessor)	↓ (possessor)	↓ (verb)	↓ (num)	↓ (possessee)
			<u>noun1 SetA=<i>kwa'al</i></u>	(numeral?)	<u>i</u>	<u>noun2</u>
			↓ (possessor)	↓ (verb)	↓ (num) (INDEF)	↓ (possessee)
Alienable possession	<u>SetA=noun1-<i>il</i></u>	<u>noun2</u>	<u>noun1 SetA=<i>kwa'al</i> (numeral) SetA=<u>noun2-<i>il</i></u></u>			
	↓ (possessee)	↓ (possessor)	↓ (possessor)	↓ (verb)	↓ (num)	↓ (possessee)
			<u>noun1 SetA=<i>kwa'al</i></u>	(numeral)	<u>i</u>	<u>noun2</u>
			↓ (possessor)	↓ (verb)	↓ (num) (INDEF)	↓ (possessee)

The possessive verbs *kwa'al* and *kó'oyal* are also found in numerous calques from Spanish in which the verb *tener* appears, as in the expressions *tengo prisa* ('I'm in a hurry') in (6.64), *¿cuántos años tiene...?* ('how many years has it been...?') in (6.65), or a greeting *¡que tengas buen día!* 'have a good day!') in (6.66).

- (6.64) Spanish calques in modern Tének
 (Meléndez-Guadarrama 2017a: 86) [glosses modified]
ʔu=ko:ʔ-o-l *ʔi* *hik'a-tala:b*
 A1.SG=have-TR-INCOMPL INDEF hurry-ABSTR
 'I'm in a hurry.' (cf. Spanish: *Tengo prisa.*)

- (6.65) Spanish calques in modern Tének
 (Hurch and Meléndez Guadarrama 2020: 151) [glosses modified]
jaay i tamub in=ko'-oy-al-Ø an ti
 how.many INDEF year A3.SG=have-TR-INCOMPL DEF? PREP
baa' it=luj-l-aamadh
 NEG? B2.SG=confess-INERG-PFV
 ‘How many years since you confessed?’ (cf. Spanish: *¿Cuántos años tiene que no te has confesado?*)

- (6.66) Spanish calques in modern Tének (RSR)
K=a kó'-oy-Ø=chik jún i alabel k'icháj
 SR=A2,SG have-TR-COMPL=PL one INDEF beautiful day
 ‘Have an excellent day!’ (cf. Spanish: *¡Que tengan un excelente día!*)

The phenomenon of calquing Spanish expressions in which the verb *tener* appears reflects a trend that can also be frequently attested in Nahuatl, as was discussed in §6.4.3 above.

6.4.5. Summary

The changes that can be observed in possessive constructions in modern Nahuatl and Tének are remarkably parallel. First of all, in both languages the ordering of constituents in possessive phrases was reversed from the Mesoamerican order possessee-possessor to a Hispanicised order possessor-verb-possessee (i.e. SVO). Both languages have also shifted from the Mesoamerican verbless phrasal possession of the formula ‘his-noun1 (the) noun2’, to a Hispanicised predicative clausal possession of the formula ‘(the) noun1 has his-noun2’. The change from the phrasal Mesoamerican possessive construction to the predicative clausal possessive construction constitutes further evidence for the process of an ongoing convergence that both Nahuatl and Tének have been subject to since colonial times. In addition, the extension in the meaning of the native verbs *piya* (in Nahuatl) and *kó'oyal* (in Tének) as generic verbs meaning ‘to have’ is not only visible in possessive constructions, but is also evident in numerous expressions that are calques of parallel constructions in Spanish in which *tener* is used.

6.5. Coordination

6.5.1. Introduction

The influence of Spanish on Nahuatl and Tének can also be attested in coordination strategies including conjunction, disjunction and adversative coordination. In this part of the chapter I demonstrate how the traditionally preferred unmarked coordination, which involved juxtaposing phrases and clauses, has been mostly replaced with marked strategies in which overt coordinators are used. I show examples of both matter borrowing in which direct loans of such Spanish coordinators as *y* ‘and’, *o* ‘or’ and *pero* ‘but’ are used, as well as pattern borrowing in which native lexical devices (e.g. relational nouns in Nahuatl) have been adjusted to function as coordinating particles. I also demonstrate how the traditional Nahuatl coordination strategies for phrases, clauses and sentences, in which different conjunction particles were used, have been replaced with a strategy in which *huan* can be used as a universal conjunctive coordinator. In addition, I briefly discuss how the borrowing of Spanish coordinating particles affects discourse organisation in modern Nahuatl and Tének.

6.5.2. Coordinating constructions

The concept of coordination involves “syntactic constructions in which two or more units of the same type are combined into a larger unit and still have the same semantic relations with other surrounding elements” (Haspelmath 2007: 1).¹²⁴ The coordinating units may include words (e.g. nouns or verbs), phrases (e.g. noun phrases), subordinate clauses or full sentences. One coordination construction must, however, consist of the same type of units which are syntactically or semantically alike, e.g. two noun phrases or two verbs. Moreover, whereas some languages allow the same linking lexical elements (coordinators) for different syntactic types of units (coordinands), such as *and*

¹²⁴ Coordinating constructions differ from subordination and dependency, in which the constituents are not symmetrical. In a dependency structure of the type A(-link-)B either A or B is the head and the remaining element is a dependant (see Haspelmath 2007 for more detailed information and guidance on distinguishing between coordinate and subordinate constructions).

in English used to coordinate verbs as well as nouns, other languages apply different coordinators, e.g. one for noun phrase conjunction and another one for sentential conjunction. An example of such a language is Yapese, (Austronesian) spoken in Micronesia which uses *ngea* ‘and’ for NP conjunction, but *ma* ‘and’ for sentential conjunction (see Jensen 1977: 311-312).¹²⁵

The three types of coordinating constructions involve: conjunction (also called ‘conjunctive coordination’), equivalent to English *and*; disjunction (also called ‘disjunctive coordination’), equivalent to English *or*; and, finally, adversative coordination (or, adversative conjunction), equivalent to English *but* (Haspelmath 2007: 1-2).¹²⁶ The units that are combined in a conjunctive coordination are called conjuncts, whereas the units of any type of coordination are called coordinands (Haspelmath 2007: 2). Examples of the three types of coordinating constructions in Spanish are provided in (6.67).

- (6.67) Coordinating constructions in Spanish
- a. *Ayer mi hermana me dio una manzana y un plátano.*
‘Yesterday my sister gave me an apple **and** a banana.’
 - b. *¿Quién tiene la razón, él o yo?*
‘Who is right, him **or** me?’
 - c. *Es nuevo pero no funciona.*
‘It is new **but** it doesn’t work.’

Whereas conjunctions and disjunctions can have an indefinite number of coordinands, the adversative coordination is always binary and consists of only two coordinands (Haspelmath 2007: 2).

The expression of coordination varies with respect to different languages. For example, in several languages the nominal conjunction marker may be difficult to distinguish from the comitative adposition (or case affix), equivalent to English *with*, since these two elements are identical and often develop diachronically from comitative adpositions (Haspelmath 2013). Furthermore, whereas some languages can have

¹²⁵ For further distinctions in the types of coordination see Haspelmath (2007).

¹²⁶ For terminological clarification regarding coordination and conjunction see Haspelmath (2007: 50).

dedicated coordinators in negative contexts, such as in the English example *neither . . . nor*, other languages may use the same coordinators. Also, different conjunction strategies may be used for nominal and verbal coordination, although this is not the case in most Mesoamerican and Indo-European languages, as shown in Haspelmath (2013).

Furthermore, languages differ with respect to the placement of coordinators used in coordinate constructions. English and Spanish, for example, use the pattern A co-B (where ‘co’ stands for ‘coordinator’), but Kannada (Dravidian) shows the pattern A-co B-co (Haspelmath 2007: 2).¹²⁷ Some languages may not use an overt (marked) coordinator at all, and use the so-called ‘asyndetic coordination’ (also called ‘asyndesis’ or ‘juxtaposition’) instead, in which the pattern of coordination is A B (Haspelmath 2007: 7). This type of unmarked coordination is found in such languages as Maricopa (Yuman) spoken in Arizona (Gil 1991) and Sarcee (Athabaskan, Alberta, Canada), as illustrated in (6.68).

- (6.68) Asyndetic coordination in Sarcee (Athabaskan) (Cook 1984: 87) [glosses modified]
- | | | | | |
|--------------|---------------|--------------|------------------|-------------|
| <i>istlí</i> | <i>gútsis</i> | <i>dóóní</i> | <i>icīctcùd,</i> | <i>gīní</i> |
| horse | scalp | gun | capture[1SG] | they.say |
- “ ‘I captured horses, scalps, and guns’, they say”

The only means to identify a coordinate construction in an asyndetic coordination is intonation. As noted by Mithun (1988b), asyndesis is quite uncommon in the languages with a long written tradition, since intonation cannot be conveyed in this means of information sharing. It is, however, frequently found in traditionally oral languages which may have not developed native coordinators and often borrow coordinators from dominant languages, such as English or Spanish (Haspelmath 2007: 8). This observation is confirmed by the ongoing loss of asyndetic coordination in modern Nahuatl and the introduction of Spanish coordinators, as I show in the following section.

¹²⁷ Although the most common coordination in English involves A co-B, juxtaposition also occurs, as shown in *Quietly, slowly, it approached its victim*, although it usually involves the use of modifying phrases, e.g. adverbials, adjectives, or it appears with clauses (Haspelmath 2007: 7). Juxtaposition is, however, not frequently found as a coordination strategy involving noun phrases.

6.5.3. Coordination in Nahuatl

Nahuatl has the means to express all three types of coordination: conjunction, disjunction and adversative coordination. According to Andrews (2003: 544), in coordinating constructions “nuclear clauses or nuclear-clause groups” can be joined, and these strategies be either marked (syndetic) or unmarked (i.e. asyndetic).¹²⁸ The preferred strategy in Nahuatl was the unmarked strategy, in which, instead of using a specific coordinator, the coordinands were juxtaposed and the coordination was implicit (Andrews 2003: 544).

An unmarked conjunction in Classical Nahuatl can include a pair or a series of combined clauses and it may involve a positive (‘and’) or negative (‘nor’) conjunction. An example of a positive conjunction of principal clause units is illustrated in (6.69) and a negative conjunction in (6.70). The marked coordinators that are required in English are shown in bold.

6.69) Unmarked positive conjunction in Classical Nahuatl (Andrews 2003: 544)
In ōtemāātēquīlōc, niman ye īc tētlamaco, tlacualo.
‘When hands have been washed, then immediately thereupon food is served **and** people eat.’

(6.70) Unmarked negative conjunction in Classical Nahuatl (Andrews 2003: 545)
Ahmō mahmōlhuia ahmō mīxamia.
‘He does not use soap, **nor** does he wash his face.’

Disjunction involves juxtaposing two or more coordinands, as illustrated in (6.71) (English coordinator *or* is marked in bold).

¹²⁸ Andrews (2003) applies different terminology when describing coordinating constructions in Classical Nahuatl. Instead of the term ‘coordination’ he uses the term ‘conjunction’. Like Haspelmath (2007), Andrews distinguishes between three types of coordination: conjunction, disjunction and adversative coordination. However, in his terms these three types are referred to as: ‘additive conjunction’, ‘alternative conjunction’ and ‘adversative conjunction’, respectively. Moreover, instead of the term ‘coordinand’, Andrews uses the term ‘conjunct’ and instead of the term ‘coordinator’, he applies the term ‘conjunct’.

- (6.71) Unmarked disjunction in Classical Nahuatl (Andrews 2003: 546)

Ōppa, ēxpā in conīz.

‘It is two **or** three times that he will drink it.’

In adversative coordination an opposition or antithesis is expressed, and it often involves counterbalancing positive and negative clauses (Andrews 2003: 546), as illustrated in (6.72), in which the English adversative coordinator *but* is marked in bold.

- (6.72) Unmarked adversative coordination in Classical Nahuatl (Andrews 2003: 546)

Ahmō zan quēxquichtin, huel ixachīntin in īxpoliuhqueh.

‘The ones who were destroyed were not just a few **but** a great number.’

In contrast, marked coordination in Classical Nahuatl was less common. It was accomplished by inserting the coordinator *auh* between the principal clauses or sentences, as illustrated in (6.73). This coordinator was used in conjunctions (6.73), disjunctions (6.74) and adversative coordinations (6.75). It was often attested at the beginning of sentences thus proving that it was used to link larger portions of texts (6.76).

