

## Plural coding of individuated inanimate nouns in Meseño Cora

Verónica VÁZQUEZ SOTO

*Seminario de Lenguas Indígenas, Instituto de Investigaciones Filológicas,  
Universidad Nacional Autónoma de México - Mexique*

**Abstract:** Meseño Cora, a linguistic variant of Cora, a Southern Uto-Aztecan language of the Corachol branch spoken in Mexico, shows a conspicuous bound morpheme with peculiar morphosyntactic patterns for conveying plural coding. The present work proposes that the *tiʔ*- prefix in this Cora variant functions as a plural marker of individuated inanimate nouns when attached to non-agentive intransitive, monotransitive and ditransitive verbs, acting on the nominal argument of the verb, either the thematic subject for intransitives or the thematic object for the other two predicate types (Malchukov *et al.* 2010). The dissemination of *tiʔ*- in those verb classes reveals how nominal number marking on the noun type of individuated inanimate nouns in this language variant follows an absolutive-alignment pattern, highlighting that the *tiʔ*- prefix affects theme thematic relations (Van Valin 2001). This account corroborates predictions of plural number marking on nouns designating inanimate entities construed as individual objects as put forth by Grimm's (2018) individuation scale and also by Haspelmath's (2005) implicational scale for number marking.

**Keywords:** Cora, Southern Uto-Aztecan languages, grammatical number, individuation, animacy.

### 1. Introduction

This article focuses on the linguistic expression of plural number in individuated inanimate nouns in Meseño Cora, an undocumented and endangered language of the Southern Uto-Aztecan family of the Corachol branch spoken in the state of Nayarit, Mexico<sup>1</sup>. Using natural speech and

---

<sup>1</sup> I am profoundly grateful to all the Cora Meseño native speakers who have collaborated with me since 1990 in the documentation of their vernacular language. Isabel de Jesús López, Diego Flores and Joel Flores have, for my benefit, continuously encouraged a marvelous group of storytellers to share their oral tradition with a worldwide audience, to preserve their unique language and cultural environment. The names of these gifted storytellers deserve full recognition: Macario Flores†, Juan Flores, Másimo Flores, and Gregoria Lobato†. I can't thank them enough. In particular, I am deeply indebted to Isabel de Jesús López who has dedicated a lifetime to explaining for me the peculiar nuances of her native language. In the realm of academia, my deepest thanks are due to

elicited data, I will address this topic by exploring the behavior of the *tiʔ*-prefix in this variant of the language to make three important claims about the morphosyntactic properties and the semantics of this bound morpheme<sup>2</sup>. Firstly, the *tiʔ*-prefix in Meseño Cora, hereafter MEC, codes plural number of individuated inanimate nouns (Corbett 2000, Grimm 2018) when attached to non-agentive intransitive, monotransitive and ditransitive verbs, acting on the nominal argument of the verb, either the thematic subject for intransitives or the thematic object for the other two predicate types (Malchukov *et al.* 2010). Secondly, the dissemination of *tiʔ*- in those verb classes reveals that nominal number marking for individuated inanimate nouns in MEC follows an absolutive-alignment pattern (Dixon 1994) highlighting that this prefix affects theme thematic relations (Van Valin 2001). This claim is backed up by suppletive verb stems in intransitives and monotransitive verbs exhibiting a similar pattern for encoding the plurality of subject and object arguments, though in the case of intransitive subjects the thematic relation triggering suppletion can be either an agent, a patient or a theme and for transitive objects it corresponds to a patient (Van Valin 2001). Lastly, I will argue that the agreement pattern between the possessed noun and the predicate occurring

---

both the anonymous abstract referees of the Texas Linguistic Conference held in Austin in 2020 and to those of the Semantics of Under-Represented Languages of the Americas, SULA 11 Conference, held in virtual format in Mexico City 2020, who provided valuable commentary and helpful references for the improvement of this article. In particular, I want to acknowledge Brenda Laca for carefully reading an earlier version of this paper. Her enthusiastic comments and her suggestion to apply the cardinality test to the Meseño Cora data definitely contributed to a more compelling approach to the issues in this article. I would also like to express my profound thanks to the two *Amerindia* referees, Albert Alvarez who generously revealed his name and the other anonymous referee, both made extremely accurate suggestions improving the content and the copy-editing of this article. I am also grateful to my colleagues Néstor Hernández-Green and Alejandra Capistrán-Bert who provided helpful input for this research during our informal discussions and friendly conversations. My gratitude goes to Irene Flores for correcting my English and for translating the Meseño Cora examples from Spanish into English. I take sole responsibility for any remaining errors.

<sup>2</sup> The practical orthography used in the present work to represent the phonological sounds of Meseño Cora corresponds to the following IPA (*International Phonetic Alphabet*) symbols: p=/p/; b=/β/; t=/t/; t,=/tʰ/; ts=/ts/; ch=/tʃ/; k=/k/; h=/h/; ʔ=/ʔ/; s=/s/; x=/s̺/; m=/m/; n=/n/; n,=/n̄/; ñ=/ɲ/; l=/l/; r=/r̄/; w=/w/; w,=/w̄/; y=/j/; a=/a/; e=/ɛ/; i=/i/; i,=/ī/; o=/o/; u=/u/; '=/'/; vv=/v̄/;. The spelling *rr* corresponds to the Spanish borrowed phoneme /r̄/. Primary stress is annotated only phonetically in practical orthography given how the rules for rhythmic and morphological stress are still a work in progress. Cora also exhibits tones driven by phonation types, yet there is currently no research available on this topic for the Meseño Cora variant and for this reason tones are not represented in practical orthography.

when *tíʔ-* has a possessor represents the strongest MEC evidence in favor of the plural number account for this bound morpheme.

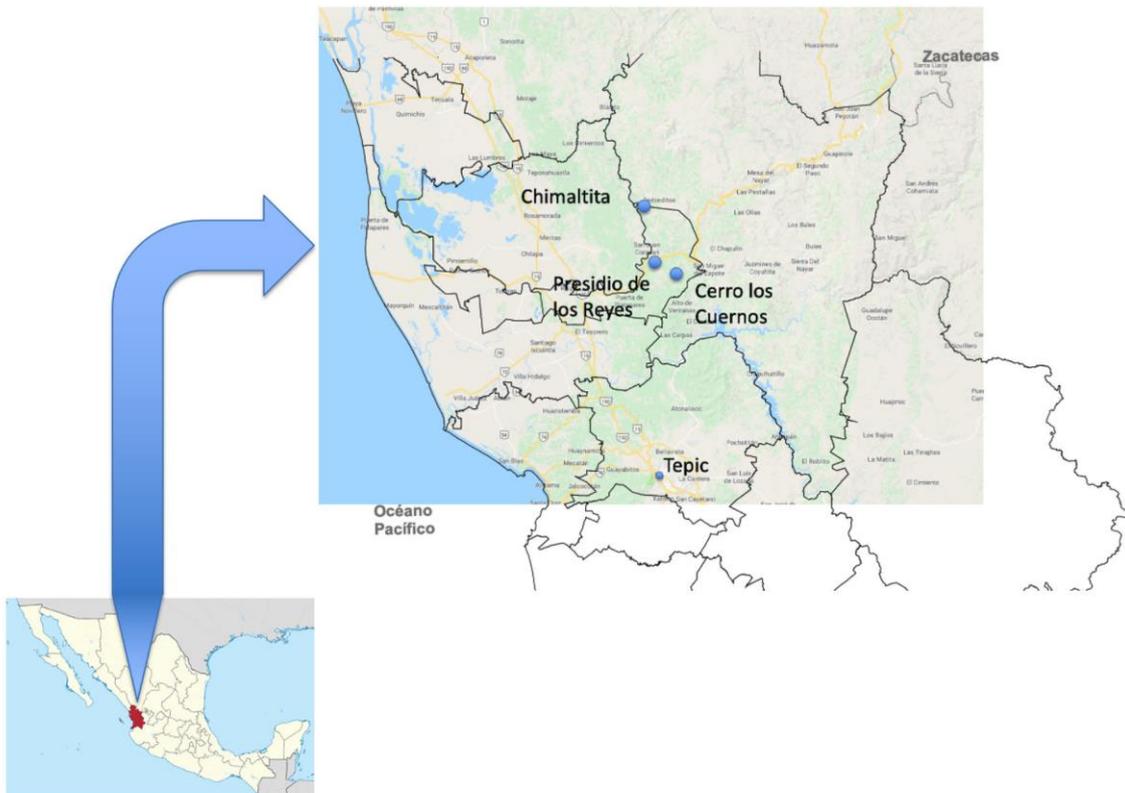
To my knowledge there has been no previous report in any Cora variant of the existence of an absolute-alignment pattern for expressing nominal number on individuated inanimate nouns in MEC by attaching *tíʔ-* to the verb template or to possessive noun phrases. Besides contributing to this major descriptive finding, the final goal of this paper is to take a more nuanced look at plural marking in descriptive projects. Eventually this will shed light on theoretical, semantic and typological discussions concerning plural coding in the class of inanimate nouns in languages worldwide.

Before proceeding, it would be useful to outline the present article. Section 2 offers general information about the language and its speakers regarding dialects and the location of the communities where fieldwork has been conducted. This section also presents a brief discussion on data gathering. The main syntactic features of MEC relevant to understanding the central topic of this article are discussed in § 3. This section examines word order, the language's alignment types, and grammatical relations coded both by bare nouns and bound pronouns emphasizing the number values expressed by those constituents. Section 4 is dedicated to a quick overview of MEC nominal number, building a clear distinction between the strategies used to code number values on the noun itself and the type of number systems distinctive of different noun classes in the language. Section 5 is entirely devoted to discussing plural number in the noun type of individuated inanimate nouns arguing through the agreement diagnostic proof observed when themes have a possessor, the bona fide plural value encoded by *tíʔ-*. My conclusions can be found in § 6.

