Mochica: Grammatical topics and external relations
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Chapter 4. Nouns, adjectives and
pronouns

In Mochica, nouns, adjectives, and pronouns all function as referring expressions. Nouns and adjectives are open word classes, while pronouns represent a closed word class.

4.1. Noun

Mochica nouns serve as heads of noun phrases, which in turn function as subjects and objects of clauses. Nouns may occur with modifiers such as adjectives or demonstratives. Features of number and case are the only grammatical features expressed on Mochica nouns. There is no morphological mark for gender. However, in 4.1.2., I present the strategies Mochica speakers deployed to refer to female and male entities. Possessability is a respect in which classes of nouns may be distinguished (Payne 2006: 102). Following this criterion, Mochica establishes a distinction between alienably and inalienably possessed nouns. I present Mochica noun classes and subclasses in 4.1.1.

4.1.1. Noun classes and subclasses

Mochica nouns cannot simply be classified as alienably and inalienably possessed nouns. Based on distinctive morphological marking one can establish three subclasses of nouns in the field of inalienable possession: absoluble, inabsoluble, and double-marked. Alienably possessed nouns can be divided in two groups based on the type of relational marking they accept. I develop the topic of nominal possession significantly in Chapter 6.

Normally, inalienably possessed nouns appear morphosyntactically marked in their absolute form (Lehmann 2003: 53; Kockelman 2009: 25), and they do not need morphological marking when they are possessed (Lehmann 2003: 53). However, with regard to the absolute form, one can identify two

grammatical classes of inalienably possessed nouns, namely those that are obligatorily possessed, i.e. that remain inabsoluble, and those that are absoluble, that is, those that can appear as absolute. Furthermore, the third subclass of inalienably possessed nouns consists of the group of nouns that present double-marking.

4.1.1.1. Absoluble inalienably possessed nouns

Absoluble inalienably possessed nouns include linear kinship terms, that is, terms that express relationships between direct descendants: father, mother, son, culturally relevant elements such as 'food', 'cultivating field', and some body parts. The body part terms included in this group are somehow special as they can be found grammaticalized as concepts of spatial relations.

4.1.1.2. Inabsoluble inalienably possessed nouns

Inabsoluble inalienably possessed nouns present zero marking when they are possessed, and their absolute form is impossible or at least does not appear to be attested in the *Arte*: <ssap> 'mouth', 'order', 'commandment'; <cul> 'blood' and <oc> 'name'. In this group, one can find other nouns that appear to be grammaticalized, including in their form the relational suffix <-æng> / <-ng>. Among these nouns are certain affinity terms: <ssonæng> 'wife', <ñang> 'husband', and some terms expressing consanguinity of collateral line kin, such as <chang> "brother, sister, nephew or niece of younger age" (Carrera 1644: 146). Also, included in this group are certain consanguinity and collateral line kin terms that are somewhat more distant from the ego.

4.1.1.3. Double marked inalienably possessed nouns

The marking appears on both the dependent in the oblique-genitive case and on the head by the suffix <-æng> or <-eng>. In addition to certain body part terms, certain nominalizations also occur with double possessive marking.

4.1.1.4. Alienably possessed nouns

In an alienable possessive construction, the possessed element is non-relational. Alienably possessed nouns require morphological marking inside of a possessive construction. This marking has a relational function. For this purpose, Mochica makes use of two suffixes, namely <-Vd> and <-(V)ss>. The alienable possession relational suffixes <-Vd>, with the variants <-æd>, <-ad>, and <-(V)ss> are found in complementary distribution. According to Carrera (1644: 5-6), the affix <-Vd> attaches to nouns ending in a consonant, and the affix <-(V)ss> attaches to nouns ending in a vowel.

Table 7.   Grammatical and semantic classes of nouns in Mochica

class	subclass	absolute form	possessed form	semantic class
inalienably possessed	inalienable possession (absolute obligatory possession)	<-quic>	N zero mark	• some lineal consanguinity kinship terms • some body part terms • bio-culturally relevant terms such as cultivation field, food
	inalienable possession (inabsoluble, obligatory possession)	N	N	• some collateral and affinity kinship terms • mouth, blood, name, etc.
	double marking	<-quic>/<ic>	<-æng>	• some body parts
		<-ic>/<-uc> <-Vc>	<-ir>/<-ur> <-Vr>	• nominalizations
alienably possessed		N	<-Vss>	• nouns ending in a vowel • animals • objects
		N	<-æd>	• some nouns ending in a consonant • animals • objects

Source: Based on the work on Possession in Yucatec Maya by Lehmann (2003)