- (6.73) Marked conjunction in Classical Nahuatl (Andrews 2003: 547)

*Quin ōtimēuh, **auh** ye cuēl tonquīza!*

‘You just now got up, **and** you are leaving already so soon!’

- (6.74) Marked disjunction in Classical Nahuatl (Andrews 2003: 547)

*Zā tehhuān īn, **auh** zā tiuhqueh īn, in titlahtlacohecāhuān totēucyo.*

‘We are (now) only these, **or** we are (now) only such as these, who are we sinners of our lord.’

- (6.75) Marked adversative coordination in Classical Nahuatl (Andrews 2003: 547)

*Momati ayāc quimachilia, **auh** ca ye ōmachilīlōc.*

‘He thinks no one knows about it, **but** in fact it is already known.’

- (6.76) Particle *auh* linking larger portions of text in Classical Nahuatl
 (Anderson and Schroeder 1997, II: 174-176; after Brylak et al. 2020: 64)
*Auh ynin macihui in ye oninoyolmelauh ye onimacoc in penitencia yhuan
 onitlapopolhuiloc onopan mochiuh in Absolucion. auh ca oniccentlaz in noyollo
 inic aoquic oc ceppa nimitznoyollitlacalhuiz: macihui in ye onicchichiuh ca ye cenca
 momauhtia in noyollo.*
 ‘**But** although I have already confessed, have already been assigned penance, and have
 been forgiven and absolved, **and** have determined that nevermore shall I again offend
 You, although I have already ornamented [my soul], my heart is already very
 fearful.’

Classical Nahuatl also had other strategies used in coordinating constructions, out of which perhaps the most productive one was the use of a possessive-state relational noun phrase *ihuan* (6.77).¹²⁹ This coordinator is composed of the 3rd person possessive pronoun *i-* and the relational noun *huan* used to express company. A literal translation of *ihuan* is therefore ‘in its company, together with, moreover’ (see Lockhart 2001: 22). According to Andrews (2003: 548), however, *ihuan* should be translated to English as ‘therewith, herewith, thereby, moreover, furthermore, along with that, in addition to that’.

- (6.77) Use of *ihuan* as a coordinator in Classical Nahuatl (Andrews 2003: 548)
Cencah tomāhuac in cuahuatl, īhuān cencah huīyac.
 ‘The tree is very thick; moreover, it is very tall.’

Although Spanish coordinators did not frequently occur in early colonial Nahuatl, their use was, however, recorded in a number of written sources. Brylak et al. (2020: 536) found an attestation of the conjunction *y* in Nahuatl as early as in 1540, but it remains unclear if it was already an integrated and widely used functional element. A slightly later example of the use of *y* in colonial Nahuatl comes from a 1760 testament from Toluca (example 6.78).

¹²⁹ Andrews (2003: 547ff.) lists also other strategies for linking conjuncts. These involve the use of adverbial modifiers, such as particles, in place of conjunctors in either marked or unmarked structures. An additive conjunction may also involve the use of the adverbial particle *no* ‘also’, *oc* ‘still’, or the combination of the two, i.e. *oc no* ‘still also’. A disjunction may be signalled by the use of such adverbial particles and collocations as *ahzo*, *ahzo eh*, *no zo*, *no zo eh*, *ma no zo*, *ma no zo eh*, *ahno zo*, *ahno zo eh* (frequently preceded by the adjunct *in*). An adversative coordination may occur in structures in which the adverbial particle *zan* ‘only’, *tel* ‘nevertheless’, *yeceh* ‘even so’, *yeh* or *neh* ‘on the other hand’, which may be introduced by the adjunct *in*.

- (6.78) Use of the Spanish coordinator *y* in Classical Nahuatl (Pizzigoni 2007: 225)
nican niczonquixtia y nomemoria yn iXpan co noa[...]basea y notestigos.
 ‘Here I conclude my memorandum in the presence of my executor **and** my witnesses.’

In addition, the Spanish adversative coordinator *mas* ‘but’ can be attested in some documents including a complaint from 1618 (6.79). The use of *mas* as an adversative marker reflects the old Spanish meaning of this lexical element which is still used in Mexican Spanish aside from another adversative coordinator *pero*.

- (6.79) Use of the Spanish loan *mas* as adversative coordinator in Classical Nahuatl (Sullivan 2003: 18)
*au quenemi timochicauasque yntla miecquinti quintlaqualtia ymecau yguan inazin yguan itlauical yguan itliticau señora yntla san içel guel ticmacasque ytlaqual **mas** amo gueli yxquichtin tiquintlaqualtisque*
 ‘And how are we to make an effort if there are so many of them to feed: his lover and his mother, and the lady’s husband and her black? If it were him only, we could give him his food, **but** we cannot feed everyone.’

The clause and phrase coordinating methods in traditional Nahuatl stand in sharp contrast with coordinating strategies attested in modern Nahuatl. First of all, all of the types of the unmarked coordination, including unmarked conjunction, disjunction and adversative coordination, have mostly been replaced with the marked strategies, which resemble parallel coordinating constructions applied in Spanish. The influence of Spanish is most obvious in the use of direct lexical loans of Spanish coordinators, but it is also present in pattern borrowings in which native Nahuatl coordinators have been adapted to match the syntactic and semantic properties of their Spanish equivalents. Direct loans of Spanish coordinators include *y* ‘and’, illustrated in (6.80), as well as *o* ‘or’ and *pero* ‘but’, which are both attested in an example from modern Nahuatl in (6.81).

- (6.80) Spanish conjunctive coordinator *y* used in modern Huasteca Nahuatl (Van't Hooft and Flores Farfán 2012: entry word: *mekojki*)
Ne capitanes kitemouaj kani momekojchiuasej kampa kipixtoka tlen melauaj moneki keniki payo, mascaras, vestidos, pantalo, rebosos y uan sekinoj tlamantli tlen kitlachilia intechmoneki para moixtsakuasej.
 ‘The captains look for specific place so that people dress up, where there are essential [things] such as handkerchieves, masks, clothes, trousers, shawls **and** other things that can be used to dress up.’ (cf. Spanish: *Los capitanes buscan un lugar específico para que la gente acuda a disfrazarse donde se tiene lo esencial como pañuelos, máscaras, vestidos, pantalones, rebozos y otras cosas más que sirven como disfraz.*)
- (6.81) Spanish disjunctive coordinator *o* and Spanish adversative coordinator *pero* in modern Huasteca Nahuatl (JFR)
Xilitla huallauh o pehua tlen ‘xili’ huan ‘tlan’. ‘Xili’ quihtoznequi cuachololohtli’ tlen ni ce... ce tlapialli catli itztoc nican... pero ni cuachololohtli mochantia pan atl, inca pan tlalli.
 “‘Xilitla’ comes from, **or** starts with ‘xili’ **and** [then] ‘tlan’. ‘Xili’ means ‘fresh water snail’ and the species that live here **but** this species lives in fresh water, not on the land.”

Aside from *pero*, an alternative adversative coordinator used in Chicontepec Nahuatl in Veracruz is *mas*, as illustrated in (6.82).

- (6.82) Spanish adversative coordinator *mas* used in modern Chicontepec Huasteca Nahuatl (Sullivan et al. 2016: 303)
Na nican niitztoc, nitlachpana ni caltic. Para maz, pan tonatiuh, pan millah, ayochueli ninemi quennopa.
 ‘I am here, I sweep here in the house. **But** in the sun, in the field, I can no longer go around like that.’

Although the Spanish loan coordinators present in the examples above could be, at first sight, considered instances of code-switching, they are in fact lexical borrowings. Unlike typical code-switches, these function words are fully integrated into the structure of modern Nahuatl varieties and are widely used (especially *o* and *pero*, see below) by the speakers across all generations. Moreover, they cannot be considered code-switches since they do not comply with the ‘Complementiser Constraint’ (Kachru 1978), according to which foreign coordinators cannot be used to join two host language noun or verb phrases (see §2.3.2.2).

Whereas the Spanish disjunctive coordinator *o* and the adversative coordinator *pero* are used very frequently in modern Nahuatl, the conjunctive coordinator *y* is attested less often.¹³⁰ Note how in example (6.80) the Spanish coordinator *y* precedes the native Nahuatl coordinator *huan*. Such an outcome is quite typical for situations in which speakers, after using a loan which has a Nahuatl equivalent, correct themselves by adding a native word immediately after a borrowed element.

The influence of Spanish also extends to the use of the native relational noun *huan* as a conjunctive coordinator in modern Nahuatl. The coordinator *huan* is, however, often used without the traditionally required obligatory possessive pronoun *i-* and it frequently appears in the same semantic and syntactic environments in which the coordinator *y* is used in Spanish. In addition, in modern Nahuatl this relational noun has been reinterpreted as a coordinator used to join not only phrases (e.g. *na huan ta* ‘me and you’), but also clauses and sentences, as illustrated in (6.83) and (6.84).

(6.83) Sentential conjunction in modern Huasteca Nahuatl (DJH)

*Ce tonalli inca aqui quiapixqui **huan** macehualmeh tlen ceyoc teyohualli panoqueh **huan** quimoyahqueh nopa atl.*

‘One day no one looked after it [the spring] **and** people from other village came by **and** contaminated the water.’

(6.84) Clausal conjunction in modern Huasteca Nahuatl (AHL)

***Huan** quihuica ijícara. Neci yahui quicuiti atl. **Huan** ce tototl huica.*

‘**And** she's carrying her bowl. It looks like she's going to fetch water. **And** a bird is singing.’

Contact with Spanish has not only contributed to a reinterpretation of the relational noun *huan* as a conjunctive coordinator, but has also resulted in an extension of the syntactic contexts in which it is used. Aside from joining phrases, clauses and sentences, this coordinator is used in modern Huasteca Nahuatl to link units of discourse which are

¹³⁰ Although the use of the Spanish coordinator *o* is by far the most preferred strategy to mark disjunction in modern Nahuatl, some speakers of Huasteca Nahuatl around Chicontepec, Veracruz still apply the native particle *zo*. Although, as pointed out by John Sullivan (p.c., 2 May 2022), although this particle never appears in older Nahuatl texts, it is attested in particle clusters, such as *ahzo* ‘perhaps, or’. With respect to adversative coordination, John Sullivan also remarks that aside from ubiquitous *pero*, also the native particles *zanpampa* or *ma* are occasionally used by some speakers of Veracruz Huasteca Nahuatl.

related to each other, but which are more complex than clauses or sentences. An example of such use of *huan* in Huasteca Nahuatl is given in (6.85).

- (6.85) Linking of larger units of discourse in modern Huasteca Nahuatl (PRC)
Huan ne itlahuical, o ce cihuatl nec... Huan yahui ica ne ommeh ne itlapiyelhuah.
‘**And** his spouse, or a woman it [the movie used as a visual stimuli] shows... **And** she's going with two of her animals.’

Such use of *huan* which connects independent statements at the levels of discourse which are higher than a sentence was not permitted in Classical Nahuatl. The connecting particle used in this function was *auh*, which is not found in modern Huasteca Nahuatl. The loss of the coordinator *auh*, as well as the use of *huan* as a universal conjunctive coordinator is, however, not only limited to Huasteca Nahuatl but it is also attested in many other geographically distant regional varieties of Nahuatl spoken across Mexico. For instance, according to Canger and Yensen (2007: 408), *auh* was also lost in North Puebla Nahuatl, where *huan* is now widely used as a general conjunction particle. The same trend can be observed in the modern Nahuatl spoken in Guerrero (Canger and Yensen 2007) and in Pipil (Campbell 1987).

Apart from *huan*, other relational nouns have also been reinterpreted as coordinators in modern Nahuatl spoken in Xilitla. One such example includes a relational noun/compound postposition *pampa* (composed of *-pan* and *-pa*), which was traditionally used with an obligatory possessive prefix (Karttunen 1992: 186), and is now found in contexts in which the Spanish coordinator *porque* customarily appears (example 6.86).

- (6.86) The relational noun *pampa* used as a coordinator in modern Huasteca Nahuatl (JFR)
Kuatsajtsistli kichijinenkej pampa nelia kuali sesek nopa atl pan maltijtinekej, pakilistli kichijinenkej.
‘They were screaming **because** the water in which they were bathing was really refreshing, they were doing it [screaming] happily.’