## **2. Background of the language and data sources**

Cora is a poorly described and endangered Southern Uto-Aztecan language of the Corachol branch spoken in Mexico mainly in the state of Nayarit. According to INEGI (2010), there are 21,445 speakers of Cora. To date, at least four different Cora variants have been identified by linguistic criteria. Though the evidence for them remains limited to changes in sound. Those language variants are: Meseño Cora, Jesús María Cora, Santa Teresa Cora

and *muxatéena*, also known in Spanish as Presideño Cora (Casad 2012, Vázquez 2020). MEC is spoken in various small towns located in the southeastern part of the Sierra del Nayar Lowlands. The data this research is based on was collected in three small neighboring villages: Presidio de los Reyes with 908 inhabitants, Chimaltita with 250 inhabitants, and Cerro los Cuernos, a very tiny ranchería, where 20 monolingual MEC speakers live<sup>3</sup>. Map 1 highlights those three small communities.



**Map 1**

The substantial fieldwork on which this study is based has been conducted almost entirely in Presidio de los Reyes since 1990. Yet I have also briefly visited Chimaltita and Cerro los Cuernos, mainly for recording and, if possible, videotaping MEC oral tradition and conversations. Throughout different years from 1990 to 2019, during several weeks, I also

<sup>3</sup> The number of people living in Presidio de los Reyes, Chimaltita and Cerro los Cuernos comes from a census I carried out in collaboration with my two Cora colleagues, Isabel de Jesús López and Mónica Flores. This census is very recent and, therefore, reliable, as it was just produced on December 2018.

undertook elicited sessions concerning many grammatical and semantic aspects of MEC with native speakers who reside in Presidio de los Reyes. Those sessions took place in Presidio de los Reyes itself, in Mexico City and in Tepic, the capital city of the state of Nayarit also highlighted in Map 1.

Likewise, my MEC data comes from the MesoSpace project supported by the National Science Foundation under Grant No. BCS-0723694 Spatial language and cognition in Mesoamerica (PI J. Bohnemeyer). The non-verbal stimuli of this project include the Ball&Chair task, henceforth B&C, and the Novel Object 1 and Novel Object 2 tasks. This ensemble of tasks was applied to five pairs of speakers in Presidio de los Reyes during the fall of 2008. The B&C task consists of four identical sets of twelve photographs, 48 photographs in total, featuring different configurations of a ball and chair MEC native speakers are asked to describe<sup>4</sup>. Importantly, this task brought to light different and attractive contexts showing peculiar predicates used by MEC native speakers to portray the configurations of two individuated inanimate nouns, a ball and chair. The corpus gathered through this non-verbal stimulus was extremely helpful in framing and eliciting other individuated inanimate nouns in MEC, mainly nouns properly portrayed in stative locative descriptions. In conclusion, four types of data sources are used in this study: oral narratives, conversations, verbal-stimuli and elicitation.

### **3. Syntactic properties of MEC**

#### **3.1. Word order, grammatical relations and number marking in subject and object bound pronouns**

Syntactically, MEC is an SOV language, although the pressures of information structure generate verb initial sentences. The SOV pattern demands bare nouns occurring in strict preverbal position have their grammatical relation assigned by position. Thus, the bare noun in first position is always the subject and the one in second position before the clause predicate is always the object. Any departure from this word order

---

<sup>4</sup> For more information and background on the B&C task see O'Meara and Pérez Báez (2011).

pattern triggers both different grammatical relations and semantic interpretations of verb arguments. Therefore, in MEC basic word order is a crucial coding property for determining grammatical relations (Givón 2001: 175-177, Van Valin 2001: 33-34). Morphologically, the SOV order is the less marked word order in the language since the object syntactic relation encoded by a bare noun lacks any additional marking either by an affix on the predicate or by a proclitic or an enclitic within the clause. Instead, subject arguments expressed by bare nouns require obligatory subject pronoun marking within the clause, resorting either to an enclitic or a proclitic pronoun. Example (1) illustrates both the SOV word order pattern and the obligatory subject marking by means of an enclitic pronoun in simple clauses<sup>5</sup>.

- |     |  |                    |                  |
|-----|--|--------------------|------------------|
|     | S <sub>AGENT</sub>                             | O <sub>THEME</sub> | V <sup>6</sup>   |
| (1) | <i>íita?</i>                                   | <i>siikíri=pu</i>  | <i>wá-nanai</i>  |
|     | woman  | basket=SBJ3SG      | CMPL-to.buy.CMPL |
|     | ‘The woman bought a basket/a chiquihuite.’ [E] |                    |                  |

Additionally, the clause presented above constitutes very valuable evidence for claiming that bare nouns in MEC are not case marked and do

<sup>5</sup> The abbreviations used in this article follow the Leipzig glossing convention rules. If the abbreviation needed does not exist in that convention system, I have coined a new gloss for the corresponding morpheme. 1, 2 and 3= first, second and third person; ACROSS= stands for meanings analogous to both the preposition and adverb of the English word *across*; ABS= absolutive; ACUE= indicates an evidential marker requesting agreement with the addressee; ADV= adverb; ADVR= adversative; ASSERT= assertive; ANI= animate; APPL= applicative; ÁREA= area; ASP= aspectual; CAP= capacitative; CER= certainty; CMPL= completive; CONJ= conjunction; CONT= contention; COP.EXIST2= existential copula type 2; DEIC= deictic; DEM= demonstrative; EMPH= emphatic; ENT= entity; ENTIRE= entire; EVID= evidential; EXIST= existential; EXP= expression; FDIR= first-hand information source; FIND= second-hand information source; INH= inherent property; IRR= irrealis; LOC= locative; NARR= narrative; NEG= negation marker; NHUM= non-human; NMLZ= nominalizer; OBJ= object; PA= pluractional; PASS= passive; PC= property concept; PL= plural; POSS= possessive; PROG= progressive; PROLEP= proleptic; PST= past tense; PV= preverb; QUANT= quantifier; REPORT= reportative; SBJ= subject; SG= singular; TOP= topic; V= visual. I would like to emphasize that all glosses corresponding to the tense-mood-aspect system are a work in progress, since this is an area of MEC requiring deeper research for reliable assessment. Other abbreviations used in this paper are: A= agent, NP= noun phrase, O= object, P= patient, R= recipient-like argument, S= subject, T= theme. The abbreviation [E] which figures at the end of the English translation of a MEC utterance indicates that the corresponding example was obtained through elicitation; whereas the [TXT] abbreviation stands for attested data in natural speech sources, either oral narratives, conversations or non-verbal stimuli like the B&C task.

<sup>6</sup> When relevant to the discussion, grammatical relations are indicated in simple clauses using capital letters, whereas thematic relations are instead symbolized by small caps.

not exhibit any special definite or indefinite marker when they occur in strict preverbal position.

Verb initial sentences driven by information structure pressure are, in contrast, the most marked morphological constructions in the language. Fronted or postverbal nouns bearing a core grammatical relation obligatorily require marking by an overt resumptive pronoun (Kroeger 2004: 177) in the predicate of the clause. Further, fronted and postverbal nouns can be morphologically marked by a presumed definite article that I analyze as a topic marker, at least in simple clauses, for being the element which always indicates old information provided previously by a lexical mention (Kroeger 2004: 135-161)<sup>7</sup>.

- (2) 

	SAGENT				
(2)	<b>hí</b>	<b>íraʔbe</b>	<b>nikái</b>		
	TOP	wolf	EVID:ACUE		
			V		
		<b>ítaʔ=pu</b>	<b>wa-náwa</b>		
	woman=SBJ3SG	CMPL-to.steal.CMPL			
	‘Speaking of the wolf, right? He stole a woman.’ [TXT]				
- (3) 

	OPATIENT	V		SAGENT	
(3)	<b>kúʔkuʔ=pu</b>	<b>wa-héʔika</b>	<b>hí</b>	<b>páʔriʔ</b>	
	snake=SBJ3SG	CMPL-to.kill.OBJ.SG	TOP	child	
	‘Speaking of the child, he killed the snake.’ [TXT]				
- (4) 

		SAGENT		OPATIENT	
(4)	<b>ø-ra-aa-héʔika</b>	<b>hí</b>	<b>páʔriʔ</b>	<b>hí</b>	<b>t,áxka</b>
	SBJ3SG-OBJ3SG-CMPL-to.kill.OBJ.SG	TOP	child	TOP	scorpion
	‘Speaking of the child, he killed it, the scorpion.’ [TXT]				
- (5) 

	SAGENT	V		OTHEME	
(5)	<b>hí</b>	<b>ítaʔ</b>	<b>ø-ra-aa-nanáí</b>	<b>hí</b>	<b>kaʔní</b>
	TOP	woman	SBJ3SG-OBJ3SG-CMPL-to.buy.CMPL	TOP	satchel
	‘Speaking of the woman, she bought it, the satchel.’ [E]				

Thus, pressures of information structure produce SOV, OVS, VSO, and SVO sequence sentences. Note that when the subject argument is fronted,

<sup>7</sup> In his Jesús María Cora grammatical sketch, Casad (1984) glosses the words *hí* and *í* as articles. According to Casad’s translations from Jesús María Cora to English all these forms seem to have definite interpretations. In this article, I do not follow Casad’s analysis and glosses for those words because although Jesús María Cora and MEC show similar forms for a related functional word, those words might behave differently in both language variants. On the other hand, my data suggests contrasting grammatical and pragmatic assessments in comparison to those proposed by Casad (1984).

this grammatical relation can be marked anaphorically by an enclitic, or a prefix in the predicate, that is to say, by any bound pronoun in the language (Bresnan and Mchombo 1987). Likewise, we can observe a coreference relation through the pronominal index in the verb with the postverbal NP, referred to more commonly as a cataphoric relation (Bhat 2004: 185)<sup>8</sup>. Accordingly, all bound subject markers function as resumptive pronouns showing either anaphoric or cataphoric properties. Table 1 shows different sets of independent and bound subject pronouns in MEC.