4.1.2. Nominal gender

Gender is not marked in Mochica. Mochica makes use of the following words to refer to male individuals: <ñangcu> 'male' and <ñofæn> 'man'. To refer to a female, one uses <mecherræc> 'female' 'woman' (Carrera 1644: 28-29). Carrera provides two examples for 'male horse': <ñangcuio col> and <ñofæno col> 'male horse, stallion', which shows that most probably there

was no semantic distinction between these two words (Carrera 1644: 28-29). For 'mare' Carrera (1644: 29) registers <mecherræco col>. Middendorf (1892: 51-52) complements the information on gender specification provided by Carrera (1644), stating that the opposing pair <ñofæn> / <mecherræc> is used when referring to humans, like in <ñofæn chisi> 'boy' and <mecherræc chisi> 'girl', while the opposition <ñangcu> / <mecherræc> is used when referring to animals.

4.1.3. Nominal number

With regard to number, singular is not marked in Mochica. The plural is marked with the suffix <-æn>. The plural marker is not obligatory, and according to Carrera (1644: 10), it is used rarely. In addition, the plural ending does not only appear in combination with nouns, but can also be attached to adjectives, pronouns and demonstratives, and numerals.

Example (28) shows the plural ending attached to the noun <eng> 'mother', to form the plural <eng-æn> 'mothers'.

(28)   <engæn>   (Carrera 1644: 13)

eng-   æn

mother- PL

'mothers'

Hovdhaugen (2004: 18) believes that the suffix <-æn> can be directly attached to the nominal stem, as seen in example (28), or "to the oblique[91] stem of nouns and pronouns if the stem ends in vowel" (Hovdhaugen 2004: 18). To illustrate this, this author gives <cꞯolu> 'boy or girl' as example and claims

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[91] Hovdhaugen (2004) uses the term "oblique" instead of genitive.

that this word, which ends in a vowel, needs the oblique case marker <-ng> in order to receive the plural marker: <cɥolu-ng-æn>. However, based on the information provided by Carrera (1644: 12), the attested plural form of <cɥolu> is actually <cɥoluæn>. Another case of a noun ending in vowel without the presence of the oblique marker, is the Spanish loan word *artículo* 'article', presented by Carrera as <articulo-æn> (Carrera 1644: 215).

4.1.4. Case

In Mochica, overt marking of case is present only in the oblique case. Mochica otherwise presents numerous cases expressed through adpositions. For this reason, I have decided to deal with the adpositions as case markers; the Mochica adpositional case system is presented in 4.1.4.3.

4.1.4.1. Morphological case according to Carrera (1644)

When describing the Mochica noun, Carrera (1644: 10-15) follows the Greco-Latin tradition and presents declension paradigms attributing the same inflectional category-system of the Latin nouns to Mochica. Unlike Latin paradigms, of which there are five, he offers three different paradigms for Mochica, based on the type of genitive marking these groups of nouns accept. According to Carrera, the nouns belonging to the first declension end in a consonant and have the genitive ending <-ærô>, such as <mecherræc> 'woman', <mecherrc-ærô> 'of the woman'; the second declension comprises nouns ending in vowel that have the <-ngô> genitive ending, like <cɥolu> 'youngster, boy or girl', <cɥolungô> 'of the youngster'; the third declension includes nouns ending in either a vowel or a consonant with <-eiô> genitive endings like <eng> 'mother', <engeiô> 'of the mother'. Throughout the *Arte,*

several other oblique-genitive endings can be found, which I present in
4.1.4.2.1.

Example (29) illustrates Carrera's (1644) presentation of the second
declension. For each case, I have translated the author's Spanish-Mochica
correspondences into English and followed Leipzig glossing rules to refer to
his proposed cases.

(29)

NOM	\<cɥolu\>	'the youngster, boy or girl'	(Carrera 1644: 12)
GEN	\<cɥolungô\>	'of the boy'	
DAT	\<cɥolung opæn\>	'for, to the boy'	
ACC	\<cɥolu\>	'the boy'	
VOC	\<cɥolu\>	'boy!'	
ABL	\<cɥolu\> \<len\> or \<tana\>	'with the boy'	

It was common practice for Carrera, as for all colonial missionary
grammarians, to force the described language data to fit the Greco-Latin
descriptive patterns, and even though the language in question did not exhibit
inflectional case suffixes for every single case, they would accommodate the
data to the Latin case system. In the paradigm shown in (29), one can observe
that the dative form \<cɥolung opæn\> differs from the basic form of the noun
(direct case), this case being expressed with the adposition \<pæn\> and the
oblique form \<cɥolungô\>. Interestingly, the adposition \<pæn\> has two
different uses and behaviors. It can be used as nominal inflection to express a
"dative" as registered by Carrera in his declension paradigms, meaning 'to' or
'for' according to the *Arte*. It can also be used as a non-inflecting adposition
meaning 'as', expressing essive case according to my own interpretation (see