The above mentioned innovations not only change coordinating strategies at the phrase, clause and sentence level, but also affect some aspects of discourse organisation in

modern Nahuatl. All of the Hispanicised coordinating strategies discussed above are illustrated in example (6.87), which represents the modern Huasteca Nahuatl spoken by an elderly woman. Note how the text also includes other Spanish elements that control discourse organisation. Thus, the passage is opened with a Spanish informal greeting *bueno* ‘well then’. As the speech continues, the speaker uses numerous Spanish adverbs, including e.g. temporal adverbs: *antes* ‘before’, *luego* ‘subsequently’, *después* ‘later’ and *entonces* ‘then’, as well as several Spanish fillers, e.g. *pues* ‘so, then’ and *este* ‘ah’. The text also includes the expression *nitlazcamati nodios* ni-tlazcamati no-dios (SBJ.1SG-thank POSS.1SG-god) ‘thank god’, which is a calque of the Spanish expression *gracias a dios*. The passage is concluded with the Spanish *es todo* ‘that is all’, which along with *bueno*, uttered at the beginning, frame the entire discourse.¹³¹

(6.87) Discourse organisation in modern Huasteca Nahuatl (SMF)

Bueno, na nican niitztoc nican San Antonio Centro. Na nitequipanoa ca nin..., ca ni... nican niclaltoc, ni la muestra. Na antes quemman nicpehualtih amo nicyecoa nicchihua pero nitlazcamati nodioz nicaprenderoh pilquentzin catlinih... nicchihua nican; ni ezte hueveroz, ni cuatochin, ni jarroz, ica itentzauhca huan ni patoh para ni para hueveroh huan ni cafeterah paya niquinchihchihua quiampa ca nimopalehuia porque pan ni tonalli nimantzin amo tleno tinemacazceh para... para timopalehuizceh tihcohuazceh ce quiloh cintli o ce quiloh de minsah, puez amo tleno, puez na ya ni... nimopalehuiti quentzitzin, amo miac, amo quiahxilia, amo quiahxilia, hay vecez nicquixtia, hay vecez amo nicquixtia, puez hay vecez huallahuih tlacohuanih. huan hay vecez amo huallahuih tlacohuanih, puez huahcapan ya nicpixtoc neca ce cuartoh nicpixtoc cazuelah paya nictentoc, amo hueli nicnemacatoc, puez porque amo huallahtohqueh tlacohuanih, porque na amo hueli nipanquiza, porque niitztoc nocelti, huan ayacmo nihueli ninehnemi, ya nochi ni... nicohcococ nochi pan notlacayo, puez... amoyoc hueli nicchihua maz, quena nitequipanoa nican pero zan nican calihc, yampa na niquihtoa. Ohala que quizaz ahque techpalehuiz para ticacizceh ce ome centavoh. Ezte... quiampa nican itztoc nican ne nocompanierah, nectoc ticamanaltih huan quiampa na ... miac nicpohuilia nopa nonecesidad catli na nicpiya. Es todo.

‘Well, I am here in San Antonio [Huitzquilico] Centro, I work with these [showing] what I have put out here, this is the sample. Before I started [doing this] I couldn’t make it but thank god I learned a bit about what I’m elaborating here... these egg containers, this [clay] rabbit, these jugs, with their lids, and this [clay] duck... for an egg container and this coffeepot, and with what I elaborate, with this I help myself

¹³¹ See Canger and Jensen (2008: 409) for their examples and discussion about the influence of Spanish on discourse organisation in North Puebla Nahuatl.

[financially] **because** these days there is nothing that we could sell to help us buy a kilo of maize **or** a kilo of minsa [mix for making tortillas], **so** there is nothing, **so** I carry on helping myself doing this..., there is not much [I don't have much], it's not sufficient, it's not enough... **sometimes** I earn, **sometimes** I don't... **well, there are times** when buyers come **and there are times** when they don't come... **So** I have it there, there, in the other room I have a casserole, I have it stored there, I can't sell it, **uh, because** the buyers didn't come, **because** I can't leave [the house], **because** I'm on my own **and** I have problems with walking, I have pains in all of my body, **well...**, I can't do much. **But** I do work here in my house, this is what I say. **Hopefully** someone will come out to help me find [earn] some pennies. Uh..., here there is my friend and we have been talking a lot **and** I told her about the necessities I have. **That is all.**'

Although one of the possible reasons behind the borrowing of Spanish coordinators may be filling the gaps with elements that the traditional system was lacking (such as a dedicated disjunctive coordinator or an adversative coordinator), the borrowing can also be interpreted as language change that made the existing coordination more transparent. Instead of the unmarked coordination used in all three types of constructions, Spanish loans permitted an easier (and less context-dependent) recognition of a type of coordination, as suggested by Campbell (1987) who researched this topic in Pipil. An even more accurate motivation can perhaps be sought using the framework of metatypy (Ross 2001), which explains both lexical loans and pattern borrowings as a result of the reorganisation of the semantic patterns (or 'ways of saying things') in the receiving language. This reorganisation stems from widespread bilingualism in Nahuatl and Spanish and a strong influence of the source language on the language and culture of the Nahua people. I elaborate more on this issue in §7.4.

To sum up, modern Huasteca Nahuatl shows considerable influence of Spanish also in the area of coordination. Spanish coordinators are applied for connecting phrases, clauses and sentences in all three types of coordinating constructions i.e. conjunction, disjunction and adversative coordination. These coordinating constructions are used in the same syntactic and semantic contexts as in Spanish. Moreover, the influence of Spanish also extends to discourse organisation in modern Nahuatl, including similar discourse opening and closing strategies, as well as comparable event sequencing strategies achieved by the use of the same Spanish temporal adverbs. The changes in coordinating strategies, as well as in discourse organisation patterns, appear to be

present in many modern Nahuatl varieties, including such geographically distant varieties as Huasteca Nahuatl and Guerrero Nahuatl. As I show in the section below, the changes in coordination and discourse organisation are, however, not limited to various dialects of Nahuatl but are, in fact, also found in other Mesoamerican languages including Tének.

6.5.4. Coordination in Tének

Traditional Tének, similarly to Nahuatl, applied both unmarked and marked coordination. Phrases, clauses or sentences could be linked either by the juxtaposition of the two or more units or by the use of coordinators. Similarly to Nahuatl, unmarked (asyndetic) coordination was very common in traditional Tének, and, according to Edmonson (1988: 580), it was frequently used in Tének spoken in the 1980s. An example of an unmarked conjunction is presented in (6.88), in which three clauses are juxtaposed and no overt coordinators are used.

- (6.88) Asyndetic conjunction in Tének (Edmonson 1988: 580) [glosses modified]
ʔin=k'apu ʔan ʔila:l ʔalwa:ç Ø=k'wah-at
 A3.SG=ate DEF medicine good.indeed B3.SG=be.located-INCOMPL
taley Ø=wičk'on ʔan yawʔla:ç
 then B3.SG=returned DEF sickness
 'He took the medicine, he was quite well, then the sickness returned.'

In contrast, the marked (syndetic) conjunction involved the use of the coordinator *ani* 'and', as illustrated in (6.89).

- (6.89) Syndetic conjunction in Tének (Edmonson 1988: 580) [glosses modified]
ʔin=çoʔo:b ti te:nek ʔani ʔin=çoʔo:b ti la:b ka:w
 A3.SG=know PREP Tének CONJ A3.SG=know PREP mestizo speech
 'He knows Tének **and** he knows Spanish.'

The coordination expressing two alternative units was marked with a coordinator *max* 'or'. This marked strategy of disjunction is attested in numerous colonial sources,

including the 16th century Christian doctrine (De la Cruz 1571), as shown in example (6.90), and the 18th century catechism by Tapia Zenteno (1767), as illustrated in (6.91).

- (6.90) Disjunction in colonial Tének
 (De la Cruz 1571; after Meléndez Guadarrama 2017b: 220) [glosses modified]
 <diablo, ynbiḥ chalechemla masi ynic hucuy>
 diablo ḥin=bih č'ale čemla **maš** ḥi ḥinik hukuy
 devil A3.SG=name king dead **DISJ** INDEF man owl
 'The devil, it's his name; the king of the dead **or** the owl man.'

- (6.91) Disjunction in colonial Tének (Tapia Zenteno 1767: 102) [my glosses]
 <Ma inic, max y Vxum?>
 ma inic, **max** i uxum
 INTERR man **DISJ** INDEF woman
 'Is it a man **or** a woman?'

Judging by the the phonological similarity between the Tének disjunctive coordinator *max* and the old Spanish adversative coordinator *mas*, it is possible that *max* is a borrowing from Spanish that underwent semantic adaptation, and instead of being used in its original meaning as an adversative coordinator, changed its function to a disjunctive marker. Whereas Nahuatl adopted the Spanish coordinator *mas* to function as the adversative coordinator (now fulfilled by *pero* 'but'), Tének did not follow the same trend.

As for adversative coordination in colonial Tének, no examples of either marked or unmarked constructions of this type were attested in the data I analysed. The topic of the traditional strategies applied for adversative coordination requires, therefore, further research.

With respect to coordination in modern Tének, it shows considerable influence of Spanish, which involves either direct lexical loans of Spanish coordinators or pattern borrowing of Spanish coordinating strategies. As in modern Nahuatl, the unmarked coordination strategies that, according to Edmonson (1988: 580), were frequent in Tének in the 1980s, have been replaced with the marked strategies of coordination. Following the Spanish pattern, conjunction, disjunction and adversative coordination are accomplished through the use of overt coordinators.

As for conjunction, modern Tének uses both native and borrowed conjunctive coordinators. These markers serve to connect any two coordinands including words, phrases, clauses, or sentences (Edmonson 1988: 484ff.). The use of the native conjunctive particle *ani* ‘and’, which is still very productive in modern Tének, is illustrated in (6.92). Two attestations of the borrowed Spanish coordinator *y* ‘and’ are illustrated in (6.93) and (6.94). Interestingly, although the coordinator *y* can be attested even in a 19th century Tének text (6.93), the native particle *ani* is used more frequently than the Spanish borrowing, which reflects a similar trend in Nahuatl.

(6.92) Native coordinator *ani* in modern Tének (Edmonson 1988: 486) [glosses modified]

ʔu=pen-aʔ-Ø ʔan t'uhub ʔani ʔu=pet'-n-aʔ-Ø
 A1.SG=lift-TS-COMPL DEF stone CONJ A1.SG=throw-TR-TS-COMPL
 ‘I lifted the stone **and** threw it.’

(6.93) Spanish coordinator *y* in 19th century Tének (Lorenzana 1896: 19) [my glosses]

Lájdú, morral, reata y sombrero=chic
 lasso bag rope CONJ hat=PL
 ‘Lassos, bags, ropes **and** hats.’

(6.94) Spanish coordinator *y* in modern Tének (TSA)

In=t'ay-a'l idhidh y tsanak'w
 A3.SG=plant-TR.INCOMPL corn CONJ beans
 ‘He plants corn **and** beans.’

Tének has also adopted the Spanish disjunctive coordinator *o* ‘or’, which replaced the particle *max* used in the colonial variety of Tének.¹³² This coordinator is used in a similar way as in Spanish, and it can connect phrases (example 6.95) and clauses or sentences (example 6.96).

¹³² Larsen (1955: 123) translates Spanish *o* ‘or’ to Tének as *u, hua*, and gives the following example of the use of this coordinator: *Nixē hua axē* ‘That one or this one’. This coordinator, however, is not attested in my modern Tének data.

(6.95) Disjunction in modern Tének (Edmonson 1988: 555-556) [glosses modified]

pe:l ʔi ʔeθem ʔo pe:l ʔi ʔu:t' ʔaʃi ʔin=k'apu
 COP INDEF raccoon **DISJ** COP INDEF opossum that A3.SG=ate
ʔan θak'čok
 DEF eggs
 'Was it a raccoon **or** an opossum that ate the eggs?'

(6.96) Disjunction in modern Tének (Kondic 2016a: 6) [glosses modified]

Tayiil ne'ech ka=∅ trasaar-iy-at an chabaal baal
 later FUT SR=B3.SG measure-TS-PASS.COMPL DEF ground so.that
ka=∅ jil-k'-on tant'ooj an ti uw-atx
 SR=B3.SG remain-DER-MV(COMPL) how DEF SR make-PTCP
t=in lee' an ataaj, maax in=lee'
 SR=A3.SG want.INCOMPL DEF house if A3.SG=want.INCOMPL
chipiil oo in=lee' puulik
 small **DISJ** A3.SG=want.INCOMPL big
 'Later the ground will be measured to make the house the size one wants it, either small **or** big.'