Grammatical relation, person and number values		SBJ1SG	SBJ2SG	SBJ3SG <sup>1</sup>	SBJ1PL	SBJ2PL	SBJ3PL
Independent subject free pronouns.		<i>ínee</i>	<i>m<sup>w</sup>ee/ m<sup>w</sup>e?</i>		<i>útein/ úten/ ten</i>	<i>m<sup>w</sup>e?n/ m<sup>w</sup>een</i>	<i>me- ?ihna me-?in</i>
Demonstratives as independent free pronouns of third person singular.				<i>ha?in a?in ha?ihna a?ihna</i>			
Subject enclitics in <i>wackernagel</i> position.		<i>=nu</i>	<i>=pe</i>	<i>=pu</i>	<i>=tu</i>	<i>=xu</i>	<i>=mu</i>
Subject proclitics marking subordination.		<i>neh=</i>	<i>peh=</i>	<i>tí=</i>	<i>teh=</i>	<i>seh=</i>	<i>meh=</i>
Subject prefixes attached to the adverb <i>rí</i> ‘already’.	Careful speech	<i>nu?</i>	<i>pe?</i>	<i>ha- ha? pu?</i>	<i>tu?</i>	<i>xu?</i>	<i>mu? me?</i>
	Fast speech	<i>nuu-</i>	<i>pee-</i>	<i>haa- puu-</i>	<i>tuu-</i>	<i>xuu-</i>	<i>muu-</i>
Anaphoric and cataphoric prefixes attached to verb stems, nouns in non- verbal predication, the <i>ah tá</i> conjunction, the purpose clause subordinator <i>ta?</i> , and the adverb <i>áuche?</i> ‘still’.	CV forms	<i>ne-</i>	<i>pe-</i>	<i>ha- ø-</i>	<i>te-</i>	<i>se-</i>	<i>me-</i>
	Consonantal allomorphs	<i>n-</i>	<i>p-</i>	<i>h-</i>	<i>t-</i>	<i>s-</i>	<i>m-</i>

<sup>1</sup>Underspecified for number when occurring with non-agentive intransitive verbs, inanimate antecedents and inanimate fronted and postverbal NPs.

**Table 1.** Subject independent and bound pronominal forms in MEC, their distribution and their corresponding features for person and number.

<sup>8</sup> It is worth stressing that when both noun phrase arguments of a transitive sentence occur postverbally the argument sequence order must be VSO. Any departure from this sentence order sequence triggers both different grammatical relations and semantic interpretations of postverbal arguments.

In contrast, NPs bearing the object grammatical relation, when fronted or postposed, can exclusively be interpreted anaphorically or cataphorically via object prefixes, since prefixes represent the only set of bound object pronouns in the language. Relevant to this article is that the third person object prefix *ra-* can refer both to individuated animate nouns *t,áxka* ‘scorpion’ (4), and to individuated inanimate nouns such as *kaʔni* ‘satchel’ (5). Those examples represent convincing evidence for the third person object prefix *ra-* being indifferent to the animacy of the noun expressing the object relation outside the clause. More importantly, both examples represent proof that this prefix is specified for person and also for the singular number value, assuming that the definition of the singular value refers to one real world entity (Corbett 2000: 4). Obviously, this prefix also carries object case information.

Unsurprisingly, the prefix *ra-* is not licensed to interpret fronted NPs or postverbal NPs designating individuated inanimate nouns conveying plural interpretations. By the term plural, I mean a value which refers to a noun or to a morphological marker denoting more than one distinct world entity (Corbett 2000: 4).

- |     |   |              |                      |     |                      |
|-----|---|--------------|----------------------|-----|----------------------|
|     | O <sub>THEME</sub>                                    |              | S <sub>AGENT</sub>   |     | V                    |
| (6) | <i>hí</i>   | <i>xáʔri</i> | <i>Péedru=pu</i>     |     | <i>tíʔ-tahwa</i>     |
|     | TOP   | pot          | Peter=SBJ3SG         |     | PL-to.make.PROG      |
|     | ‘Speaking of the pots, Peter is making (them).’ [TXT] |              |                      |     |                      |
|     | S <sub>AGENT</sub>                                    |              | V                    |     | O <sub>THEME</sub>   |
| (7) | <i>Péedru=pu</i>                                      |              | <i>tíʔ-aa-tua</i>    |     | <i>hí múukuʔ-tsi</i> |
|     | Peter=SBJ3SG  |              | PL-CMPL-to.sell.CMPL | TOP | hat-ABS              |
|     | ‘Speaking of the hats, Peter sold (them).’ [E]        |              |                      |     |                      |

Besides showing that *ra-* does not occur to encode plural interpretations of individuated inanimate nouns either fronted or postposed, the previous examples also demonstrate that those interpretations go unmarked by an overt resumptive pronoun in the clause’s predicate. In this respect, it is worth stressing that the *tíʔ-* prefix occurring within the verb template of those sentences indicates plurality of theme object arguments, but does not stand at all as an object core argument marker. A piece of evidence supporting this account is the fact that this prefix also figures in clauses featuring the canonical word order pattern in MEC that exhibit core bare arguments in strict preverbal position. Note (8).

- (8) S<sub>AGENT</sub> O<sub>THEME</sub> V  
*ítaʔ* *siikári=pu* *tíʔ-aa-nanai*  
 woman basket=SBJ3SG PL-CMPL-to.buy.CMPL  
 ‘The woman bought baskets/chiquihuites.’ [E]

It serves as compelling evidence for this account that object core arguments expressed by individuated animate nouns in plural forms, either fronted or postverbal, do indeed show a resumptive pronoun via an object prefix in the predicate. The presence of the prefix *wáʔ-* in the next couple of examples undoubtedly stands for a bona fide resumptive pronoun of an object core argument of the verb.

- (9) S<sub>AGENT</sub> V O<sub>PATIENT</sub>  
*hí* *yáʔuxu* *ø-wáʔ-aa-kʷii* *hí* *chápiliʔ-se*  
 TOP opossum SBJ3SG-OBJ3.ANI.PL-CMPL-to.kill.OBJ.PL TOP chicken-PL  
 ‘Speaking of the opossum/tlacuache, he killed them, the little chickens.’ [TXT]
- (10) O<sub>PATIENT</sub> S<sub>AGENT</sub> V  
*hí* *tíʔrú-tsi* *súkario=pu* *wáʔ-aa-kʷii*  
 TOP children-PL drug.dealer=SBJ3SG OBJ3.ANI.PL-CMPL-to.kill.OBJ.PL  
 ‘Speaking of the children, the drug dealer killed them.’ [E]

Consequently, the third person plural object bound pronoun *wáʔ-*, that shows both anaphoric and cataphoric properties behaves quite differently from its singular counterpart, *ra-*. The former exhibits strong restrictions on the animacy of the noun it refers to and it is used exclusively to establish a coreference relation with plural animate nouns, while the latter does maintain a coreference relation both with singular animate and inanimate nouns. Table 2 shows the sets of independent and bound object pronouns in MEC.

Grammatical relation, person and number values	OBJ1SG	OBJ2SG	OBJ3SG	OBJ1PL	OBJ2PL	OBJ3ANI.PL	OBJ3PL
Independent object free pronouns.	<i>néetsi</i>	<i>mʷéetsi</i>	<i>haʔí</i>	<i>téentsi</i> <i>téhemi</i> <i>téhmi</i> <i>itéhmi</i>	<i>mʷéhmi</i>		X
Anaphoric and cataphoric bound object prefixes.	<i>ne-</i>	<i>mʷa-</i>	<i>ra-</i>	<i>ta-</i>	<i>háʔmʷa-</i>	<i>wáʔ-</i>	X

**Table 2.** Object independent and bound pronominal forms in MEC and their corresponding features for person, number and animacy.

Also significant to the major topic of this article, is the fact that third person bound subject pronouns are unspecified for number either through

the form of enclitics, proclitics or prefixes. Pronoun number underspecification depends both on the verb class and the animacy of the nouns involved in the predication. In this way, when both fronted and postverbal NPs belong to the class of inanimate nouns and when the predication involves a non-agentive verb, the underspecification phenomenon arises, as shown in (12). Given that one of the conditions for number underspecification in subject bound pronouns depends on non-agentive intransitive verbs, the following examples exclusively show this predicate type.