4.1.4.3.2.4.4.). Middendorf (1892: 97, 100) also recognizes both uses and behaviors, respectively. In order to stick to the Latin paradigm, Carrera (1644: 12) includes two postpositions <len> and <tana> as expressing ablative case. I interpret <len> and <tana> as comitative case adpositions (see 4.1.4.3.2.2.4. and 4.1.4.3.2.2.5., respectively).

4.1.4.2. Case inflectional system

Middendorf (1892: 96) and Adelaar ([2004] 2007a: 332) propose a case system with a "clear nominative-genitive distinction" for the Mochica language. According to Iggesen (2013) a two-term case system is based on a binary opposition (minimal pair). The inflectional system of Mochica is represented by a minimal case paradigm that contains two members. A binary opposing case system in a language implies an overtly marked case category expressing a specific function (oblique case) and a corresponding zero-marked base form, used as "default case" or "direct case", even if it has no specific grammatical function (Iggesen 2013). After examining the Mochica data, I surmise that it is more appropriate to refer to it as a direct-oblique distinction. I prefer to use the direct-oblique distinction because even though "genitive" is the only overtly marked case, it has several functions depending on the context in which it appears. The oblique marker behaves as (a) a relational in combination with some adpositions (see example 30), (b) a genitive when expressing possession (see example 31), and (c) an ergative when expressing agentivity in ergative constructions (see example 32). I will use the gloss OBL for the oblique-relational and the oblique-genitive functions, and ERG for the oblique-ergative function.

Example (30) shows the behavior of the oblique as a relational between the noun <pol> 'heart' and the adposition <nic>, which expresses inessive case:

(30)   <polenic>   (Carrera 1644: 158)

pol-   e-   nic

heart-   OBL   INE

'in the heart'

Example (31) shows the personal name Pedro with the oblique marker <-ng>, which has a genitive function:

(31)   <Pedrong colæd>   (Carrera 1644: 6)

Pedro- ng   col-   æd

Pedro- OBL   horse- REL

'Pedro's horse'

Finally, example (32) shows the oblique suffix with an ergative function:

(32)   <Pedrong az xllip quem>   (Carrera 1644: 70)

Pedro- ng   az   xllip- qu-   em

Pedro- ERG   2SG   call- BEN- VAL_{EM}

'Pedro is calling me'

4.1.4.2.1. Oblique suffixes

According to the information provided by Carrera (1644), and to the examples provided in the *Arte,* one can find more oblique suffixes than those presented in Carrera's three nominal declensions. Specifically, I will present the following endings: <-ær(ô)>, <-(V)ng(ô)>, <-e(iô)>, <-i(iô)>, <-u(iô)>, <æ> and <-en>. However, before doing so, it is necessary to explain the nature of the recurrent element <-ô>, which follows the oblique forms in many cases. Carrera (1644: 1) informs us that this <ô> / <o> has to be pronounced independently. This is the reason why, as anticipated by Adelaar ([2004]

2007a: 334), this element "has to be assumed as a grammatical element of its own". In his analysis of this element, Adelaar suggests that <ô> / <o> indicates the predicative character of the genitive noun. Adelaar ([2004] 2007a: 333-334) considers it an adjectivizer and glosses it as AJ. In the same vein, Hovdhaugen (2004) glosses <ô> as ADJR (adjectivizer). However, this interpretation does not explain the independent character provided by the suffix <ô>. I consider this suffix a nominalizer, in particular, a possessive nominalizer, because it appears in combination with the oblique-genitive), creating a nominal that refers to a possessed item but does not directly modify the possessed item; see examples (33) - (37). The gloss I propose for this nominalizer is POSS.NMLZ. In fact, the possessive nominalizer can trigger the same kind of derivation with any noun in the oblique-genitive and the possessive adjectives, as in example (35), or the pronouns (in oblique-genitive), as in example (36).

I believe that the recording of the possessive nominalizer is motivated by the colonial grammarian's need to present the nouns according to the Latin grammatical tradition, that is, offering the nominative and genitive forms of each noun in order to fully classify the nouns in terms of declensions. The element <ô> appears suffixed to the oblique-genitive forms of Carrera's nominal and pronominal declensions. An important detail in this respect is that these are the citation forms. This means that the examples are cases of nouns outside a possessive construction or, better said, they stand by themselves and do not modify a possessed item directly but refer to it. This suffix presents two allophones whose selection is determined by the ending of the oblique marker. When the oblique marker ends in a vowel, it occurs as <-io> and when in a consonant, as <-ô>.