An example of the use of the Spanish coordinator *o* in (6.96) comes from South Eastern Tének spoken in the Sierra de Otontepec in the state of Veracruz, which suggests an interdialectal diffusion of loans in a parallel way to the diffusion observed in Nahuatl, as was shown in the section above.

As for the adversative coordination, it is commonly expressed with another Spanish borrowed item, i.e. *pero* (or *poro*, cf. Edmonson 1988: 485), as illustrated in (6.97).

(6.97) Adversative coordination in modern Tének

(Van't Hooft and Cerda Zepeda 2003: 35) [my glosses, translation modified]
Ani támna' in=andh'-its-kwa' jun-íl t=in
 CONJ so A3.SG=take.home-COMPL.EMPH-QUOT one-POSS PREP=A3.SG
k'imá' pero yabáts-kwa' ∅=kalej alwa'
 house **ADVS** NEG-QUOT B3.SG=turn.out well
 'So she returned her home **but** it didn't work out well, so they say.' (cf. Spanish:
Entonces ya la regresó a su casa. Pero ya no salió bien, así dicen.)

The above mentioned Spanish coordinators should not be considered solely lexical loans, but rather borrowings of function words that affect the organisation of discourse and information flow. In a very similar manner to Nahuatl, Spanish borrowings of greetings, coordinators, temporal adverbs, sentence fillers and hesitation markers, frame

spoken discourse in modern Tének. Some of these elements are shown in the example below (6.98). The Spanish borrowings that can be attested in the passage include the adversative coordinator *pero* ‘but’, the disjunctive coordinator *o* ‘or’, the coordinator *como* ‘as’, the connector *pues* ‘so’, the temporal adverb *hasta* ‘until’, and the fixed Spanish expressions *de todos modos* ‘anyway’ and *de esta manera* ‘in this way’.

(6.98) Discourse organisation in modern Tének (Kondic 2016a: 40-41) [glosses modified]

Peero de todos modos an iniktal koo'-y-al k'elej
 ADVS PREP all ways DEF corpse have-TR-INCOMPL INTS
ka=Ø chuu't-al koo'-y-al ka=Ø jol-in.
 SR=B3.SG see-PASS.COMPL have-TR-INCOMPL SR=B3.SG bury-MV(COMPL)

Koomo wa'ach i familiaar, wa'ach
 as exist.INCOMPL INDEF relative exist.INCOMPL
i t'ojlith, taatamaa' an k=in chuuj-Ø ka=Ø
 INDEF authority anybody DEF SR=A3.SG see-COMPL SR=B3.SG

chem-ech ich juuni syudadaanu naa'in=formaar-iy-al
 die-COMPL already one INDEF citizen RTL A3.SG=form-TR-INCOMPL
paarte k'aal axee' i komunidaad. Pwees inchana' wawaa'
 part with DEM INDEF community then that.way 1PL
an t=i t'aj-a-al an sepeeliu, an funeraal.
 DEF SR=A1.PL do-TR-INCOMPL DEF funeral DEF funeral

Wawaa' baa' wa' i=koo'-y-al juuni kapiiya
 1PL NEG 1PL A1.PL=have-TS-INCOMPL one INDEF chapel
jelat nuu' inchee' ti bitxow, an kapiiya ardieente oo an funeral.
 like there here PREPcity DEF chapel funeral DISJ DEF funeral

Taa' an ti ne'ech ka=Ø belaar-iyat an chamnek,
 there DEF SR HABIT SR=B3.SG vigil-TR-PASS.COMPL DEF deceased
baa' tenchee', wa' belaar-iy-aap an t=in k'imaa',
 NEG here 1PL vigil-TR-PASS.COMPL DEF PREP=A3.SG home
taa' naa' wa chem-el, taa' ne'ech ka=Ø
 there RTL 1PL die-INCOMPL there HABIT SR=B3.SG
belaar-iy-a taa' an ti ne'ech ka=Ø
 vigil-TR-PASS.COMPL there DEF SR HABIT SR=B3.SG
kal-th-a-aj aasta ka=Ø ne'-th-a-aj
 exit-CAUS-TS-PASS.COMPL until SR=B3.SG go-CAUS-TS-PASS.COMPL
ich an ti jol-n-al. Pwees de eesta manera
 already DEF SR bury-MV-INCOMPL so PREP this way
wawaa' t=u teenek tenchee' axee' ti komunidaad
 1PL PREP=B1.PL Huastec here DEM PREP community
San Francisco inchana' an t=i t'aj-a-al tant'ooj
 San Francisco that.way DEF SR=A1.PL do-TS-INCOMPL what

<i>an</i>	<i>k=i</i>	<i>ejt-ow</i>	<i>baal</i>	<i>wawaa'</i>	<i>k=i</i>
DEF	SR=A1.PL	can-TS(COMPL)	so.that	1PL	SR=A1.PL
<i>kumpliir-iy</i>	<i>axee'</i>	<i>i</i>	<i>noorma</i>	<i>ke</i>	<i>koo'-y-al</i>
fulfill-TS(COMPL)	DEF	INDEF	obligation	that	have-TS-INCOMPL
<i>k=i</i>	<i>jol-iy</i>	<i>ni</i>	<i>at</i>	<i>ch'oontaal</i>	<i>taam</i>
SR=A1.PL	bury-TS(COMPL)	DEM	peer	poor	when
<i>ka=Ø</i>	<i>k'ib-ej</i>	<i>ich.</i>			
SR=A3.SG	lose-COMPL	already			

‘Anyway, a corpse has to be taken care of, it has to be buried. There are family members and authorities to take care of the deceased citizen who was part of our community. This is how we hold funerals here. We do not have a church like those in cities, with a funeral chapel to hold vigil over the deceased. Here we hold vigil at home, where the person has died, there vigil is held. From there the deceased is taken to the place of burial. This is the way we the Huastecs do it in our community of San Francisco Chontla. We fulfill our duty to bury our fellow person, when a loved one is gone.’¹³³

To sum up, coordination strategies in modern Tének involve frequent use of Spanish coordinators, as well as other discourse organisation elements. Their presence in Tének most likely stems from widespread bilingualism in Spanish, which, in a similar way to Nahuatl, has resulted in a semantic reorganisation and metatypy that can be found across all varieties of this Mayan language.

6.5.5. Summary

Coordination strategies in both languages are modelled on those present in Spanish, regardless of whether native particles are still used as coordinators (e.g. *huan* in Nahuatl and *ani* in Tének), or whether they have been replaced with borrowed elements. Many Spanish particles were adopted to connect phrases, clauses or larger parts of discourse. Whereas both languages mostly use native elements in conjunctive constructions, the disjunctive and adversative coordinators are Spanish loans. Contact with Spanish also resulted in a shift from unmarked coordination towards the marked method. Moreover,

¹³³ cf. Spanish: *Y de todos modos, el cuerpo se tiene que ver, se tiene que enterrar. Hay familiares y la autoridad que se encargan de ver cuando muere un ciudadano que formaba parte de la comunidad. Pues de esta forma nosotros hacemos los funerales. Nosotros no tenemos una iglesia como en las ciudades, donde hay capillas ardientes o funerales para velar el difunto. Aquí se vela en la casa, donde uno muere, allí se vela. De allí se saca hasta que lo llevan a enterrar. Pues de esta forma lo hacemos nosotros aquí en esta comunidad de San Francisco Chontla. Así nosotros cumplimos esta norma que tenemos de enterrar a nuestro semejante, cuando se pierde al ser querido.*

the analysis of discourse organisation in Nahuatl and Tének also reveals a remarkable isomorphism, which can be attested across different dialects of both Nahuatl and Tének.

6.6. Concluding remarks

Similarly to changes in nominal and verbal morphologies discussed in previous parts of this work, also changes in syntax that were analysed in this chapter demonstrate significant similarities that stem from intense contact with the same source language. In both modern Nahuatl and Tének, a strong preference for the SVO word order can be observed, as well as the development of the predicative possession and the emergence of a generic verb ‘to have’. Moreover, both languages of the Huasteca have developed separate copulas for expressions of permanent versus non-permanent states that reflect the *ser/estar* dichotomy in Spanish, as well as a preference for the marked coordination. These Hispanicised traits have been gradually replacing traditional Mesoamerican features present in both languages that included predicate-initial word order, verbless possessive constructions, absence of copulas in nominal and locational predicates and preference for unmarked coordination.

Chapter 7: Concluding discussion

7.1. Introduction

In the final chapter I summarise and discuss the Spanish-contact induced changes in Nahuatl and Tének that I investigated in my work. I also compare the extent of Hispanisation in both languages and I point out the similarities and differences in how Nahuatl and Tének have been affected by contact with Spanish. I then focus on the possible interpretation of the changes. I pay special attention to the simplification of the two languages and the typological drift towards more analytic structures. I describe in more detail how the innovations observed in the nominal and verbal morphology and the syntactic structure can be interpreted within the framework of metatypy. Next, I compare the results of my study of changes in Nahuatl and Tének against the traits of the Mesoamerican linguistic area, and I demonstrate that many of the traditional features of this convergence area have been Hispanicised, as a result of which Mesoamerican languages can be referred to as the languages of the ‘Mestizoamerican linguistic area’. I show that Spanish fulfills the role of the new source of convergence in the indigenous languages of the Huasteca and Middle America. I conclude my work by suggesting issues that need to be addressed in future studies on Huasteca Nahuatl, Tének, as well as language contact and change involving these languages.

7.2. The impact of Spanish on modern Nahuatl and Tének

Evidence of contact with Spanish can be attested in all areas of the linguistic structure of Nahuatl and Tének including phonology, lexicon, nominal and verbal morphology, as well as syntax. Although the Spanish-contact induced changes that can be observed in

these co-territorial languages are not identical, many innovations are remarkably similar and reflect a long-lasting and intense influence from the same dominant language.

7.2.1. Phonology

As a result of contact with Spanish the phonemic inventories of both Nahuatl and Tének have been expanded. Modern Nahuatl has adopted such new phonemes as /b, d, f, g, r/. Initially these phonemes found in Spanish loanwords were substituted with close native equivalent phonemes in terms of place and manner of articulation (e.g. the phoneme /f/ was frequently replaced with /p/ and /d/ was replaced with /t/). However, as a result of bilingualism that has been gradually spreading among Nahuatl speakers, the Spanish phonemes, as well as new phonemic contrasts (including e.g. the voiced/voiceless contrast found in Spanish consonants) have been adopted by Nahuatl. As for vowels, the changes that are most noticeable in modern Nahuatl are the weakened distinction between long and short vowels, and the differentiation between /o/ and /u/ among a growing number of speakers.

As a consequence of contact with Spanish and the borrowing of many Spanish lexical items, new phonemes were also adopted in Tének, including /d, g, f, r, s/. Similarly to Nahuatl, these sounds were initially substituted with close equivalents in Tének, but would gradually become pronounced as in Spanish. Today most modern Tének speakers have the full vowel and consonant inventories of contemporary Mexican Spanish. Moreover, contact with Spanish has had an impact on other aspects of the traditional phonological system in Tének, including its syllable structure and the gradual loss of the word-initial glottal stop that was traditionally found in Tének.

7.2.2. Lexicon

The Spanish-contact induced changes that are perhaps most obvious in Nahuatl and Tének are those found in the lexicon. Lexical borrowings represent all Spanish word classes including nouns, articles, numerals, verbs, prepositions, adjectives, adverbs, coordinators and discourse particles. Out of all word classes, nouns are by far borrowed

most frequently. This fact confirms many of the proposed hierarchies of borrowings (e.g. Haugen 1950; Weinreich 1968; Hout and Muysken 1994; Field 2002; Matras 2007). Whereas in early colonial times, nouns were acquired to name new objects and concepts introduced by the European colonisers (e.g. religious and administrative concepts and the names of animals and plants brought to Mexico), in modern Nahuatl and Tének core nominal borrowings, for which native equivalents exist, are also frequently attested. Moreover, the degree of (mostly phonological but also morphological) assimilation of newer lexical borrowings has been vastly reduced due to widespread bilingualism, positive attitudes towards Spanish and the fact that most lexical borrowings come from a single language (cf. Haspelmath 2009: 42). Whereas neologisms, or native creations, were frequently used in colonial times to name new concepts, in modern Nahuatl and Tének the most preferred strategy is to use direct Spanish borrowings. One type of lexical items that has been almost completely replaced in both indigenous languages with the Spanish equivalents are numerals, both cardinal and ordinal. Although there are speakers who remember the native terms for double-digit numerals (and some who remember even higher numerals), in practice most speakers count in Nahuatl and Tének only up to 5 or less. A related change involves the grammaticalisation of native numerals for ‘one’, i.e. *ce* in Nahuatl and *jún* in Tének, as indefinite articles.