- (11) *háa=pu*    *nigái*                    <sup>S<sub>THEME</sub></sup> *ʔip<sup>w</sup>ári*  
 there=SBJ3    EVID:ACUE                    chair
- V
- háʔ-utátaʔ=pu*                    *hóu-nee*                    <sup>S<sub>THEME</sub></sup> *hí*    *ʔip<sup>w</sup>ári*  
 POSS2SG-left=SBJ3    LOC-to.look.SBJ.SG.COMPL    TOP    chair  
 ‘There, right? Speaking of the chair, it is facing your left, the chair.’ [TXT]
- (12) *háa=pu*    *nigái*                    <sup>S<sub>THEME</sub></sup> *ʔip<sup>w</sup>ári*  
 there=SBJ3    EVID:ACUE                    chair
- V
- háʔ-utátaʔ=pu*                    *ø-tíʔ-aa-hau-nehneʔ*  
 POSS2SG-left=SBJ3    SBJ3-PL-COMPL-LOC-to.look.SBJ.PL.COMPL
- S<sub>THEME</sub>
- hí*    *ʔip<sup>w</sup>ári*  
 TOP    chair  
 ‘There, right? Speaking of the chairs, they are there (in front, on the other side) facing your left, the chairs.’ [E]
- (13) *pus*    *héiwa=mu*                    V                    S<sub>PATIENT</sub>  
 well    ADV:QUANT.ENT=SBJ3PL    *wáxua*                    *hí*    *kúʔkuʔ-se*  
 EXIST.NHUM    TOP    snake-PL  
 ‘Well, there are a lot of snakes.’ [TXT]

As expected, the clause in (11) carries the third person subject enclitic =*pu* given that the fronted bare noun *ʔip<sup>w</sup>ári* ‘chair’ and the postverbal NP *hí ʔip<sup>w</sup>ári* ‘the chair’, denote one and only one entity. Ergo, the clause has a singular interpretation. The fact that the verb is overtly in its singular suppletive form *nee* ‘to look.SBJ.SG.COMPL’ serves as additional morphological evidence to support the singular interpretation of (11). Surprisingly, the corresponding clause carrying the plural interpretation shows two unusual facts. Firstly, the subject enclitic for third person in

(12) is still *=pu*, instead of the subject enclitic for third person plural *=mu*, which clearly exists in the language, as shown in (13). Crucially, *=mu* occurs in this sentence because it refers to a plural animate NP denoting more than one distinct entity, such as *hí kú?ku?-se* ‘the snakes’. Further, this noun exhibits an overt plural morphological form through suffix marking. Hence the presence of *=mu* in (13) represents convincing evidence for claiming this bound pronominal form is specified for number, person and case, and as such refers to a subject third person plural. Conversely, third person bound subject pronouns are unspecified for number when they refer to individuated inanimate nouns occurring with non-agentive predicates, as can be concluded from (11) and (12)<sup>9</sup>. That is why *=pu* in both sentences is glossed exclusively as a subject third person “SBJ3” ignoring number values.

The second unexpected fact in (12) is that the fronted bare noun *?íp<sup>w</sup>ári* ‘chair’ and the postverbal NP, *hí ?íp<sup>w</sup>ári* ‘the chair’, exhibit the same morphological form in singular and plural uses, where, crucially, no morphology is added to the bare noun for expressing the plural value. The absence of plural morphology on the noun itself is a defining feature of number-neutral languages according to Chierchia’s count/mass typology (1998a, 1998b). Another feature of these languages are bare nouns placed in argument position (subject or object) because they do not carry a definiteness marker, case or number inflection. As I have argued in this section, MEC presents all the listed defining properties of the number-neutral language category in Chierchia’s typology (including those mentioned above), mainly in SOV clauses, such as (1) and (8). Moreover, the lack of plural morphology remains in OSV (6), SVO (7), and VS (12) sentences too. The only additional marking attested in those latter sentences, although optional, is an overt topic marker which encodes the marked definiteness of the bare noun. Therefore, following Chierchia’s count/mass typology, it is possible to claim that (6), (7), (8) and (12) show

---

<sup>9</sup> The distinctive number marking of third person bound subject pronouns arises when predication involves agentive verbs, even if the antecedents within the clause, or the fronted and postverbal NPs in the sentence express individuated inanimate nouns. Yet the outcomes of agency in MEC grammar constitute a huge topic which deserves an article in its own right and cannot be addressed in this paper.

the number-neutral system displayed by the individuated inanimate noun class in MEC.

Although, bare nouns and NPs are unmarked for number when denoting inanimate individuated nouns and despite third person subject pronouns being unspecified for the same feature when they refer to this noun type, the verb in (12) does indeed show number values exhibiting its suppletive plural form *nehne?* ‘to.look.SBJ.PL.COMPL’. Accordingly, the predicate is the only constituent of the sentence portraying overt plural marking. In this respect, note how the occurrence of the prefix *tí?*- on the verb template in (12) expresses plural marking of individuated inanimate nouns. This is also the case in (6), (7), and (8), an issue which will receive extensive attention in § 5.

To conclude this section, it is worth emphasizing that evidence for arguing that SOV is the unmarked and basic word order in MEC comes from morphological criteria such as the obligatory anaphoric or cataphoric agreement of subject and object bound pronouns within the sentence and optional topic marking on bare nouns in SOV, OVS, VSO, and SVO sequence sentences<sup>10</sup>. As for individuated inanimate nouns, MEC is a number-neutral language according to Chierchia’s count/mass typology (1998a, 1998b). For this reason, bare individuated inanimate nouns in MEC exhibit the same form in singular and plural uses and no morphology is added for expressing plural coding on the noun itself. The animacy constraint for conveying plural number values on nouns, together with the agency of the verb involved in the predication, have a peculiar reflex on the use of third person subject bound pronouns producing an underspecification phenomenon for those pronouns where three conditions are met: they have inanimate antecedents, the sentence exhibits fronted or

---

<sup>10</sup> In Casad’s (1984: 168) own terms the most neutral linear order in single simple sentences in Jesús María Cora is VSO. As I have discussed in note 7, I do not follow Casad’s analysis on Jesús María Cora for many reasons. Firstly, because Jesús María Cora is a variant quite different from the MEC dialect studied in this article. Secondly, my data suggests different grammatical and pragmatic analysis for unmarked, canonical and basic word order in MEC. As I have argued the diagnostics of grammatical and anaphoric/cataphoric agreement point to an SOV word order pattern in this language variant. On the other hand, to support his analysis Casad does not offer any kind of criteria either morphological markedness, topic/focus discursive functions, or corpus-counting. Thus, it is difficult to evaluate the pros and cons of the two alternative analytic accounts.

postverbal inanimate NPs, and lastly, they occur in clauses involving non-agentive verbs.

### 3.2. Alignment patterns

MEC exhibits a nominative-accusative alignment in which S and A are treated alike, whereas O is treated differently (Dixon 1994). The coding property (Givón 2001: 175-177, Van Valin 2001: 33-34) for determining subject alignment is illustrated through the set of subject and object prefixes of the second singular person which have both anaphoric and cataphoric properties.

*A of transitive verb*

- (14) *héru kapú yéewi yée hí-pe-ra-k<sup>w</sup>a?-ni*  
 but NEG EVID.EMPH EMPH NARR-SBJ2SG-OBJ3SG-to.eat-IRR  
*pórke kú?ku?=pu yéewi*  
 because snake=SBJ3SG EVID.EMPH  
*m<sup>w</sup>a-te-kí?-mi*  
 OBJ2SG-ENTIRE.ASP.SG-to.swallow.something.alive-CAP  
 ‘But don’t go eating him because a snake can swallow you whole.’ [TXT]

*S of intransitive verb*

- (15) *pe-pá?u-xa-ra?*  
 SBJ2SG-to.be.red-PC.INH.SG-PC.INH.SG  
 ‘You are red.’ [TXT]

*O of transitive verb*

- (16) *Mmm, ka=nu=wí m<sup>w</sup>a-cóstiado*  
 EXP NEG=SBJ1SG=EMPH OBJ2SG-to.suit  
*kási? pih nená wí ri?-wáchi!*  
 Look ADV EMPH.SBJ1SG EMPH PA-to.be.skinny  
 ‘Mmm, I won’t suit you. Look how super skinny I am! (Vázquez 2002: 28)<sup>11</sup>

Examples in (14) and (15) show the second person singular subject for transitive and intransitive verbs sharing the same pronoun marking by means of the *pe-* prefix, while objects of transitive verbs take a different pronoun for the same person and number which distinctively corresponds to *m<sup>w</sup>a-*, as shown in (16). This coding property reveals that MEC can be classified as a nominative-accusative language.

<sup>11</sup> Many of the examples extracted from MEC texts published by me have a slightly modified practical orthography, morpheme segmentation or assignment of glosses. On the other hand, published text material addressed to non-linguistic audiences is used in this article with interlinear glossing.

Concerning object alignment, MEC presents a mixed object pattern. On the one hand, this language exhibits the secundative pattern in the Malchukov *et al.* (2010: 5) framework, where R and P share properties different from those of T. This object alignment which corresponds to the primary object alignment in Dryer's (1986) terms is convincingly showcased in MEC through the coding property previously applied to elucidate the nominative-accusative pattern. The object anaphoric/cataphoric prefixes prove that the *ra-* prefix of the third person singular belongs into the same group as the object marking patients of monotransitive verbs and the recipients of ditransitive verbs P=R.

*P of monotransitive verbs*

- (17) *nuʔ-rí*                      *ne-ra-aa-héʔika*                      *kúʔkuʔ*  
 SUBJ1SG.ASP-already    SBJ1SG-OBJ3SG-CMPL-to.kill.OBJ.SG    snake  
 'I killed her already, the snake.' (Vázquez *et al.* 2009: 198)

*R of ditransitive verbs*

- (18) *me-ti=ihtá*                      *nu*    *mi*    *meʔín*    *rá-aa-wabii-riʔ*                      *tín=*  
 SBJ3PL-COMP=CONJ    EVID    EMPH    DEM    OBJ3SG-CMPL-ask-APPL    REPORT=  
 'They say that when they asked him to...' (Vázquez *et al.* 2009: 206)

*T of ditransitive verbs*

- (19) *Norberto=pu*                      *m<sup>w</sup>a-táʔixa-teʔ-sin*                      *hí*    *ʔip<sup>w</sup>ári*  
 Norberto=SBJ3SG    OBJ2SG-to.explain.APPL-APPL-IRR    TOP    chair  
 'Norberto will explain to you (again), the chair (the same object that you both have been talking about).' [TXT]

Importantly, the theme argument of a ditransitive verb, expressed explicitly by a postverbal NP in (19) does not have access to cataphoric pronoun marking through the *ra-* prefix on the predicate. In this case, the theme is formulated by an individuated inanimate singular NP, *hí ʔip<sup>w</sup>ári* 'the chair', which definitely may receive pronoun marking via the *ra-* prefix as explained in § 3.1. The fact that the themes of ditransitive verbs are not explicitly coded by anaphoric/cataphoric pronouns represents convincing evidence for claiming that object marking is exclusively available for beneficiary/recipient arguments in this verb class. The encoding of the recipient by an anaphoric/cataphoric object prefix like *m<sup>w</sup>a-* in (19) represents proof for the secundative object alignment in MEC.