Example (33) shows the case of an oblique marker that ends in a consonant, occurring with the possessive nominalizer <-o>:

(33)   <cꭓolungô>   (Carrera 1644: 12)

cꭓolu-   ng-   ô

boy-   OBL-   POSS.NMLZ

'the boy's'

Example (34) illustrates an oblique marker ending in a vowel, followed by the possessive nominalizer <-io>. Note that the oblique mark shown in (34) has an accent mark. Carrera (1644) does not always mark this oblique marker and there does not seem to be a rule for its accentuation.

(34)   <ponéio>   (Carrera 1644: 145)

pon-   é-   io

sister in law-   OBL-   POSS.NMLZ

'the sister in law's'

Examples (35) and (36), respectively, show a possessive adjective and an interrogative pronoun with the oblique-genitive case function, in combination with the possessive nominalizer <-ô>:

(35)   <tzhæng ô>   (Carrera 1644: 17)

tzhæng   ô

2S.OBL   POSS.NMLZ

'yours'

(36) <iñô>   (Carrera 1644: 21)

iñ-   ô

who.OBL   POSS.NMLZ

'whose?'

Example (37) is a clear case in which the predicative character mentioned by Adelaar is shown. The noun is able to function as a predicate due to the nominalization triggered by the suffixation of <-ô>.

(37) <Mocꭒilpi ang mæiñ eng eio>   (Carrera 1644: 1)

Mo   cꭒilpi ang   mæiñ   eng   e-   io

DET.PROX   blanket COP   1SG.OBL   mother OBL- POSS.NMLZ

'This blanket is my mother's'

4.1.4.2.1.1. Suffix <-ær(o)>

This suffix is used with nouns ending in a consonant (Carrera 1644: 10). See example (38), in which <efquic> 'father' occurs with the suffix <-ær>. It is important to note that the noun <efquic> is the absolute form of <ef> 'father', in combination with the suffix <quic>, a derelational which makes it possible to use this inalienably possessed noun in its absolute form.

(38) <efquicær>   (Carrera 1644: 207)

ef-   quic- ær

father- DEREL- OBL

'of the father'/'the father's'

4.1.4.2.1.2. Suffix <-ng>

This suffix is used with nouns that end in a vowel (Carrera 1644: 11). Most of the examples present <-ng> interacting with <ô> or <o> (like in example (33)). In example (39), <fanû> 'dog' occurs with the ending <-ng>:

(39)   <fanûng o>   (Carrera 1644: 145)

        fanû-   ng   o

        dog-   OBL   POSS.NMLZ

        'the dog's'

4.1.4.2.1.3. Suffix <-e>

Carrera (1644: 10) presents <-eio> as the suffix of his third declension, stating that it is used for nouns ending either in a vowel or a consonant. Confronting this information with the attested examples, it appears evident that the oblique suffix is not <-eio>, but only <-e>, as already noted by Hovdhaugen (2004: 22); see example (40). The search for examples of stems ending in vowel was fruitless. As stated by Hovdhaugen (2004: 22), the distribution of this suffix is wide among monosyllabic and polysyllabic nouns.

(40)   <cocædeio>   (Carrera 1644: 145)

        cocæd-   e-   io

        aunt-   OBL-   POSS.NMLZ

        'the aunt's'

This suffix <-e> seems to have allophones, namely <-i>, <-u> and <-æ> (4.1.4.2.1.4., 4.1.4.2.1.5. and 4.1.4.2.1.6., respectively). These allophones would be the result of a vowel harmony process triggered by genitivization. As seen in 3.4.1., Mochica exhibits complex vowel alternations. In chapter 3,

I examined how the addition of the oblique suffix <-ng> onto pronouns triggered vowel alternations in the root affecting the height feature of the vowel. Examining the case of the oblique suffix allophones here, one can conclude that genitivization definitely triggers height vowel harmony independently of the suffix involved.