7.2.3. Nominal morphology

Spanish has also influenced the nominal morphology of Nahuatl and Tének. Several patterns found in Spanish are being adopted by Nahuatl, including the pluralisation of inanimate nouns, which traditionally could only appear in singular forms. The plural marker on inanimate nouns can also be attested more frequently in the case of nominal phrases in which numerals or quantifiers are used. The use of plural suffixes on numerals and quantifiers that appear with animate nouns has, however, been reduced. In Huasteca Nahuatl numeral classifiers have been lost. Moreover, one of the traditionally used plural suffixes *-meh* is becoming the default plural marker, used not only to mark the plural number on absolutive nouns, but also, so far only in isolated examples, to mark the plural on possessed nouns. The latter would traditionally receive the *-huan*

marker. The Spanish plural marker *-s/-es* is almost always only used with Spanish nominal borrowings, apart from one example in my data, in which it appeared with a native Nahuatl noun. One of the noticeable changes in relational words, including e.g. *huan*, *pan*, *pampa*, involves their reinterpretation as prepositions and the loss of the possessive morphology that they traditionally required.

With respect to Tének, contact with Spanish influenced the expression of number and possession, as well as the numeral system. The plural clitic =*chik* is attested more frequently than in colonial Tének, in which it was used optionally, and now it appears also on inanimate nouns and in nominal phrases in which quantifiers and numerals are used. I have not found evidence for the adoption of the Spanish plural marker *-s/-es* in native Tének nouns, although Spanish lexical borrowings frequently appear with this suffix. A significant influence of Spanish can also be found in the marking of possession. Although the traditional contrastive marking for alienable versus inalienable nouns is still retained, and nouns referring to parts of the body, parts of a whole and most nouns referring to kinship terms are considered inalienable, in modern Tének more nouns are treated as alienably possessed and, as such, marked with the possessive marker *-il*. Culturally significant items, as well as items that are being consumed, are now marked as alienably possessed, unlike in the traditional variety, in which they were treated as inalienable from their possessor. Similarly to Nahuatl, Tének has also borrowed Spanish numerals and, although there are speakers who remember the principles of traditional vigesimal counting up to double-digit numbers, in practice almost all Tének speakers use Spanish numerals while referring to quantities beyond 4 or 5.

7.2.4. Verbal morphology

Intense contact with Spanish is also reflected in the verbal morphology of Nahuatl and Tének. With respect to Nahuatl, the morphological complexity of modern Huasteca Nahuatl has been reduced. Despite the fact that traditionally Nahuatl requires its verbal arguments to be overtly marked on the verb, examples are attested of verbs lacking object prefixes. Noun incorporation, once a productive morphological operation used to

indicate a generic object of a verb or the location, time or manner of the action expressed by the verb is often replaced with periphrastic constructions. This trend is also attested in applicative and causative constructions, which in modern Nahuatl are often realised not as morphological operations, in which the causative or the applicative suffix is added, but as syntactic constructions modelled on Spanish. Thus, expressing causation often involves the use of the causative auxiliary verb *chihua* ‘to do’ (or its causative form *chihualtia*) followed by a caused event verb. Adding a benefactive object, on the other hand, does not involve suffixing the applicative morpheme but, rather, is frequently realised by the use of a prepositional phrase in which the benefactive is expressed syntactically. In contrast with Classical Nahuatl, neither causatives nor applicatives are productively used in honorific speech in modern Huasteca Nahuatl, apart from a very limited number in fossilised expressions.

The influence of Spanish on the verbal morphology of Tének also involves a gradual shift from morphological to syntactic expression of causation and the applied object. In a manner similar to Nahuatl, the causative in modern Tének may be expressed in a periphrastic operation in which a causative auxiliary verb is used. A benefactive object, which was traditionally expressed by an applicative suffix on a verb, in modern Tének is specified in a prepositional phrase. An increase in the number of contexts in which middle voice constructions are used also appears to be a result of contact with Spanish. Although Spanish does not have middle voice, similar functions are fulfilled in this language by reflexive passive constructions. Although middle voice in other Mayan languages is not used with a reflexive meaning, in Tének middle voice has been extended to include this context. Despite the above examples of significant influence of Spanish on verbal morphology in Tének, this Mayan language retains its ergative-absolutive alignment that follows either direct, local or inverse pattern, depending on the hierarchy of participants involved in a speech act.

7.2.5. Syntax

My analysis of the syntactic structure of modern Nahuatl demonstrates that the traditional verb-initial word order in transitive clauses has been replaced with SVO

order found in Spanish, and the order in intransitive clauses is now mostly SV (although some speakers use VS as well). Another change concerns a shift from the verbless expression of possession to predicative possessive constructions that use the verb *piya*, which has become equivalent to the Spanish verb *tener*. As a result, *piya* appears in many Nahuatl expressions which are calques of the constructions employing the verb *tener* in Spanish. Yet another change is attested in the constructions that express non-permanent states and the location of animate and inanimate referents. All of these constructions in modern Nahuatl can employ the same verb, i.e. *itztoc*, that is used in the same syntactic and semantic contexts as the Spanish verb *estar*. Contact with Spanish has also contributed to extending the use of *itztoc* from a verb employed to indicate the location of animate beings (as opposed to *eltoc* used to indicate the location of inanimate referents) to a generic locational verb mirroring the use of *estar*. Moreover, *itztoc* is also now used in modern Huasteca Nahuatl in a manner similar to the way in which *estar* is employed as a verb used in expressions indicating non-permanent states of animate and inanimate referents in Spanish. Furthermore, contact with Spanish is also visible in phrase, clause and sentence coordination strategies. The unmarked coordination strategies frequently found in Classical Nahuatl have been mostly entirely abandoned in favour of marked strategies. These are fulfilled by borrowed Spanish coordinators *y* ‘and’, *o* ‘or’ and *pero* ‘but’, as well as the native relational noun *-huan*, reinterpreted as a universal conjunctive coordinator used not only to join phrases and clauses, but also to link larger units of discourse.

With respect to syntax in Tének, several changes that result from contact with Spanish can also be identified. In San Luis Potosí Tének the verb-initial word order, that was typical in Mayan and Mesoamerican languages, has been replaced with SVO order in transitive clauses and SV order in intransitive clauses. Word order also became fixed and not dependent on the animacy or definiteness of arguments, which determined whether the order was VOS or VSO in traditional Tének. Moreover, contrary to Edmonson’s claim (1988: 574-575) that Tének displayed syntactic ergativity, in which the position of the subject of an intransitive verb and the patient (object) of a transitive verb were the same with respect to the verb, this feature is no longer present in modern

Tének. Another change involves the replacement of non-verbal possessive constructions with predicative constructions which use the verb *kó'oyal* (or, its alternative form *kwa'al*). This verb, in a similar manner to *piya* in Nahuatl, is also used as a generic possessive auxiliary verb in similar semantic contexts to the Spanish verb *tener*, including fixed expressions. Moreover, Spanish has also affected the expression of nominal and locational predication in modern Tének. The main changes that can be observed in this domain include the replacement of verbless nominal existential constructions with constructions that employ the copula *pél*, that possibly developed from a numeral classifier. Locational predicates use the verb *k'wajat* that, in a similar way to *itztoc* in Nahuatl, also extended its use to match the contexts in which *estar* is used in Spanish, including non-permanent states referring to people and objects. Tének has also switched from its traditional unmarked coordination strategies to overtly marked strategies. Finally, this Mayan language also borrowed the Spanish coordinators *y*, *o* and *pero*, among which *y* is not frequently used (since the native conjunction *ani* 'and' is preferred), but the other two, i.e. *o* and *pero*, are regularly found in modern Tének.

7.2.6. Hispanisation of Nahuatl and Tének: a comparison

As it can be seen from the above description of changes in nominal and verbal morphology, the numeral system and syntax in modern Nahuatl and Tének, many similarities in how contact with Spanish has affected these languages can be observed. A summary of selected features in both languages before and after contact with Spanish is presented in Table 7.1. The corresponding traits in Spanish are added for comparison and also to show the influence of this language on structures of both of the indigenous languages of the Huasteca. The gray background of some of the cells in the table indicates the features of modern Nahuatl and Tének that have undergone significant change with respect to the traditional system as a consequence of contact with Spanish.

Table 7.1. Comparison of changes in Nahuatl and Tének.

No.	Feature	Pre-Spanish contact		Hispanicised		
		Nahuatl	Tének	Nahuatl	Tének	Spanish
1	Plural marking on nouns	animacy-based	optional, animacy-based	no longer restricted to animate nouns	marked with more frequency, incl. inanimate nouns	obligatory
2	Both quantifier and noun in plural forms with animate referents	yes	no	varies	no	no
3	Both numeral and noun in plural forms with animate referents	yes	no	no	no	no
4	Possessed noun plural marking distinct from absolutive noun plural	yes	no	absolutive plural suffix <i>-meh</i> also used as a possessive plural suffix	no	no
5	Spanish plural suffix <i>-s/-es</i>	no	no	on Spanish loans and native nouns	on Spanish loans	yes
6	Contrastive possessive marking for alienably and inalienably possessed nouns	yes	yes	more traditionally inherently possessed nouns can appear in absolutive form	more nouns traditionally considered inalienably possessed now marked for alienable possession	no
7	Culturally significant items marked as inalienable	no	yes	no	no	no
8	Numeral system	vigesimal	vigesimal	decimal, Spanish loans except <5	decimal, Spanish loans except <5	decimal
9	Causative	morphological	morphological	morphological and periphrastic	morphological and periphrastic	periphrastic, semantic

10	Applicative	morphological	morphological	morphological and periphrastic	morphological and periphrastic	periphrastic
11	Noun incorporation	yes	limited	limited	no	no
12	Middle voice	-	yes	-	yes, its use extended to reflexive meaning	reflexive passive
13	Word order for transitive clauses	predicate-initial	predicate-initial, sensitive to animacy and definiteness of arguments, syntactic ergativity	SVO	SVO	SVO
14	Word order for intransitive clauses	predicate-initial	predicate-initial	SV or VS	SV	SV
15	Nominal predicates (permanent states)	verbless in present tense, copula <i>eli</i> used otherwise	verbless?	verbless in present tense, copula <i>eli</i> used otherwise	copula <i>pél</i>	copula <i>ser</i>
16	Stative predicates (temporary states)	verbless	verbless	verb <i>itztoc</i>	verb <i>k'wajat</i>	copula <i>estar</i>
17	Locational predicates	<i>eltoc</i> used for inanimate subjects and <i>itztoc</i> used for animate subjects	verb <i>k'wajat</i>	<i>itztoc</i> can be used for both animate and inanimate subjects	verb <i>k'wajat</i>	copula <i>estar</i>
18	Possessive constructions	verbless ('his-dog (the man)')	verbless ('his-dog (the man)')	verbal constructions with the verb <i>piya</i> ('he (the) man has (a) dog')	verbal constructions with the verb <i>kwa'al</i> or <i>kó'oyal</i> ('he (the) man has (a) dog')	verbal constructions with the verb <i>tener</i> ('the man has (a) dog')
19	Clause linking	unmarked preferred, marked also used (conjunctive coordinators: <i>auh</i> and <i>ihuan</i>)	native conjunctive coordinator <i>ani</i> (?), unmarked strategies	no unmarked strategies, relational noun <i>huan</i> reinterpreted as coordinator 'and', Spanish coordinators <i>o</i> 'or' and <i>pero</i> 'but'	native coordinator <i>ani</i> , Spanish coordinators <i>o</i> 'or' and <i>pero</i> 'but'	coordinators <i>y</i> 'and', <i>o</i> 'or', <i>pero</i> 'but'

As demonstrated in my analysis of changes in number marking in chapter 4, in both Nahuatl and Tének, pluralisation of inanimate nouns has become more frequent than in the traditional varieties of the two indigenous languages (point 1 in the table above). In Tének the plural marker =*chik* is attested more often than in the traditional variety of this language, and in Nahuatl the absolutive suffix *-meh* is becoming the default plural suffix used with all noun roots. Parallel changes can be seen in the counting system (8). Both languages have almost completely departed from the traditional vigesimal system and, after a transitional period in which a hybrid vigesimal-decimal system was used, they replaced their native numerals with the corresponding Spanish loans, except for very low numbers (lower than 5).