MEC also exhibits an indirective object alignment (Malchukov *et al.* 2010: 11-12). Passives in this language represent a reliable behavioral

property (Givón 2001: 178) for determining that patients of monotransitive verbs and themes of ditransitive verbs are treated alike when promoted to subjects, while recipients, instead, have no access to passive promotion operations. Thus, what defines this alignment pattern is the contrast between  $P=T \neq R$ .

*Active monotransitive clause*

- (20) *úuka tuíxu-te=mu wá-nanai*  
 women pig-PL=SBJ3PL CMPL-to.buy.CMPL  
 ‘The women bought pigs.’ [E]

*P is promoted to subject through passive operation*

- (21) *í tuíxu-te me-aa-nanáí-wa-ka?*  
 TOP pig-PL SBJ3PL-CMPL-to.buy.CMPL-PASS-PST  
 ‘Speaking of the pigs, they were bought.’ [E]

*Active ditransitive clause*

- (22) *ne-m<sup>w</sup>a-áa-tui-ri?* *í tuíxu-te*  
 SBJ1SG-OBJ2SG-CMPL-to.sell.APPL-APPL TOP pig-PL  
 ‘Speaking of the pigs, I sold (them) to you.’ [E]

*T is promoted to subject through passive operation*

- (23) *í tuíxu-te me-áa-tui-wa-ka?*  
 TOP pig-PL SBJ3PL-CMPL-to.sell.APPL-PASS-PST  
 ‘Speaking of the pigs, they were sold.’ [E]

*Ungrammaticality of R when undergoing the passive operation*

- (24) *\*pe-aa-tui-wa-ka?* *í tuíxu-te*  
 SBJ2SG-CMPL-to.sell.APPL-PASS-PST TOP pig-PL  
 Intended meaning: ‘You were sold the pigs.’ [E]

In this way the corresponding passive construction in (21) formed through the *-wa* suffix promotes the patient NP to subject. This promotion is convincingly assessed by the subject prefix *me-* which agrees in person and number with the promoted subject NP. Unfortunately, demoted subjects in MEC are always omitted in passive clauses, so we cannot validate the formal demotion of subjects occurring in passive forms.

On the contrary, recipient arguments of ditransitive constructions when undergoing passive operations through *-wa* suffixing cannot be promoted to subjects. The resulting clause following the attachment of the passive suffix generates an interpretation of the theme promoted to subject (23). The reading of the recipient as subject of the clause is entirely incompatible with the passive form of the verb, as shown by (24). Thus, the themes of ditransitive constructions accept straightforwardly

promotional passives by means of *-wa* suffixing as is the case for the patient arguments of monotransitive clauses. Accordingly, passives in MEC reveal that the P of monotransitive verbs and the T of ditransitive constructions behave alike, whereas R arguments behave differently rejecting subject promotion through passive implementation.

#### 4. Quick overview of MEC nominal number coding

Since section § 3.1, I have been assuming the definition of singular versus plural number put forth by Corbett (2000). I have also followed Corbett (2000: 66-67) when looking at morphological criteria, such as the occurrence of additional marking within the noun itself, to determine the formal expression of singular versus plural number values in MEC. According to these criteria, the singular in this language is zero-marked and represents the unmarked value in most noun types, except for a few exceptions in which singular versus plural values are flagged by suppletion. Considering the morphological strategies for expressing plural number, MEC displays three types of number systems.

Firstly, the primary singular-plural distinction (Corbett 2000: 20) obligatory for nouns designating kin terms and human beings marked by the *-m<sup>w</sup>a?* suffix in the former class and expressed by suppletion in the latter class, shown in (25) and (26) respectively.

(25) *s-ahtá*            *m<sup>w</sup>ée*    *hí*    *ni-yáuh-m<sup>w</sup>a?*        *hí*    *úuka*  
 SBJ2PL-CONJ    SBJ2PL    TOP    POSS1SG-child-PL    TOP    women  
 ‘And you, speaking of my children, the women.’ [TXT]

(26) *hí*            *íira?be*    *nikái*  
 TOP            wolf            EVID:ACUE  
*íta?=pu*    *wa-náwa*  
 woman=SUBJ3SG    CMPL-to.steal  
 ‘Speaking of the wolf, right? He stole a woman.’ [TXT]

Secondly, MEC also exhibits the more widespread typological system of general number consisting of a general/singular versus plural distinction (Corbett 2000: 10-13). This system is observed in the noun type of human and non-human animate nouns that codes the plural through a profuse set of ten different suffixes, *-te*, *-si*, *-tsi*, *-ri?*, *-se*, *-h*, *-tse*, *-kí*, *-xí*, and *-i*.

- (27) *kú?ku?=pu wa-hé?ika*  
 snake=SBJ3SG CMPL-to.kill.OBJ.SG  
 ‘(The boy) He killed a snake.’ (Vázquez *et al.* 2009: 205)
- (28) *pus héiwa=mu wáxua hí kú?ku?-se*  
 well ADV:QUANT.ENT=SBJ3PL EXIST.NHUM TOP snake-PL  
 ‘Well, there are a lot of snakes.’ [TXT]
- (29) *tuíxu=pu u-ráh-bee*  
 pig=SUBJ3SG PV:CONT-PV:CONT.ASP.SG-to.be.standing.SG  
*kúurah-ta?*  
 farmyard-LOC:ÁREA  
 ‘The pig is inside the farmyard.’ [E]
- (30) *tuíxu mu?-rí hi-í?-m<sup>wi</sup>?*  
 pig SBJ3PL.ASP-already NARR-PA-to.be.many  
*tuíxu héiwa*  
 pig ADV:QUANT.ENT  
*m-i-ru?-ra?-úu*  
 SBJ3PL-NARR-PV:CONT.PL- PV:CONT.PL-to.be.standing.PL  
*ñí?u me-rí*  
 EVID SBJ3PL.ASP-already  
 ‘The pigs are already numerous, many pigs.  
 There are already many of them inside.’ [TXT]
- (31) *útehmi hí-ku teh=náayari*  
 OBJ1PL NARR-EVID:ADVR.CER.V SBR.SBJ1PL=Cora  
*teh=pú-rikí*  
 SBR.SBJ1PL=ASERT-COP.EXIST2  
*ayéin=pu ta-aa-t,áhtua*  
 so=SBJ3SG OBJ1PL-CMPL-to.leave  
*he?itá? hí? hí terréno*  
 half.of DEM.NV TOP land  
 ‘But as for us, as we are Cora, so he left us half of the land (we did see (God) do it,  
 though others didn’t see it).’ [TXT]

In this respect, the general number system causes the animate noun *kú?ku?* ‘snake’ in example (28) to show an overt plural marking through *-se* suffixing, while (30) and (31), despite conveying plural interpretations, lack plural suffix marking on the bare nouns. This would have been *-te*, if discursively adequate, both in the animate human noun *náayari* ‘Cora’ and the animate noun *tuíxu* ‘pig’. The fact that plural marking on the noun itself is grammatically optional represents the defining property of a general number system. Nevertheless, Corbett (2000: 13-14) underlines

that this language type does indeed express number obligatorily on certain discursive contexts. For instance, in the case of MEC all members belonging to the human and non-human animate nouns do show up obligatory number marking when occurring with a cardinal number modifier (Grimm 2018: 536). This morphosyntactic property also allows the individuated animate class in MEC to be classified as countable.

- (32) *kásiʔ mé=mu wéika wáakiʔ-riʔ*  
 EXP DEIC=SBJ3PL three Tepehuano-PL  
*wa-tée-ʔuu*  
 ACROSS-ENTIRE.ASP.PL-to.be.standing.PL  
 ‘Look! Over there, three Tepehuanos are standing.’ [TXT]
- (33) *wéika=mu nawáʔ-ri-te wáʔ-aa-kʷii*  
 three=SBJ3PL to.thieve-NMLZ-PL OBJ3ANI.PL-CMPL-to.kill.OBJ.PL  
 ‘Three thieves killed them.’ [E]
- (34) *ahtá haʔɛmahná wá-kʷii*  
 CONJ OBJ3PL.EMPH COMPL-to.kill.OBJ.PL  
*waʔpʷá-kaʔ hɛ mʷaxá-te*  
 two-PST TOP deer-PL  
*hi-htá íku nuʔ*  
 NARR-CONJ NARR EVID.FIND  
 ‘And those he killed them. And they say they were two deer.’ [TXT]

Therefore, human and non-human animate nouns in MEC do indeed exhibit plural marking mandatorily when modified by cardinal numbers. This condition is quite strong, since it does not seem to obey any restrictions regarding the morphological structure of the noun involved. It applies to a deverbative noun like *nawáʔ-ri-te* ‘thieves’, or to bona fide monomorphemic nouns, such as *wáakiʔ-riʔ* ‘Tepehúanos’ and *mʷaxá-te* ‘deer’. All of them take their corresponding suffix from the nominal class they belong to. Suffix selection is partially motivated by semantic class, though the data can attest for a lot of exceptions and opaque choices. One of the best-behaved semantic classes is represented by kin terms whose members always take the *-mʷaʔ* suffix. On the other end of the semantic motivation scale, we find the blurred selections represented by nouns including insects, domestic animals and endonyms, among many others. Generally, they take the most neutral and productive suffixes, *-te* and *-se*<sup>12</sup>.