4.1.4.2.1.4. Suffix <-i>

Carrera (1644: 8) reports the suffix <-i>, providing examples with <æix> (unknown meaning), <ixll> 'sin' and the Spanish loan word for 'God' <Dios>. Examining the *Arte*, one finds other examples with this suffix. The noun ending does not seem to affect the selection of this suffix. The noun may end in a consonant, as in (41) or in a vowel, as in (42). Nevertheless, in the case of <æix> (unknown meaning), <ixll> 'sin', and <ñaiñ> 'bird', the vowel <i> preceding the consonants <x>, <xll> and <ñ>, exhibits the same quality as this oblique marker <-i>. Genitivization of these words triggers height harmony; however, in this particular case, since the preceding vowel is already the high front unrounded vowel /i/, it cannot be raised more and thus stays as /i/. In any case, this does not apply to the following cases: <ñac> 'saliva', <rac> 'puma', <far> 'festivity', <sser> 'flatus', <ssel> 'mucus', <ñiet> 'excrement' and <cul> 'blood'.

(41)   <ñaiñiio>   (Carrera 1644: 144)

    ñaiñ-   i-   io

    bird-   OBL-   POSS.NMLZ

    'the bird's'

(42)   <çilôiô>   (Carrera 1644: 13)

çilô-   i-   ô

?-   OBL-   POSS.NMLZ

4.1.4.2.1.5. Suffix <-u>

There are two nouns reported by Carrera that have the oblique suffix <-u>.
The only two cases registered in the *Arte* are shown in (43) and (44). Carrera
(1644: 7) mentions that there are very few other nouns that behave the same
way, without registering them in his grammatical description or religious
texts. In the following examples (43) and (44), the root vowel, i.e. the high-
mid back rounded vowel /o/ is followed by the oblique suffix, which in its turn
is the high back rounded vowel /u/.

(43)   <colûio>   (Carrera 1644: 7, 14, 120)

col-   u-   io

horse-   OBL-   POSS.NMLZ

'the horse's'

(44)   <olu nic>   (Carrera 1644: 260)

ol-   u   nic

fire-   OBL   INE

'in the fire'

4.1.4.2.1.6. Suffix <-æ>

Carrera (1644: 7, 9) registers the oblique suffix <-æ>, assigning it only to the
noun <cɥap> 'roof'; see example (45). Nevertheless, one can find the same
oblique ending attached to the numerals <tap> 'nine': <tapæio> (Carrera

1644: 182) and <çiæcʮ> 'ten': <çiæcʮæio> (Carrera 1644: 182), as Hovdhaugen (2004: 22) states correctly.

(45)   <cʮapæio>   (Carrera 1644: 7)

    cʮap-   æ-   io

    roof-   OBL-   POSS.NMLZ

In this case, the preceding low front unrounded vowel /a/ becomes the oblique suffix <æ>.

4.1.4.2.1.7. Suffix <-en>

Carrera (1644: 6, 9) registers the suffix <-en> as the third genitive of nouns that have <e(io)> as their first genitive. Regarding this topic, Carrera (1644: 4) claims that Mochica nouns bear three genitives. Carrera (1644) attempts to clarify what the first, second and third genitives refer to in the following way. Taking the noun <ef> 'father' as an example, the first genitive would be the nominal resulting from attachment of the oblique form to the possessive nominalizing suffix <ô> / <o>, presented in 4.1.4.2.1. The first genitive would thus be <ef-e-io>, 'the father's'. This first genitive represents Carrera's citation form. The second genitive would be the nominal with the oblique ending <-e>, after the possessive nominalizer <-io> has been removed, that is, <ef-e->. The third genitive corresponds to the special marker <-en>, which occurs with <ef> when it us used as the agent of an ergative construction, resulting in <ef-en> (Carrera 1644: 6, 9, 98). The colonial grammarian explicitly says that this ending is used with certain nouns, namely, kinship terms in passive constructions. Torero (2002: 353) considers this ending "a special agentive mark" and interprets this special marking as inverse marking. Adelaar ([2004] 2007a: 335) analyzes this ending as a "special case ending to indicate the agent in a passive construction".

The most original approach is that of Hovdhaugen (2004: 23), which terms this ending "agentive case" and segments it into two elements <-e-n>. According to Hovdhaugen's analysis, this suffix <-e-n> is composed of the oblique case marker <-e> and the agentive case marker <-n>. I adopt Hovdhaugen's proposal as his approach would also help to explain the rise of a new case marker (the ergative case marker), through a mechanism that has been called multilayer case marking (Kulikov 2009: 445) or case layering (Malchukov 2010: 140). Hovdhaugen's agentive marker <-n> attaches to the oblique form of the noun, ending in <-e>. In spite of the fact that it is difficult to be sure about the origin of this element <-n>, I hypothesize that it may be the oblique suffix <-ng> that typically attaches to nouns ending in a vowel (4.1.4.2.1.2.). The <-en> mark would be the result of a case layering mechanism in which the first layer would be the oblique suffix <-e> and the second layer would be the <-n> suffix. I speculate that this suffix <-n> would be the suffix <-ng> which is the voiced velar nasal /ŋ/ (3.8.). In case this would be actually the suffix <-ng>, it may have lost its velar feature and begun to be pronounced as the voiced alveolar nasal /n/.