The results of my analysis also confirm similar innovations in the domain of verbal morphology. Both Nahuatl and Tének have introduced the periphrastic expression of causation and the expression of an applied object (points 8 and 9). Both languages use their respective causative auxiliary verbs (*chihua* in Nahuatl and *t'aj* in Tének, both translated as 'to do, to make') in syntactic causative constructions modelled on the Spanish formula *hacer que* + [verb of effect]. The applicative object, on the other hand, may be now expressed in a prepositional phrase that follows the verb. Another similarity can be attested in changes in word order in transitive clauses (13). Both Nahuatl and Tének have replaced their verb-initial ordering with SVO order, that is also the basic order found in Spanish. Similarities can also be found in how Spanish has influenced stative predicates, and the expression of temporary states referring to animate and inanimate referents (16). The use of locational copulas (*itztoc* in Nahuatl and *k'wajat* in Tének) in this type of constructions is an innovation clearly modelled on the use of the Spanish verb *estar*, also a locational verb that is employed to express temporary, changeable states. Parallel changes in Nahuatl and Tének can also be observed in possessive constructions (18), as the two languages have replaced the Mesoamerican verbless possessive constructions formed according to the formula 'his dog (the) man' with the Hispanicised expression of possession, in which a possessive verb is employed, i.e. '(the) man has (a) dog'. This change was accompanied by the development of a generic possessive verb 'to have' (*piya* in the case of Nahuatl and

kwa'al/kó'oyal in Tének). The possessive generic verbs seem to have evolved in both Nahuatl and Tének from verbs with a more restricted meaning ('to take care of something or someone'). Finally, Spanish has also caused similar changes with respect to clause linking strategies (19). Both Nahuatl and Tének now favour marked coordination strategies, which employ either native coordinators (the reinterpreted Nahuatl relational word *-huan* used as a conjunctive coordinator, and the particle *ani* fulfilling the same function in Tének), or borrowed Spanish coordinators *o* 'or' and *pero* 'but'.

Changes stemming from contact with Spanish that are different in Nahuatl and Tének include, for example, plural marking with quantifiers (2), including numerals (3). In modern Nahuatl the main change that can be observed involves omitting the plural suffix on quantifiers (including numerals) when animate nouns appear in the plural form. In modern Tének, on the other hand, the innovation concerns a more frequent use of nouns in plural forms in nominal phrases with quantifiers and numerals. A change from two different plural markers used for absolutive and possessed nouns to one universal marker (4) is only observable in Nahuatl, in which *-meh* is becoming the generic plural marker. Tének did not have a similar distinction, so a possible influence of Spanish does not apply with respect to this feature. The Spanish plural suffix *-s/-es* (5) seems to have been adopted to mark the plurality of native nouns in Nahuatl only. Contrastive possessive marking for alienably and inalienably possessed nouns (6) appears to be less changed by contact with Spanish in Tének than in Nahuatl. Culturally significant items were traditionally marked as inalienably possessed (7) only in Tének, and this feature has also been affected by contact with Spanish. No similar contrast was, however, traditionally found in Nahuatl. The use of noun incorporation (11) has been reduced in modern Nahuatl, but no parallel observation can be made about Tének since the available data shows that noun incorporation was not productively employed at an earlier point in its history. As for extending the use of middle voice to reflexive meanings (12), this change can be only observed in Tének. Word order in intransitive clauses (14) switched to SV in Tének, but is more flexible in Nahuatl, in which both SV and VS are attested. Differences can also be noted in nominal predicative constructions

in which permanent states are expressed (15). While the influence of Spanish in the case of this feature is not noticeable, Tének has replaced verbless constructions with the ones in which the copular verb *pél* is used. Whether this change was caused by contact with Spanish is not clear. It is, nevertheless, an obvious innovation with respect to the traditional system. Finally, whereas the influence of Spanish in locational predicates (17) is not attested in traditional or modern Tének, in which the same copula has been used (*k'wajat*), contact with Spanish had a more profound impact on this feature in Nahuatl. In this language, traditionally two distinct copular verbs were employed, i.e. *eltoc* to indicate the location of inanimate referents and *itztoc* for animate referents, and they are being replaced with one generic verb *itztoc* used for all types of referents.

7.3. Ongoing language change in Nahuatl and Tének: simplification, variation and resistance

One of the ways in which a significant Hispanisation of Nahuatl and Tének, as well as an overall simplification and reduction of their features not shared with Spanish can be interpreted, is an ongoing language attrition. The link between grammatical simplification, language attrition and language shift has been shown by many scholars, including Dorian (1978, 1980), Austin (1986), Swiggers (2007) and Sallabank (2012, 2013). Simplification in obsolescent languages typically affects nominal and verbal inflection, such as number, gender and case for nouns, and argument marking, number, TAM categories and voice for verbs (Dorian 1978: 591; Palosaari and Campbell 2011: 115). The phenomena typically associated with simplification, such as the reduction of irregularities, the increase in transparency, the loss of grammatical categories, as well as an overall reduction of morphological complexity (Trudgill 2016), are all present in the modern varieties of Nahuatl and Tének described in this work.

With respect to the regularisation of irregularities, in modern Western Huasteca Nahuatl the single plural suffix *-meh* is typically used as the default suffix employed for all kinds of nominal stems. This suffix replaced three absolutive plural suffixes, namely *-tin*, *-meh* and *-h*, the use of which was phonologically motivated. What is more,

semi-speakers of Huasteca Nahuatl often overgeneralise and use the suffix *-meh* also on nouns in possessive form, which traditionally required the use of a different suffix (*-huan*). Furthermore, the preferred verbalising suffix in modern Nahuatl, used e.g. on Spanish verbal loans, is now *-oa*, which has become the default verbaliser that replaced many possible verbalising suffixes employed in traditional Nahuatl. An example of regularisation in Tének is the more frequent use of the possessive suffix *-il*, which traditionally was only used on alienably possessed nouns. This suffix is now becoming the default genitive marker also used on nouns referring to culturally significant items, which traditionally were treated as inalienably possessed and, as such, were unmarked.

Furthermore, what can also be observed in both modern Nahuatl and Tének, is an overall reduction of morphological complexity and the replacement of complex synthetic constructions with analytic constructions. Both Nahuatl and Tének traditionally displayed features of polysynthetic languages, including the presence of complex morphological structures with numerous bound morphemes, head-marking inflections, noun incorporation and significant allomorphy of both free and bound morphemes (cf. Fortescue 1994, 2008; Mithun 2017a). These features have been affected by contact with Spanish and, as a result, the morphological structures of both indigenous languages of the Huasteca have been simplified. One symptom of the decrease in morphological complexity includes less frequent use of morphological causative and applicative marking on verbs, and their gradual replacement with periphrastic operations. Other phenomena related to morphological simplification in Nahuatl include the reduction of the productivity of noun incorporation, omission of the obligatory marking of the object of transitive verbs, and the absence of a possessive prefix on relational nouns.

Language attrition is also characterised by reduction, which is understood as loss of structural elements without compensation by other elements (Mühlhäusler 1974). As noted by Trudgill (1974), Dorian (1981: 153ff.) and Dressler (1982: 325ff.), speakers of obsolescent languages mostly retain their expressability thanks to shifting functions from their heritage language to the dominant language. However, although both Nahuatl and Tének have lost several features that have not been compensated with other features

(including numeral classifiers, for example), most traits have been replaced with alternative constructions, and these often involve the use of native elements adjusted to new functions. For example, relational nouns in modern Nahuatl are being reinterpreted as prepositions, and the traditionally preferred unmarked coordination strategies in both Nahuatl and Tének are being replaced with marked strategies, some of which include the use of native particles reinterpreted as coordinators. Likewise, although the productivity of the morphological expression of causation has been significantly diminished, both languages found other native means to express causation that involve the use of periphrastic causative.

Another feature that has been listed as symptomatic of language attrition, apart from tendency to analytism or overgeneralisation, also involves what Sasse (2001: 1671) refers to as “phonological and grammatical instability (variability)”. This phenomenon is related to the existence of not only significant transgenerational variation in language use, but also to intra- and interspeaker variability. Thus, while less competent speakers of Nahuatl have lost the vowel length distinction, or tend to overgeneralise by employing the same plural marker on both absolutive and possessive forms of nouns, other more proficient speakers apply more traditional rules while speaking their heritage language. A complex example of variation is provided by the ongoing changes in the numeral system of both languages. Thus, whereas it is true that the majority of Nahuatl and Tének speakers use Spanish numerals when counting from 5 on, some speakers do use native terms for numerals referring to higher quantities. Further, speakers who have some recollection of the native Nahuatl or Tének counting system apply the principles of vigesimal counting, while others use a hybrid system in which vigesimal counting may be mixed with the decimal system. For instance, the numeral 50 can be expressed in five different ways in Tének, as either: 1) the Spanish loan (*cincuenta*), 2) the native Tének numeral that follows the vigesimal counting principles (*tsáb inik lájuj*, i.e. $2 \times 20 + 10$), 3) the decimalised version in which the native term for ‘ten’ (*lájuj*) serves as the base (*bó’ lájuj*, i.e. 5×10), 4) another decimalised version in which the native term for ‘twenty’ (*inik*) has been reinterpreted as the base term for ‘ten’ (*bó’ inik*, i.e. 5×10),

or, finally, 5) a construction combining native and Spanish vocabulary (*tséjel ciento* ‘half a hundred’).

Despite the presence of the above mentioned phenomena related to simplification, as well as the existence of sociolinguistic parameters typically associated with language endangerment such as the loss of intergenerational transmission, a decrease in the absolute and proportional number of speakers, reduction in the domains of use and an unfavourable language policy (UNESCO 2003: 7, 12-13), the situation of Nahuatl and Tének need not only be considered as an ongoing language attrition. First alternative interpretation may involve treating simplification of Nahuatl and Tének as a rather typical development. This way of thinking about language change was suggested by several scholars, including e.g. Maher (1991) or Dixon (1994: 182-184), who considered change from a synthetic to analytic structure a regular and expected outcome of language contact, in which morphologically simpler constructions tend to replace more complex ones. Another interpretation of heavy language change and simplification involves regarding it “as halting or delaying a shift” (O’Shannessy 2011: 97). In this view, as suggested by Gruzdeva and Vakhtin (2017: 446), who studied language obsolescence in polysynthetic languages, the simplification of morphological complexity, the regularisation of morphology and morphophonemics, as well as the overgeneralisation and becoming more like the source language, may be seen not as a symptom of decay of the recipient languages, but, rather, as means of resistance against the dominant language.¹³⁴ After all, the closer Nahuatl and Tének become to Spanish, they may have greater chances to survive as languages, as their speakers will not have to acquire two radically different languages that display very distinct phonological and morphosyntactic traits. This point of view has also been explored in the theory of metatypy, to which I turn now.

¹³⁴ In Gruzdeva and Vakhtin’s (2017: 446) words: “any language, including a polysynthetic language, strives to survive, and all changes that occur in its structure can be interpreted as means of resistance. The closer a recessive polysynthetic language becomes to the dominant language (in many cases analytical) the more chance it has of survival: the speakers do not have to retain/acquire two largely different morphological (and phonological, and syntactic) systems and can use both languages with a similar grammatical structure. In this way the ‘life’ of a polysynthetic language may be significantly prolonged in a new, less polysynthetic, or even non-polysynthetic, hypostasis.”