<sup>12</sup> The copious number of suffixes in Jesús María Cora has been analyzed by Parra (2015) as an exponent of a classificatory system. However, in the present work, the related set of suffixes in MEC is analyzed instead as a nominal class system slightly motivated by semantic features. For

Thirdly, MEC features the number-neutral language category in Chierchia's count/mass typology (1998a, 1998b) in the noun type of individuated inanimate nouns. What defines this number category is that bare individuated inanimate nouns or NPs containing this type of nouns exhibit the same form in singular and plural uses and no morphology is added for expressing plural coding on the noun itself. Examples showing the number-neutral language category have been previously discussed within this paper in (6), (7), (8) and (12). A novel couple of examples figure in (35) and (36) to remind the reader of this data.

- |      |                                      |  |
|------|--------------------------------------|--|
|      | S <sub>THEME</sub>                   | V  |
| (35) | <i>tak<sup>w</sup>átsi=pu</i>        | <i>hu-téh-ka</i>                         |
|      | ball=3SG                             | PV:CONT-ENTIRE.ASP.SG-to.be.seated.SG    |
|      | 'The ball is in the corner.' [TXT]   |  |
|      | S <sub>THEME</sub>                   | V  |
| (36) | <i>tak<sup>w</sup>átsi=pu</i>        | <i>tíʔ-u-tée-tei</i>                     |
|      | ball=3SG                             | PL-PV:CONT-ENTIRE.ASP.PL-to.be.seated.PL |
|      | 'The balls are in the corner.' [TXT] |  |

The bare noun in clause (35) denotes one and only one entity and has correspondingly both a singular interpretation and a singular unmarked form for the thematic subject *tak<sup>w</sup>átsi* 'ball'. Unusually, the corresponding clause which carries the plural interpretation in (36) shows the same morphological form for this thematic subject in singular and plural uses. The second noteworthy feature shown by clause (36) is the occurrence of the *tíʔ-* prefix on the verb template. In the next section, I claim that this prefix encodes plural marking of themes when they are expressed by individuated inanimate nouns. Formal evidence for a plural account of the *tíʔ-* prefix is provided by an agreement pattern obligatorily arising between the verb and the theme when the latter has a possessor. This agreement pattern is observed both in theme subjects and objects. Additional morphological evidence is also provided by suppletive verb stems driven

---

lack of space, the pros and cons of the two distinct analytic proposals are neither evaluated nor discussed in the present article. This is an issue deserving of an article in its own right. Yet Parra's research on Jesús María Cora is very valuable work defending the classificatory system analysis. It has the advantage of carefully examining almost a hundred lexical items belonging to the major noun lexical class in its variant of the language. It also has the merit of being based on first-hand data collected by the author himself through substantial field work.

by the number for core theme arguments, mostly when they bear the subject grammatical relation.

## 5. Individuated inanimate countable nouns in MEC

In Grimm's (2018: 528) framework, the term 'entity' refers to some portion or element of the external world whereas 'individual' refers to a construal of an entity as an individual object. Departing from these two terms, the same author defines 'individuation' as the propensity for an entity to be construed as an independent individual. I will follow this notion of individuation to semantically classify nouns such as *siikéri* 'basket', *ʔipwári* 'chair', and *takwátsi* 'ball'. They, among many other nouns in MEC, show a propensity for being construed as individual objects. I will claim that the fact that those nouns are construed as individual objects makes them more suited to receiving plural number marking as predicted by Grimm's (2018) individuation scale and also by Haspelmath's (2005) implicational scale for number marking. I will further argue that this semantic class of individuated inanimate nouns is morphologically coded by the *tíʔ*- prefix in MEC.

Methodologically, this research emulates Grimm's (2018: 530) when selecting nouns the author terms 'natural concrete entities' (*dog*). Again, in accordance with Grimm (2018: 530), derived inanimate nouns as well as 'abstract entities' are excluded from this study, since they add another layer of complexity to number pattern research. Grouped body parts are also omitted because in MEC they offer a cumbersome scenario which deserves an article all to itself. Lastly, this research does not account for nouns denoting liquids or substances, such as *háh* 'water', *xíureʔ* 'blood', *mwiʔra* 'pus', granular aggregates like *séh* 'sand' and *unáh* 'salt', and collective aggregate nouns like *xíuxuʔ* 'flower', *xúʔraʔbe* 'star', and *xánaʔ* 'banana'<sup>13</sup>. The omission of the morphosyntactic patterns of all these noun semantic types impedes the present investigation from making a full assessment of prototypical noncountable nouns in MEC. Despite all these shortcomings, the noun class I cover allows for an approach to my article's main goal, which hinges on determining both the morphosyntactic

---

<sup>13</sup> All the terminology for designating these noun types is taken from Grimm (2018).

behavior of *tíʔ*- prefixing in MEC and the semantic lexical class covered by this bound morpheme.

### 5.1. The plural marker of individuated inanimate countable nouns in MEC

As has been discussed in the previous section, MEC displays singular/plural distinction in many types of animate nouns. In this respect, the singular value is zero-coded in this language. The only exception is the human noun type marked for singular by suppletion. Instead, the plural value is morphologically coded both by suppletion in human beings and also by a profuse set of suffixes which select different noun types varying by degree of semantic motivation. Nevertheless, inanimate bare nouns in MEC entirely lack plural marking on the noun itself, a typical behavior attributed to number-neutral languages. Yet it has also been suggested that, at least, the type of individuated inanimate nouns including *siik̄ri* ‘basket’, *ʔip<sup>w</sup>ári* ‘chair’, and *tak<sup>w</sup>átsi* ‘ball’ in this language does indeed express plural coding.

This section is entirely dedicated to offering three formal criteria to back up this claim. Even redundant and controversial, the first formal testimony is the obligatory occurrence of the *tíʔ*- prefix on the verb template. It codes plural number when individuated inanimate nouns are either subject or object themes within the clause. This proof may be considered a weak formal indicator in favor of nominal number marking, given that the *tíʔ*- attaching site is the verb and distributive meanings are prone to being marked on the verb in contrast to bona fide nominal plurals which are usually coded on nouns themselves. Still, the occurrence of this bound morpheme in the predicate will be used as a relevant criterion for nominal number marking. Happily, more robust tests support this analysis in MEC. One of the most critical diagnostics is that this language shows an agreement pattern between possessed nouns and the predicate, when themes have a possessor. The third relevant test in favor of the plural number proposal is found in suppletive verb stems driven by number. In this respect, suppletive verb stems show agreement between either subject singular or subject plural theme arguments and the predicate.

## 5.2. The obligatory occurrence of the *tíʔ*- prefix on the verb template

While the *tíʔ*- prefix does not occur on the noun itself, it does show up obligatorily in the predicate of the clause, when individuated inanimate nouns require a plural interpretation. Significantly, *tíʔ*- selects certain verb classes, mainly non-agentive intransitives with theme subjects and monotransitive and ditransitive verbs with theme objects (Malchukov *et al.* 2010). When occurring in those verb classes *tíʔ*- functions as a number marker quantifying over the nominal argument of the verb. The two examples relevant to the discussion are shown in (38) and (40).

- |      |  |   |                     |
|------|--|---|---------------------|
|      | S  | O <sub>THEME</sub>                      | V                   |
| (37) | <i>íitaʔ</i>                                   | <i>síkuʔ=pu</i>                         | <i>wá-nanai</i>     |
|      | woman  | bottle.gourd=SBJ3SG                     | CMPL-to.buy.CMPL    |
|      | ‘The woman bought a bottle gourd/guaje.’ [E]   |   |                     |
|      | S  | O <sub>THEME</sub>                      | V                   |
| (38) | <i>íitaʔ</i>                                   | <i>síkuʔ=pu</i>                         | <i>tíʔ-aa-nanáí</i> |
|      | woman  | bottle.gourd=SBJ3SG                     | PL-CMPL-to.buy.CMPL |
|      | ‘The woman bought bottle gourds/guajes.’ [TXT] |   |                     |
|      | O <sub>THEME</sub>                             | V                                       |                     |
| (39) | <i>ítsí</i>                                    | <i>pe-ne-áa-tuii-riʔ</i>                |                     |
|      | cane   | SBJ2SG-OBJ1SG-CMPL-to.sell.APPL-APPL    |                     |
|      | ‘You sold me the cane.’ [E]                    |   |                     |
|      | O <sub>THEME</sub>                             | V                                       |                     |
| (40) | <i>ítsí</i>                                    | <i>pe-tíʔ-ne-áa-tuii-riʔ</i>            |                     |
|      | cane   | SBJ2SG-PL-OBJ1SG-CMPL-to.sell.APPL-APPL |                     |
|      | ‘You sold me the canes.’ [TXT]                 |   |                     |

In both examples *tíʔ*- quantifies over theme arguments, although in (38) its scope is the plural of the primary object of a monotransitive verb, whereas in (40) its scope corresponds to the plural of the secondary object of a derived ditransitive verb. For the sake of clarity, I appeal to Dryer’s (1986) terms for primary object languages, although § 3.2 states that MEC is a mixed object language, as it shows both a secundative and indirective object alignment. It is worth noting that examples (38) and (40) would not support the plural interpretation at all if *tíʔ*- did not occur in the predicate. The obligatory nature of this prefix when producing plural interpretations represents a piece of evidence in favor of the number marking account of this morpheme.