A possible motivation for the use of an extra suffix like <-ng> would be to avoid ambiguity that could arise if the only available marker of ergative case were <-e> since <e> is one of the three invariant copulas in Mochica, which are shown in 5.2. In any case, the suffix <-ng> is used as an ergative marker when the noun ends in a vowel, see example (47b). As such, the innovative case marker <-en> can be interpreted as the ergative case marker that expresses the agent (A) of ergative constructions; see example (46). Carrera (1644: 12, 13, 98) mentions that it is attached to a very specific noun class: kinship terms and some other nouns that Carrera does not specify. Attested examples in Carrera (1644) show that pronouns marked as ergative have exactly the same form as the ones used in oblique case, see example (47a).

With other nouns or personal names, the attached ergative case markers are the same as the other oblique suffixes: <-ær> or <-ng>; see example (47b).

Example (46) shows the kinship term <eng> 'mother' occurring with the ergative case marker <-en>:

(46)   <Engen eiñ tzhacær>   (Carrera 1644: 11)

    Eng-   en   =eiñ   tzhac- ær

    Mother   ERG   =1SG   take-   VAL_ER

    'My mother is taking me'

The following example (47a) demonstrates how the interrogative pronoun <eiñ> 'who' gets inflected with the oblique marker and functions as an agent.

(47a)   <iñ iñ xllip quèm?>   (Carrera 1644: 115)

    iñ   =iñ   xllip   qu   èm?

    who.ERG   =1SG   say   CAUS   VAL_EM

    'Who is calling me?

Example (47b) is the answer to the question posed in (47a) 'Who is calling me?'. The answer is 'Pedro (is calling me)'. The personal name 'Pedro' appears inflected through the oblique suffix <-ng>, signaling agency.

(47b)   <Pedrong>   (Carrera 1644: 115)

    Pedro-ng

    Pedro- OBL/ERG

    'Pedro (is calling me).'

4.1.4.3. Adpositional case system

Hovdhaugen (2004: 21-25) identifies a direct, an oblique and an agentive case in Mochica, besides he identifies two Mochica adpositions: locative-allative <-nic> and ablative <-ich>. Adelaar ([2004] 2007a: 332-333) acknowledges that the postpositions "may be case suffixes rather than postpositions". In the same line, Torero (2002: 332) considers that "the case functions were accomplished through the use of genitivized postpositions". The use of descriptive labels for adpositions is common among descriptive linguists because adpositions have the same function as cases (Haspelmath [2008] 2012: 508). Adpositions are considered analytic case markers, in opposition to synthetic case markers (Blake [2001] 2004: 9). In this respect, adpositions are free forms that mark the relation between the dependent noun and the governor of the adposition (Blake [2001] 2004: 9, 196). Moreover, in languages where inflectional case and adpositions co-occur, the adpositional system offers much finer distinctions than the inflectional system (Blake [2001] 2004: 196). This is very well illustrated with Mochica data. One identifies several adpositions that attach to nouns in either the oblique or direct case.

In order to best showcase the available Mochica data concerning adpositional case, I prefer to present two classifications. The first level of my classification divides the many adpositions into two groups, the first group including inflecting adpositions and the second group including non-inflecting adpositions. The second level of my classification involves a subclassification of the case markers and the adpositions in abstract (grammatical) cases, concrete non-spatial cases, spatial cases and directional cases. A division similar to my first level of classification was made by Middendorf (1892: 96-100), who defined adpositions (*Postpositionen* for him) as those that occurred

with either genitive or accusative case. In this respect, it should be noted that there is no morphological accusative case suffix in Mochica. In the same line, Hovdhaugen (2004: 54-55) treats the adpositions in two groups, mentioning that they "govern either the direct or the oblique case form of the preceding noun or pronoun". He unfortunately does not account for them all. Torero (2002: 338-339) has a slightly different approach, classifying the adpositions in four groups: (a) simple suffixes (i.e. non-inflecting), (b) compound suffixes, (c) postpositions that attach to the noun in the genitive and (d) the privative *pir*.

4.1.4.3.1. Inflecting and non-inflecting adpositions

The following classification (Table 8) was constructed based on the information provided by Carrera (1644: 120-134); this classification also takes into account the inflectional properties of the adposition.