7.4. Spanish-based metatypy in Nahuatl and Tének

The changes discussed above can also be interpreted in terms of metatypy. The characteristics of this process were laid out by Labov (1971) and Grace (1981), and later developed in greater detail (and named ‘metatypy’) by Ross (1999). After studying the languages of Kupwar, an Indian village on the Indo-Aryan/Dravidian border, Labov discovered that the locally spoken varieties of Marathi and Urdu (both Indo-European) have undergone metatypy on the model of Kannada (Dravidian). Labov (1971: 460) observed that “the lexical components of a language can be divorced from the underlying grammatical sub-structure” in such a way that the three languages of Kupwar have developed morpheme-for-morpheme intertranslatability, i.e. they have a common grammar but separate lexicons. Ross (1996, 1999) noticed a similar outcome of contact between Takia (Oceanic) and Waskia (Papuan), both spoken in Papua New Guinea, and he interpreted the Papuanisation of Takia in terms of metatypy, which he defined as:

[t]he change in morphosyntactic type and grammatical organisation which a language undergoes as a result of its speakers’ bilingualism in another language. This change is driven by grammatical calquing, i.e. the copying of constructional meanings from the modified language and the innovation of new structures using inherited material to express them. A concomitant of this reorganisation of grammatical constructions is often the reorganisation or creation of paradigms of grammatical functors. (Ross 1999: 7)

Ross listed three main characteristics of metatypy, which include: 1) change in morphosyntactic type (i.e. metatypy), as well as 2) presence of extensive lexical calques, i.e. loan translations, based on the metatypic model language, and 3) borrowing of discourse markers and interclausal conjunctions (Ross 1996, 1999).

All of these characteristics can be observed in Nahuatl and Tének. In addition to the changes in morphosyntactic type that involve Nahuatl and Tének becoming more analytic, calquing is a frequently attested phenomenon in both languages of the Huasteca. It occurs in both the lexicon and the grammar, although the lexical calquing (loan translations) may be easier to detect. Examples of calquing include translation of

Spanish clauses in which the verb *tener* ‘to have’ is present, as well as the innovative expression of possession according to the Hispanicised formula ‘(the) man has (a) dog’. As in other languages that underwent metatypy, lexical and grammatical calquing in Nahuatl and Tének was preceded by semantic reorganisation. Thus, before the verbs *piya* and *kó’oyal/kwa’al* could be used in calques, they needed to undergo a semantic change in which their more restricted meaning (‘to look after’) was extended so that they could become generic possessive verbs matching the meaning of *tener* in Spanish. Similarly, the nouns *tzontli* in Nahuatl and *xi’* in Tének could only be used to express multiplications of 1,000 after their original semantics (referring to 400) was changed to mirror the meaning of *mil* ‘thousand’ in Spanish.

Another feature of metatypy involves borrowing of discourse markers and interclausal conjunctions from their prototypic model, which can also be observed in Nahuatl and Tének. The examples given in §6.5 included borrowings of Spanish sentence introducers (e.g. *después* ‘after’, *pues* ‘so’, subordinators (e.g. *antes* ‘before’, *desde que* ‘since’, *como* ‘as’, *mientras* ‘during’, *para que* ‘in order to’), as well as sentence fillers (e.g. *bueno* ‘well’, *pues* ‘well’). Spanish coordinating and subordinating markers (including *y*, *o* and *pero*), as well as clause linking strategies found in this dominant language, have also been borrowed by Nahuatl and Tének.

In metatypy the larger syntactic units are typically affected first, followed by metatypy that occurs in smaller units (Ross 1999:12). In Nahuatl and Tének metatypy involves word-for-word calquing but not morpheme-for-morpheme calquing, which is a more advanced form of metatypy. Nahuatl and Tének retain their own verb structure, consisting of argument marking on verbs, so the type of metatypy found in these languages is not the most developed form of intertranslatability, such as that observed in the languages of Kupwar. In Nahuatl and Tének metatypy has, so far, affected only the clause and sentence levels. As can be observed in example (7.1), native morphology is employed, including agglutinating-type argument marking on verbs, which is distinct from the fusional-type argument marking employed in Spanish.

(7.1) Spanish-based metatypy in modern Huasteca Nahuatl and Tének

Huasteca Nahuatl:	<i>Ni-c-piya</i>	<i>ce</i>	<i>cahuayo</i>
	SBJ.1SG-OBJ.3SG-have	one(ART)	horse
Tének:	<i>U=kwa'-a-l</i>	<i>[jún i]</i>	<i>bichim</i>
	A1.SG=have-TR-INCOMPL	[one INDEF]	horse
Spanish:	<i>Tengo</i>	<i>un</i>	<i>caballo</i>
	1SG.have	one(ART)	horse
	'I have a horse.'		

The presence of metatypy in units smaller than clauses, i.e. phrases, is debatable. This claim can be illustrated by looking at adjectival phrases in the languages in question. Whereas word order in the adjectival phrases of Nahuatl, Tének and Spanish is comparable, i.e. noun-adjective, the lexical components of a typical adjectival phrase in Spanish do not always match its Nahuatl or Tének equivalents. For example, Spanish uses definite articles, i.e. the feminine *la* and the masculine *el* in singular form and the feminine *las* and the masculine *los* in plural forms, and these do not have counterparts in Nahuatl, which typically uses demonstratives to indicate definite referents. Moreover, nouns in both Nahuatl and Tének can be used predicatively, and this feature is not regularly found in Spanish. Because of these issues, it can be argued that Spanish-based metatypy in Nahuatl and Tének has reached the clause level but not the phrase or morpheme level.

Metatypy is strongly linked to bi- or multilingualism since now almost all Nahuatl and Tének speakers are competent speakers of Spanish. These multilingual speakers often engage in grammatical calquing which involves copying of constructions found in Spanish (the metatypic model language) using the lexical material present in their respective heritage language. The structural changes effectively make Nahuatl and Tének more similar to Spanish, and the two indigenous languages appear to be shifting towards new codes which share grammatical structures, or a 'template grammar' with Spanish. While the Hispanicised codes use lexical elements that are (mostly) native, the grammatical patterns are modelled on Spanish.

Metatypy is considered by Ross (1999: 16) a way to reduce the memory burden for speakers living in the same speech community, so that "a speaker could express the

same meanings, both constructional and lexical, in corresponding ways in both languages” (cf. Gruzdeva and Vakhtin 2017: 446). As a result of metatypy, these different linguistic systems are combined into a system in which many morphosyntactic similarities are shared, which makes the communicative effort much easier for a bilingual speaker. As also noted by Hasse (1991) and Heine and Kuteva (2003, 2005), comparable syntactic structures or semantic calques (translation equivalents) may be applied to satisfy the wish of bilingual speakers to have equal constructions at their disposal or an easy mental comparison between model and replica languages. According to this interpretation, it is much more straightforward for a Nahuatl or Tének speaker to use a possessive construction of the formula ‘(the) man has (a) dog’ than ‘his dog, the man’, as the former resembles the construction found in Spanish, which is the language they use more often. This phenomenon can also be illustrated by changes in clause linking strategies, in which not only unmarked strategies were replaced with the marked strategies modelled on Spanish, but also Spanish coordinators were borrowed and are used in similar contexts to Spanish. The use of dedicated prepositions to designate conjunctive, disjunctive or adversative coordination can be considered a more efficient strategy for indicating an exact type of coordination, than the traditionally used juxtaposition of clauses or sentences that was more context dependent. Moreover, in Tének the use of native middle voice has been extended to match the reflexive passive constructions in Spanish in such a way that one morphological operation, i.e. adding the middle voice marker, covers the same semantic contexts as the reflexive passive in Spanish. This use of the middle voice marker has replaced a syntactic operation that employed the ‘*t=Set A bá*’ construction traditionally used to express reflexive meaning in Tének.

Another reason why metatypy occurs may be related to cultural changes. Many bilingual speakers use Nahuatl and Tének in similar cultural contexts in which Spanish is spoken. They tend to express the same meanings in both languages, and not only apply the same word order, the same coordinators or calque common Spanish expressions onto their heritage language, but they also use their heritage language in a way that reflects the dominant *mestizo* culture, in which they must have learned to exist.

This becomes obvious when we look at the shift from vigesimal to decimal counting. The 10-based counting system is the one that is reflected in many areas of life to which the indigenous peoples of Mexico have had to adapt. It is present in the religion to which many of them have been converted, and reflected in e.g. the Ten Commandments and the Rosary, as well as in the obligatory state schooling in which they are taught the principles of decimal counting, Arabic digits and measurements that rely on the decimal system. The indigenous populations have also been introduced to the cash economy, which uses the base-10 system.

A strong correlation with cultural values is also noticeable in possession marking. Changes in possession marking in Tének reflect an adjustment to many social stereotypes and patterns of the *mestizo* perception of possession. The marking of culturally significant objects (such as jewellery and elements of clothing), as well as everyday objects including e.g. frequently used kitchen utensils as alienably possessed stems from changes in the perception of these objects as no longer culturally important, which leads to them being treated as detachable from one's ego. The gradual loss of alienable/inalienable distinction makes marking of possession in Tének less dependent on the traditional indigenous worldview. The new perception of such objects matches how they are treated in *mestizo* culture, the contact with which is very difficult to avoid as very few indigenous community members now engage in the production of their own clothes, jewellery or pottery, relying on the cheap supply of these items in the municipal capital.

A similar interpretation can be applied to innovative marking of consumable products, including food, as alienably possessed. The explanation for this change may be sought in the cultural changes that also affect agriculture, food preparation activities, food consumption rituals and the overall perception of nutrition. Whereas traditionally securing the supply of food involved intense agricultural work followed by the time-consuming process of its preparation for consumption (e.g. nixtamalisation of maize before making tortillas), now food can be easily bought at a community store or, in the case of some indigenous towns and villages, in a market, or even in a fast food

restaurant. This cultural change may also be reflected in the linguistic system of Tének in which food items are now treated as alienably and temporarily possessed.

7.5. Mesoamerican languages 500 years after the Spanish conquest

As indicated above, half a millennium after the Spanish conquest the reality of cultural life in the region of the world which we refer to as ‘Mesoamerica’ has profoundly changed. The traditional features that were once identified as the characteristics of the Mesoamerican cultural area (e.g. stepped pyramids, use of solar and ritual calendars, use of *amate* paper and the pictographic/hieroglyphic writing system), have mostly been replaced with *mestizo* culture features and moved to the domain of archaeology and history.

Contact with *mestizo* culture and Spanish has also affected the languages which were classified as members of the Mesoamerican linguistic area. The crucial role of Spanish in the reshaping of shared features in the indigenous languages of Mesoamerica is evident by looking at the changes in Nahuatl and Tének that were analysed in this work. These changes involve many typically Mesoamerican features, including the 14 traits that were identified by Campbell et al. (1986). These characteristics are listed in Table 7.2 below, which compares the original Mesoamerican linguistic area features with the new, i.e. Hispanicised, features based on my study of language change in Nahuatl and Tének. The corresponding traits from Spanish are added in order to emphasise its converging role in language change in Nahuatl and Tének. Although the comparison of changes only comes from two languages of the area, similar trends can be noted in other languages, as I explain below.

Table 7.2. Hispanisation of the Mesoamerican linguistic area.

No.	Feature	Mesoamerican		Hispanised (Mestizoamerican)		
		Nahuatl	Tének	Nahuatl	Tének	Spanish
1	Absence or limited occurrence of plural markers on nouns	yes (only on animate nouns)	yes (optional and animacy-based)	no longer restricted to animate nouns	marked with more frequency, incl. on inanimate nouns	no
2	Absolute nominal affixes	yes	yes	yes	yes	no
3	Relational nouns	yes	yes	reinterpreted as prepositions	reinterpreted as prepositions	no, prepositions
4	Locatives derived from body parts	yes	yes	yes	yes?	no
5	Inalienably possessed body parts and kin terms	yes	yes	yes	yes	no
6	Numeral system	vigesimal	vigesimal	decimal, Spanish loans for >5	decimal, Spanish loans for >5	decimal
7	Numeral classifiers	yes	yes?	no	no	no
8	Aspect more important than tense	no	yes	no	yes	yes
9	Verbal directional affixes	yes	yes?	yes?	no?	no
10	Noun incorporation	yes	yes, but limited	less productive	no?	no
11	Basic word order	predicate-initial	predicate-initial, based on animacy and definiteness, syntactic ergativity	SVO for transitive clauses, SV or VS for intransitive clauses	SVO for transitive clauses, SV for intransitive clauses, no syntactic ergativity	SVO for transitive clauses, SV for intransitive clauses
12	Pronominal copular constructions	yes for present tense only (copula <i>cah/yeh</i> used for non-present tenses and non-permanent states)	yes	yes (for present tense only, <i>eli</i> used for non-present tenses), <i>eltoc</i> used to express non-permanent states with inanimate subjects and <i>itztoc</i> with animate and inanimate subjects	copula <i>pél</i> used for permanent states, <i>k'wajat</i> for non-permanent states	<i>ser</i> for permanent states, <i>estar</i> for non-permanent states
13	Nominal possession	'his-dog (the) man'	'his-dog (the) man'	'(the) man has a dog'	'(the) man has a dog'	'(the) man has a dog'
14	Absence of verb 'to have'	yes	yes	no, use of the verb <i>piya</i>	no, use of <i>kó'oyal/kwa'al</i>	no, use of <i>tener</i>

Out of the 14 features listed above, a complete change from a Mesoamerican trait to a Hispanicised trait can be observed in the case of 6 features (marked in dark gray in the table), i.e.: relational nouns (3), numeral system (6), numeral classifiers (7), basic word order (11), nominal possession (13) and the absence of the verb ‘to have’ (14). These 6 features include 4 out of 5 of the strongest defining features of the area, which according to Campbell et al. (1986: 555), were the following: nominal possession construction of the type ‘his-dog the man’ (13), presence of relational nouns (3), vigesimal numeral system (6), non-verb-final basic word order (11) and a number of semantic calques.