There is very little evidence to support that *tíʔ-* conveys distributive meanings when referring to theme arguments of the individuated inanimate type. For instance, the application of a non-verbal stimulus like the B&C task proves that *tíʔ-* may have both distributive and plural interpretations. Through this task, I obtained sentence (42) where the suspended or flying *pelóota* ‘ball’ was portrayed in different pictures, thus in different places and locations, corresponding accordingly to a distributive meaning which marks the separation of entities over space (Corbett 2000: 111). Furthermore, such a description is also accurate in terms of true conditions. Note the corresponding pictures that sentence (42) is describing.



- |      |  |                |                        |
|------|--|----------------|------------------------|
|      | V  |                |                        |
| (41) | <i>kixé</i>  | <i>yé</i>      | <i>ø-raʔraʔ-naʔ</i>    |
|      | to.seem  | EVID:FDIR      | SBJ3-to.fly-to.seem    |
|      | STHEME   |                |                        |
|      | <i>pelóota</i>   | <i>yé=pu</i>   | <i>wa-séʔiri</i>       |
|      | ball   | EVID:FDIR=SBJ3 | CMPL-to.look           |
|      | ‘The ball seems to be flying, that’s what it looks like.’ [E]  |                |                        |
|      |  |                | V                      |
| (42) | <i>kixé</i>  | <i>yé</i>      | <i>ø-tíʔ-raʔraʔ-na</i> |
|      | to.seem  | EVID:FDIR      | SBJ3-PL-to.fly-to.seem |
|      | STHEME   |                |                        |
|      | <i>pelóota</i>   | <i>yé=pu</i>   | <i>wa-séʔiri</i>       |
|      | ball   | EVID:FDIR=SBJ3 | CMPL-to.look           |
|      | ‘The balls seem to be flying, that’s what they look like (whether the balls appear in the same picture, or each ball in a different picture).’ [TXT] |                |                        |

MEC native speakers were asked whether this sentence was appropriate in reference to the *pelóota* ‘ball’ when more than one entity of this type

appears within the same picture, even if this scenario does not correspond to true conditions, given that the B&C task portrays neither many balls nor many chairs in the same photograph. The speakers replied affirmatively that such an interpretation was correct and appropriate for that context. Thus, the less marked plural number interpretation is also valid for sentence (42). Concerning this example, it is possible for the distributive interpretation to be derived from a particularized conversational implicature understandably created within the context of the B&C task dialogue between two MEC native speakers. Yet the implicature has not achieved the stage of a conventional implicature and neither has it become a conventional sense encoded by the *tíʔ-* prefix (Levinson 1983: 166). While conversational implicatures play a major role in language change and semantic shifts, it is not possible to claim that the *tíʔ-* prefix has already achieved the category of a marker for both plural and distributive meanings in MEC. As expected, (42) shows number underspecification of the subject enclitic of the third person =*pu* driven both by the non-agentive character of the predicate and by the fact that this bound pronoun refers to an inanimate noun conveying plural interpretations, though not overtly coded by plural morphology. Surprisingly, the verb *ráʔraʔ* ‘to fly’ is classified by MEC grammar as non-agentive.

In conclusion, the *tíʔ-* prefix codes plural interpretations of theme arguments whether in subjects of non-agentive verbs (42), or objects of monotransitive and ditransitive verbs, (38) and (40) respectively. To achieve this meaning the *tíʔ-* prefix must be obligatorily attached to those verb classes. Crucially, this bound morpheme encodes plural meanings in semantic terms specifying multiple exemplars of the noun type or at least more than one. Distributive meanings associated with the *tíʔ-* prefix are attested in very few cases. Yet they are produced by particularized conversational implicatures. Therefore, the encoded meaning of the *tíʔ-* prefix, according to MEC native speakers, corresponds to a regular plural indicating more than one entity or multiple entities.

### 5.3. Agreement pattern in MEC when themes have a possessor and evidence of suppletive verb stems driven by number of verb arguments

Unlike bare nouns, possessive noun phrases do indeed exhibit the *tíʔ*-prefix either when theme subjects of non-agentive intransitives, or theme objects of monotransitive and ditransitive verbs have a possessor. The distributional behavior of the *tíʔ*- prefix under these morphosyntactic conditions corroborates the absolutive-alignment pattern discussed before for bare nouns referring to theme arguments. As expected, in all these cases *tíʔ*- occurs obligatorily on the verb template coding plural number. Some relevant examples illustrating the conspicuous blending of nominal and verbal behavior featured by *tíʔ*- are shown in (43) and (44)<sup>14</sup>.

- |      |   |                      |
|------|---|----------------------|
|      | V   | OTHEME               |
| (43) | <i>ne-tíʔ-tahwa</i>                           | <i>tíʔ-ne-múukuʔ</i> |
|      | SBJ1SG-PL-to.make.PROG                        | PL-POSS1SG-hat       |
|      | 'I am making my hats.' [E]                    |                      |
|      | V   | OTHEME               |
| (44) | <i>ne-tíʔ-m<sup>w</sup>a-nanai-tse</i>        | <i>tíʔ-háʔ-itsi</i>  |
|      | SBJ1SG-PL-OBJ2SG-to.buy.APPL.PERF-APPL.PROLEP | PL-POSS2SG-cane      |
|      | 'I bought canes for you.' [E]                 |                      |

Crucially, the obligatory occurrence of *tíʔ*- on both the possessive noun phrase and the verb suggests that syntactic agreement is involved in the plural marking of individuated inanimate nouns in MEC. In some cases, this morphosyntactic property is backed up by verb suppletion driven by nominal number. Furthermore, suppletive verb stems triggered by nominal number in MEC follow an absolutive-alignment pattern. This explains why intransitive verbs exhibit subject verb suppletion when the argument refers to more than one entity, either an agent, a patient, or a theme. In contrast,

<sup>14</sup> The analysis of *tíʔ*- as a prefix can be questionable because its attaching site is both the verb and the noun, a behavior typical of clitics which usually occur in different lexical classes (Bickel and Nichols 2007: 176). The nature of this bound morpheme as a proclitic could be acceptable when occurring in possessive noun phrases, but is completely erroneous when attached to the predicate. This is because *tíʔ*- shows a fixed slot on the verb template since it always occurs after the subject prefixes with anaphoric/cataphoric properties, such as in example (44). Prosodically, *tíʔ*- always carries the main stress of the noun or the predicate in such a way that those words switch their usual stress pattern when *tíʔ*- occurs either in the noun phrase or the predicate. The phonetic correlation of the stress shown by *tíʔ*- is always a high tone. Yet further research is needed to convincingly assess all the prosodic issues concerning this bound morpheme.

monotransitive verbs display object verb suppletion when patient objects designate multiple entities. Thus, the suppletive verb morphology exhibited by the number of verb's arguments can be considered supplementary formal evidence to reinforce the absolutive-alignment pattern that the *tíʔ*-prefix displays in MEC. Note (45) and (46) which show the double marking of nominal number on the verb template both by *tíʔ*-prefixing and by suppletive verb stems. In this particular case, double number marking affects a theme subject argument coded by a possessed individuated inanimate noun in a locative description. Unsurprisingly, the third person subject enclitic =*pu* is underspecified for number when occurring with a plural individuated inanimate noun *túʔnamiʔ* 'musical bow' which in example (46) is overtly coded by the *tíʔ*-prefix for plural number. Here, the plural suppletive stem of the predicate corresponds to a non-agentive stative verb like *heʔstímen* 'to.be.laying. SBJ.PL'.

- |      |   |                   |                            |
|------|---|-------------------|----------------------------|
|      | S <sub>THEME</sub>                              |                   | V                          |
| (45) | <i>ne-túʔnamiʔ</i>                              | <i>chuátaʔ=pu</i> | <i>hoʔu-réʔka</i>          |
|      | POSS 1SG-musical.bow                            | ground=SBJ3       | LOC-to.be.laying.SBJ.SG    |
|      | 'My musical bow is laying on the ground.' [E]   |                   |                            |
|      | S <sub>THEME</sub>                              |                   | V                          |
| (46) | <i>tíʔ-ne-tuʔnamiʔ</i>                          | <i>chuátaʔ=pu</i> | <i>tíʔ-haʔu-heʔstímen</i>  |
|      | PL-POSS 1SG-musical.bow                         | ground=SBJ3       | PL-LOC-to.be.laying.SBJ.PL |
|      | 'My musical bows are laying on the ground.' [E] |                   |                            |

Although the conditions for agreement might be considered relatively weak in MEC, because ditransitive constructions may optionally exhibit the occurrence of the *tíʔ*-prefix on possessive noun phrases when the possessor refers to a first person, note how below in (47), the agreement facts still hold.

- |      |   |                             |
|------|---|-----------------------------|
|      | S   | O <sub>THEME</sub>          |
| (47) | <i>úuka</i>                                     | <i>(tíʔ-ne-) siikári=mu</i> |
|      | women   | PL-POSS 1SG-basket=SBJ3PL   |
|      | V   |                             |
|      | <i>tíʔ-ne-aa-nanai-riʔ</i>                      |                             |
|      | PL-OBJ 1SG-CMPL-to.buy.APPL-APPL                |                             |
|      | 'The women bought my baskets/chiquihuites.' [E] |                             |

In conclusion, all the varied evidence presented so far suggests that *tíʔ*- is a bona fide plural marker. Firstly, as previously discussed, the obligatory

nature of the *tíʔ*- prefix in the verbal template producing plural interpretations is characteristic of nominal number markers in many language number systems, albeit general number systems which show strong discursive conditions for expressing mandatorily number coding. Further evidence as showcased in linguistic literature (Corbett 2000: 116; Grimm 2018: 538) is that number markers are obligatory in many languages. By contrast, distributives on nouns are seldom if ever obligatory. Ultimately, conclusive evidence in favor of the plural number account appears in the pattern of syntactic agreement between the predicate and theme arguments when they have a possessor, since according to Corbett (2000: 116) number is often an agreement category, which distributivity is not. Therefore, this agreement pattern permits a convincing assessment that *tíʔ*- is not only an indicator of plural interpretations but a plural marker in its own right.