Table 8.   Inflecting and non-inflecting Mochica adpositions

Inflectional adpositions-oblique	example	Noninflectional adpositions-direct	example
<nic> 'inside'	<Iglesiang nic> 'in the church' (Carrera 1644: 120)	<tim> 'because of, for'	<ixllæss tim> 'for (our) sins' (Carrera 1644: 213)
<capæc> 'on top'	<colu capæc> 'on the horse' (Carrera 1644: 120)	<pæn> 'as'	<alcalde pæn> 'as mayor' (Carrera 1644: 121)
<lecɥæc> 'on top'	<messang lecɥæc> 'on the table' (Carrera 1644: 121)	<na> 'through'	<Limacna> 'through Lima' (Carrera 1644: 131)

Inflectional adpositions-oblique	example	Noninflectional adpositions-direct	example
<ssecæn> 'under'	<chilping ssecæn> 'under the blanket' (Carrera 1644: 121)	<len> 'together with'	<Dios len> 'with God' (Carrera 1644: 240)
<lec> 'toward', 'at'	<Pedrong lec> 'to Pedro's' (Carrera 1644: 121)	<tana> 'with'	<Dios tana> 'with God' (Carrera 1644: 122)
<lucɥæc> 'among'	<mechercær lucɥæc> 'among women' (Carrera 1644: 121)	<fæiñ> 'with' (when mixing)	<æp fæiñ> '(mixing) with salt' (Carrera 1644: 122)
<pæn> 'for', 'to'	<mecherrcærô pæn> 'for the woman' (Carrera 1644: 10)	<tot> 'with'	<Dios i eng tot> 'with the mother of God' (Carrera 1644: 206)
<er> 'with'	<lactung er> 'with whips' (Carrera 1644: 118)	<ich> 'from'	<enec ich> 'from home' (Carrera 1644: 128)
<tutæc[92]> 'in front of', 'before'	<justiciang tutæc> 'before the grand jury' (Carrera 1644: 165)	<mæn> 'because of', 'according to[93]'	<Ponçio Pilatong ssap mæn> 'according, because of Pontius Pilate's order' (Carrera 1644: 207)
<turquich[94]> 'behind'	<llemking turkich> 'behind the mountain' (Middendorf 1892: 97)		

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[92] <tutæc> is mentioned in Carrera (1644: 160).

[93] Middendorf (1892: 99).

[94] <turquich> is mentioned in Carrera (1644: 159), but I could not find an example in use. One finds the case of <ich turquich> 'why?' (Carrera 1644: 124).

Inflectional adpositions-oblique	example	Noninflectional adpositions-direct	example
\<funæc[95]\> 'according to'	\<Dios i ssap e fænæc\> 'according to God's commandment' (Carrera 1644: 246)	\<totna\> 'towards'	\<Mucup totna\> 'towards Mócupe' (Carrera 1644: 132)
\<lequich\> 'from inside'	\<efe lequich\> 'from (inside) my father's home' (Carrera 1644: 128)		

Source: Carrera (1644: 120-134)

In this table I do not include the only attested preposition in the *Arte*: \<pir\> 'without' (Carrera 1644: 122), which does not correspond to case inflection. An example with \<pir\> would be \<pir moix\> 'without soul' (Carrera 1644: 122). In Table 8, one can see different adpositions attested. It seems that all adpositions of Colonial Mochica were not registered, Carrera (1644: 123) claiming that it would be to "proceed ad infinitum" if all the adpositions (in his words, prepositions) would need to be registered and suggesting that one learn them by using the language. Furthermore, he asserts that there are more adpositions that govern the oblique case and that there are some rare ones that behave as prepositions.

4.1.4.3.2. Classification of the morphological case markers and the adpositions

Case and adpositions are closely related. They express similar functions; they both code semantic roles. While case markers are affixes and attach to their hosts, adpositions can be seen as independent constituents (Kittilä, Västi &

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[95] \<funæc\> is mentioned in Carrera (1644: 161).

Ylikoski 2011: 3). As a generalization, Kittilä, Västi & Ylikoski (2011: 4) claim that there are clear differences in the nature of the roles expressed by cases versus those expressed by adpositions: adpositions are semantically more specific, and cases are more abstract in nature. As proposed in 4.1.4.2., the Mochica case system is a direct-oblique distinction. Nevertheless, there are several adpositions that behave in the same way as case markers. In this regard, it needs to be said that I consider the adpositions (all of the registered ones being postpositions apart from one) difficult to define, their register and description being, to some extent, quite vague. One counts on Carrera's (1644) orthography, which can be misleading in many cases. I believe that some postpositions function as case markers, and not only as postpositions. In this section, my intention is to classify the attested case markers and adpositions. In this manner, I will present abstract cases in 4.1.4.3.2.1., concrete non-spatial cases in 4.1.4.3.2.2., spatial cases in 4.1.4.3.2.3., and directional cases in 4.1.4.3.2.4.