Thus, judging by the changes that can be observed in Nahuatl and Tének, the Hispanicised Mesoamerican linguistic area, which I propose to call the ‘Mestizoamerican linguistic area’, has mostly lost its strong diagnostic features, as suggested by Campbell et al. (1986), and is in the process of replacing them with new features that show an obvious influence of Spanish. First of all, nominal possession in the Mestizoamerican linguistic area is expressed according to the formula ‘(the) man has (a) dog’, in which a possessive verb ‘to have’ has been introduced and the word order has been reversed from possessee-possessor to possessor-possessee. Secondly, relational nouns have either been reinterpreted as prepositions, and have lost their obligatory possessive morphology, or were replaced with Spanish prepositions. Another feature of the Mestizoamerican linguistic area is the decimal counting system, in which Spanish numerals are used and the respective native numerals are only employed to refer to the lowest quantities. In addition, the presence of numeral classifiers is no longer a trait of the new linguistic area. Although, according to Campbell et al. (1986: 556, Table 2), Tének did not have numeral classifiers, the presence of this feature in other Mayan languages allows us to assume that numeral classifiers also existed (and were later lost) in Tének. Finally, the Mestizoamerican linguistic area is also characterised by SVO word order.

Aside from the above mentioned four features that have undergone a radical change, other features have also been significantly affected (marked in light gray in the table). The absence or limited occurrence of plural marking on nouns (1) cannot be considered

a shared feature of the languages of Mestizoamerica as more nouns, including inanimate nouns that were traditionally not pluralised, are attested with plural marking. The use of directional affixes (9) also appears to have been somewhat reduced in Nahuatl, and because of this innovation this trait is not a reliably occurring feature in the languages of the area. However, the range of changes with respect to this feature requires more research. Noun incorporation (10) can still be considered a feature of the area, although its productivity has been diminished in Nahuatl. This morphological process was not attested in the modern Tének data that I collected. With respect to pronominal copular constructions (12), this feature has also undergone change with respect to the traditional characteristics. While pronominal copular constructions are still widely attested in modern Huasteca Nahuatl in the present tense, Tének has developed a copula (*pél*) used as an existential predicate.

Four Mesoamerican features were not considerably affected by contact with Spanish, including the presence of absolutive nominal affixes (2), locatives derived from body parts (4), inalienably possessed body parts and kinship terms (5) and aspect being more prominent than tense (8). These traits can still be listed among the features present in the languages of the Hispanicised Mesoamerican linguistic area, although the ‘aspect more important than tense’ was not listed by Campbell et al. (1986: 556, Table 2), as one of the characteristics of Nahuatl.

Based on my analysis of changes in the Mesoamerican features of Western Huasteca Nahuatl and Tének, I propose six strong traits of the new transformed Mestizoamerican linguistic area, which represent near-complete linguistic changes that stem from contact with Spanish. These include the following:

- relational nouns reinterpreted as prepositions,
- decimal numeral system,
- lack of numeral classifiers,
- SVO basic word order,
- possession expressed according to the formula ‘(the) man has (a) dog’,
- marked coordination strategies that employ borrowed Spanish coordinators *o* ‘or’ and *pero* ‘but’.

Although the proposed list of features of the Mestizoamerican linguistic area cannot be confirmed until more systematic analysis of Hispanisation of more languages is performed, parallel tendencies have been identified in other indigenous languages of the region. Thus, similar innovations with respect to the Mesoamerican traits of Nahuatl were reported for several varieties of this language spoken in, e.g. Tlaxcala (Hill and Hill 1981, 1986; Flores Farfán 2008), Guerrero (Flores Farfán 1999, 2008), Morelos (Flores Farfán 2008), Sierra Madre Occidental (Canger 2001) and the Huasteca Veracruzana (Olko et al. 2018). Campbell (1987) also describes parallel changes in Pipil. England (1991: 455), who researched word order in Mayan languages, also attributed SVO word order to contact with Spanish. Chamoreau (2008), who studied Purépecha spoken in the state of Michoacán in Mexico, also confirmed the existence of changes triggered by Spanish including shift to SVO word order, development of a nominal copula, use of the plural marker on inanimate nouns, borrowing of *ser/estar* semantic opposition and the loss of vigesimal counting above 5, to mention a few. Hekking and Bakker (2007) reported comparable changes in Otomí, including the emergence of prepositions which evolved from native particles, changes in the marking of possession involving the development of the verb *ñehe* ‘to have’ as the generic possessive verb, replacement of the predicate-initial word order with SVO order, development of copula used in nominal predicates, and the adoption of the decimal numeral system. Other changes in Otomí that resemble innovations described in this work include the widespread use of grammatical calques and the discourse structure which is converging towards that of Spanish.

The high degree of similarity among structural changes in Mesoamerican languages, as confirmed by the analysis of changes in Western Huasteca Nahuatl and Tének and supported by studies of other languages of the linguistic area, is very noticeable and, although it could be attributed to parallel internal development or coincidence (cf. Aikhenvald and Dixon 2001: 2), a more likely reason involves input from the shared dominant language. Spanish is the most recent single source of diffusion of features within the languages of the Mesoamerican linguistic area, and it has contributed to change of many lexical, semantic and structural features in the languages that have been

under its influence since the Spanish conquest. Although the direction of influence between Spanish and the Mesoamerican languages has also been the other way round, i.e. Mexican Spanish has received some features originating simultaneously in Nahuatl and other indigenous languages of Mexico (cf. Campbell et al. 1986; Stolz and Stolz 1996; Lipski 2010), the linguistic result of this direction of influence is much less pronounced than the features that have been Hispanicised in the native languages of Mexico.

The role of Spanish in consolidating the languages of the area, which was already pointed out by Diebold (1962: 42), is not unlike the role that Nahuatl played before the conquest (cf. Brown 2011; Hill 2012). Both Nahuatl and Spanish can be considered sources of the diffusion of features and convergence in Mesoamerica. After the conquest of Mexico, Spanish first became the lingua franca used together with local indigenous languages, and then, after the Mexican Independence, it progressively became the dominant language throughout Mexico. Five hundred years of contact with Spanish is reflected in the phonology, the lexicon and the grammar of Mexico's indigenous languages. Its function as the sole source of the most recent convergence in Mesoamerica is very evident and it supports the claim that multilateral diffusion need not be a requirement for the formation of a linguistic area (Thomason 2001: 89). Rather, unilateral diffusion can also result in the convergence of features (Aikhenvald 2006: 32; Muysken 2008: 9; Ramírez-Trujillo 2009).

As a result of contact with Spanish, many Mesoamerican traits, including those classified as the strongest features defining the area, have been (or, are being) lost and replaced in Western Huasteca Nahuatl and Tének with Hispanicised features. The innovative features, including e.g. SVO basic word order, use of predicative possession, reinterpretation of relational nouns as prepositions, decimal counting system, and the use of Spanish coordinators, seem to have been distributed regularly across many indigenous languages of Mesoamerica. The new features have been replacing the strongest traits that defined Mesoamerican languages to the point in which, as suggested above, the languages spoken in the region perhaps should not be referred to as 'Mesoamerican' but, rather, as 'Mestizoamerican'. Although both Nahuatl and Tének

retain many of their pre-Spanish contact characteristics (e.g. ergativity in Tének or the alienable/inalienable possession distinction in both Nahuatl and Tének), numerous other features, which made these languages distinct from Spanish, are being or have already been lost. These languages now combine the traits of indigenous languages with traits of the colonial language, not unlike the post-conquest *mestizo* culture of Mexico and other parts of the Middle America which mixes both indigenous and Spanish attributes.

7.6. Prospects for future studies

This study has benefited from previous work on both Nahuatl and Tének but has also revealed many themes which have not yet been explored, particularly in the case of Tének. This language remains a poorly understood member of the Mayan family in a number of areas including the time and place of its separation from the rest of the family. More studies should be devoted to establishing whether Tének and its closest relative Chikomuseltek form a separate branch, the Huastecan branch, or whether they should be grouped together with the Cholan and Tsetlalan languages within the Western branch of the Mayan family.

The historical development of Tének is also very understudied, and the topics that require further exploration include, among others, the development of inverse alignment, which is a unique trait among the Mayan languages, as well as the evolution of the position of the absolutive preclitics, which in other Mayan languages are realised as postclitics. In addition, more attention should be paid to the verbal TAM operations, as well as valency increasing and decreasing operations and the development of middle voice in particular. Moreover, my study identified serious gaps in our understanding of the use (and loss) of numeral classifiers, statives, positionals and noun incorporation, and these topics also require further research.

More research is also required on the available documentation of colonial Tének. Despite the extreme scarcity of such sources, which only include two grammars, one translation of the Christian doctrine and one Spanish-Tének phrasebook, the valuable

information that they contain on the colonial language, indigenous culture or traditional rituals is yet to be fully explored. For instance, taking into account that these sources were composed in different parts of the Huasteca and, as such, they represent different dialects of Tének, they could provide a compelling material for the scholars interested in varieties of Tének used in the colonial times. Moreover, these sources could also be used in studies focused on diachronic change with respect to the varieties of Tének spoken in the respective areas today. The two particularly useful sources would be De Quirós's 1711 grammar from Tanlajás and Tapia Zenteno's 1767 grammar of Tének from Tampamolón Corona, since Tének is still spoken in those areas today. Apart from being precious materials that could be employed in the analysis of the language and culture contact phenomena originating in Spanish, these colonial sources could also be used in studies focusing on the development of the unique features in Tének distinct from other Mayan languages mentioned above.

With respect to Spanish-contact induced change in modern Nahuatl and Tének, further studies are needed on the changes in the linguistic areas that this study had to omit due to length restrictions. For instance, the phonological features that call for more attention include innovations in the sound systems of both Nahuatl and Tének, including such themes as the possible loss of vowel length in some varieties of Nahuatl, and the loss of the glottal stop in vowel-initial words in Tének. Another area that deserves interest is verbal morphology including changes in argument marking, the use of directional prefixes, as well as TAM and number marking in Nahuatl. The study of the latter feature would provide additional information about the loss of animacy as a category, which was only explored in this work with respect to nominal marking. Further analysis is also needed on syntax, including relative clauses and complement clauses, as well as more thorough context-rich research targeting discourse organisation in modern Nahuatl and Tének compared with colonial texts.

Additional comparative work that would include a bigger sample of languages is also necessary in order to better understand the role of Spanish as the most recent source of diffusion of features in the Mesoamerican linguistic area. Ideally, this should include genetically and typologically diverse languages, since it would permit the identification

of features that are either more prone or more resistant to change as a result of contact with Spanish. The sample should include other indigenous languages spoken in the Huasteca or its geographical proximity, such as Pame, Totonac, Tepehua and Otomí, as well as other languages of the Uto-Aztecan, Mayan, Mixe-Zoquean and Oto-Manguean families, and language isolates such as Huave or Purépecha. The features that deserve more attention include not only the typically Mesoamerican traits but also other traits from such areas as the lexicon, phonology, morphosyntax, semantics and discourse organisation. Such investigation of the existing language change based on a larger sample of Mesoamerican languages would permit a more comprehensive analysis of the precise role of Spanish as the new force for convergence among the languages of the linguistic area.

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