Additionally, the agreement pattern shown by *tíʔ*- when the theme has a possessor fits straightforwardly with Corbett's (2000: 66-67) predictions, which claim that the morphological expression of number may not mark number in some nouns, and in that respect, it is irregular. But other research criteria such as syntactic agreement will reveal more regular and consistent patterns of number expression. From this perspective, the neutral-number category exhibited by MEC in individuated inanimate bare nouns is particular to the morphological criteria on nouns themselves. However, number marking becomes more consistent following the syntactic agreement criteria, when possessors come into play. Therefore, according to these same criteria, MEC shows more regular number marking patterns.

Further, it is possible to argue that the morphological pattern shown by *tíʔ*- prefixing seems to reflect a categorization of entities referred to in the present work as individuated inanimate nouns. They designate entities that show a great propensity to being construed as independent individual objects. This type of entity in Haspelmath's (2005) proposal corresponds to discrete inanimate nouns more likely to exhibit plural morphology than other non-discrete inanimate nouns. Thus, in semantic and typological terms, the fact that nouns such as *túʔnamiʔ* 'musical bow', *siikéri* 'basket', *ʔiri* 'arrow,' *itsí* 'cane', *takwátsi* 'ball', *pelóota* 'ball', *múukuʔ* 'hat', *ʔipwári*

‘chair’, *kaʔní* ‘satchel’, *chíʔ* ‘house’, *xáʔri* ‘pot’, *tep<sup>w</sup>áih/tep<sup>w</sup>éih* ‘axe’, *ham<sup>w</sup>éʔi* ‘tortilla’, *kum<sup>w</sup>á* ‘comal/cast-iron skillet’, and *síkuʔ* ‘guaje/bottle gourd’ take the *tíʔ*- prefix to code plural number, either on the noun itself when they have a possessor or by means of verbal coding when they occur as bare nouns, is a linguistic behavior expected from discrete inanimate nouns. This follows the predictions of both Haspelmath’s (2005) implicational scale and Grimm’s scale of individuation (2018). In this way, the *tíʔ*- prefix in MEC functions both as the morphosyntactic marking of plural morphology and as the hallmark of a noun type meaning corresponding to individuated inanimate nouns.

Regarding countability, individuated inanimate nouns behave as their corresponding counterparts of the animate type noun in MEC, since besides showing plural markers, they can be combined with numbers and, therefore, they pass the cardinality test without restrictions. This test confirms that individuated inanimate and animate nouns refer to atoms in MEC, units that can be counted (Lima 2014). Example (48) shows the noun type of individuated inanimate nouns.

		SAGENT	O <sub>THEME</sub>		V
(48)	í	<i>ínee</i>	<i>anxíbi</i>	<i>kaʔní=nu</i>	<i>tíʔ-u-nanai</i>
	TOP	SBJ1SG	five	satchel=SBJ1SG	PL-COMPL-to.buy.COMPL
			‘As for me, I bought five satchels.’ [TXT]		

## 6. Final remarks

Given the complexity of my data, in order to accurately describe number coding for individuated inanimate countable nouns in MEC, I needed to appeal to different theoretical frameworks. Moreover, I had to apply distinct criteria not necessarily restricted to number coding on the noun itself, but also including syntactic criteria regarding agreement patterns shown between possessive NPs and the predicate of the clause. As predicted by the grammatical number literature, syntactic agreement criteria show more regular number marking patterns in MEC.

On the other hand, to fully understand the number system displayed by individuated inanimate countable nouns in MEC, it was imperative to assess the number coding shown by bound subject and object pronouns,

specifically those referring to third person. Unexpectedly, the nature of verb classes in this language plays a key role when accounting for number marking in the class of inanimate nouns. The interesting interplay between nouns, pronouns, verb classes, animacy, and individuation makes the conspicuous blending of nominal and verbal behavior of the *tíʔ*- prefix more comprehensible and coherent. Ultimately, the fact that this bound morpheme selects theme arguments, either intransitive verb subject themes or object themes of monotransitive and ditransitive verbs are not some morphosyntactic oddity of MEC. Even if the majority of languages belonging to the Uto-Aztecan family exhibit a nominative-accusative alignment, the absolutive alignment pattern is a widespread feature attested in Southern Uto-Aztecan languages when looking at suppletive verb stems driven by number. In this language family, it is a well-known fact that verb stems show number suppletion of subjects in intransitive verbs, whereas number suppletion of objects affects transitive verbs. From this perspective, it is not surprising that the *tíʔ*- prefix has replicated the same pattern for number marking. Yet the surprising behavior of this prefix is worth noting, as well as the unexpected pattern of third person subject bound pronouns regarding non-agentive verbs and animacy. Uto-Aztecan languages have not previously documented the phenomenon of number underspecification in the case of third person subject pronouns when occurring with this verb intransitive class and when referring to inanimate nouns. Further research is needed in other languages belonging to this linguistic family to confirm if this pattern is common to these genealogically related languages or is instead particular to MEC.

## References

- Bhat, D.N.S. 2004. *Pronouns*. Oxford: Oxford University Press.
- Bickel, Balthasar & Johanna Nichols. 2007. Inflectional morphology. *Language typology and syntactic description*, Vol. III, T. Shopen (ed.), 169-239, 2nd edition. Cambridge: Cambridge University Press.
- Bresnan, Joan & Sam, Mchombo. 1987. Topic, pronoun and agreement in Chichewa. *Language* 63: 741-782.

- Casad, Eugene H. 1984. Cora. *Studies in Uto-Aztecan Grammar, Vol. 4: Southern Uto-Aztecan Grammatical Sketches*, Ronald W. Langacker (ed.), 152-459. Dallas: Summer Institute of Linguistics and the University of Texas at Arlington.
- Casad, Eugene H. 2012. *From Space to Time. A cognitive analysis of the Cora locative system and its temporal extensions*. Amsterdam: John Benjamins Publishing Company.
- Chierchia, Gennaro. 1998a. Plurality of mass nouns and the notion of 'semantic parameter'. *Events and grammar*, Susan Rothstein (ed.), 53-104. Dordrecht: Kluwer.
- Chierchia, Gennaro. 1998b. References to kinds across languages. *Natural Language Semantics* 6: 349-405.
- Corbett, Greville. 2000. *Number*. Cambridge: Cambridge University Press.
- Dixon, Robert. 1994. *Ergativity*. Cambridge: Cambridge University Press.
- Dryer, Matthew. 1986. Primary objects, secondary objects and antidative. *Language* 62: 808-845.
- Givón, Talmy. 2001. *Syntax, Volume I*. Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Grimm, Scott. 2018. Grammatical number and the scale of individuation. *Language* 94: 527-574.
- Haspelmath, Martin. 2005. Occurrence of nominal plurality. *The world atlas of language structures*, Martin Haspelmath, Matthew S. Dryer, David Gil, & Bernard Comrie (eds.), 142-45. Oxford: Oxford University Press.
- INEGI Instituto Nacional de Estadística y Geografía. 2010. *Censo Nacional de Población y Vivienda 2010*. <http://www.inegi.gob.mx>.
- Kroeger, Paul. 2004. *Analyzing Syntax. A Lexical-Functional Approach*. Cambridge: Cambridge University Press.
- Levinson, Stephen. 1983. *Pragmatics*. Cambridge, New York, New Rochelle, Melbourne Sydney: Cambridge University Press.
- Lima, Suzi. 2014. *The Grammar of Individuation and Counting*. PhD thesis. University of Massachusetts Amherst.

- Malchukov, Andrej, Martin, Haspelmath & Bernard, Comrie. 2010. Ditransitive constructions: a typological overview. *Studies in Ditransitive Constructions: A Comparative Handbook*, Andrej Malchukov, Martin Haspelmath & Bernard Comrie (eds.), 1-64. Berlin, New York: Mouton de Gruyter.
- O'Meara, Carolyn & Pérez Baéz, Gabriela. 2011. Spatial frames of reference in Mesoamerican languages. *Language Sciences* 33 (6): 837-852.
- Parra, Rodrigo. 2015. El sistema de clases nominales del cora de Jesús María: motivación semántica y ubicación en el continuo de técnicas clasificatorias. *De la gramática a la filosofía del lenguaje*, José Luis Iturrioz & Paula Gómez (eds.), 83-130. México: Departamento de Estudios de Lenguas Indígenas, Universidad de Guadalajara.
- Van Valin, Robert. 2001. *An Introduction to Syntax*. Cambridge: Cambridge University Press.
- Vázquez, Verónica. 2002. El Conejo. Un cuento de la región cora (Nayarit). *Revista de Literaturas Populares*, II (I): 5-33. México: Facultad de Filosofía y Letras, Universidad Nacional Autónoma de México.
- Vázquez, Verónica, Juan Flores & Isabel de Jesús López. 2009. "El Ray". Una probadita de la narrativa y la gramática del cora meseño. *Tlalocan* XVI: 169-214.
- Vázquez, Verónica. 2020. Apuntes sobre el *muxatéena* (cora presideño) de Presidio de los Reyes, municipio de Ruíz, Nayarit. *Lenguas yutoaztecas: historia, estructuras y contacto lingüístico. Homenaje a Karen Dakin*, Rosa H. Yáñez Rosales (coordinadora), 603-660. Guadalajara: Universidad de Guadalajara.