4.1.4.3.2.1. Abstract cases

Abstract cases are also called grammatical cases. Examples include nominative, accusative, absolutive and ergative. These cases express grammatical relations: subject and object (Kittilä, Västi & Ylikoski 2011: 4). In this respect, abstract cases in Mochica consist of the following: direct DIR, oblique OBL and ergative ERG. Direct case corresponds to absolutive case used to mark subjects of intransitive verbs and objects of transitive verbs. I also include the adposition used to express dative DAT <pæn> 'for' in this group of abstract cases.

4.1.4.3.2.2. Concrete non-spatial cases

The postpositions I present in this section express more concrete cases, but not spatial cases. In what follows, I briefly attempt to describe each of them, offering corresponding examples.

4.1.4.3.2.2.1. Instrumental (INS) <fæiñ> 'with'

Only one example with this adposition is attested in the *Arte*, along with a brief explanation of its meaning 'with' and how it is used to describe something having been mixed with another. Example (48) shows how <fæiñ> is used.

(48)   <nucon æp fæiñ, cio [sic] xllac>   (Carrera 1644: 122)

    nuc-   on   æp   fæiñ   cio   xllac

    bring-   IMP   salt   INS   ANA   fish

    'Bring that fish (mixed) with salt'

4.1.4.3.2.2.2. Instrumental (INS) <-er> 'with'

Carrera himself (1644: 122) calls <-er> an "instrumental", offering several examples. This postposition is found throughout the *Arte*; see example (49).

(49)   <puper of cætzh cædo moiñ>   (Carrera 1644: 122)

    pup-   er   o   =f   cætzh- c-   ædo   moiñ

    stick-   INS   REL$_1$ =COP   hit-   BEN-   PTCP   1SG

    'I was hit with stick(s)'

4.1.4.3.2.2.3. Comitative (COM) <tot> 'with'

This postposition does not occur with an oblique form of the noun it gets attached to; see (50). Based on all the attested examples in the *Arte*, one can conclude that it is used with nouns, in general animate nouns, like people or God, and pronouns.

(50)   <Maria miñæp tot>   (Carrera 1644: 189)

    Maria   miñæp tot

    Maria   miñæp COM

    'with Maria Miñæp[96]'

This adposition seems to constitute a part of adverbs such as <çæctotna> 'downwards' (Carrera 1644: 125) and <olecųtotna> 'upwards' (Carrera 1644: 125) and <totna> itself (Carrera 1644: 132), which is not an adverb but a postposition expressing allative case, meaning 'towards' (ALL).

4.1.4.3.2.2.4. Comitative (COM) <len> 'with'

The postposition that expresses comitative case is similar to <tot> in the sense that it is used mainly with animate nouns and pronouns; see example (51).

(51)   <tzhang len>   (Carrera 1644: 205)

    tzhang   len

    2SG   COM

    'with you'

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[96] Miñæp is a Mochica surname.

4.1.4.3.2.2.5. Comitative (COM) <tana> 'with'

The postposition <tana> has the same meaning as <tot> and <len>. After checking all occurrences of all three comitative adpositions, I conclude that <tana> differs from the other two mainly because it appears in combination with pronouns, as well as animate and inanimate nouns. Example (52) shows a case of <tana> with the inanimate noun <ærc[97]> 'flesh'.

(52)   <ærqueng tana>   (Carrera 1644: 209)

    ærc-   eng   tana

    flesh-   DEREL   COM

    'with flesh'

4.1.4.3.2.2.6. Abessive (ABESS) <pir> 'without'

This is the only attested adposition in Mochica that is a preposition. It has been called "privative" by Torero (2002: 339). I personally take it to express abessive case. Interestingly, this preposition demands some relationality from the noun it attaches to. For instance, nouns that can be possessed alienably, need to adopt the relational suffix. The examples I have collected are the Spanish loans <Baptismo> 'christening' (Carrera 1644: 220) and <Bulla> 'Bula' (Carrera 1644: 251) and the Mochica word <ixll> 'sin'. These nouns need a relational suffix <-Vss> when combined with <pir>; see example (53). In the case of a nominalization used in a context in combination with <pir>,

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[97] For stems that terminate in /k/, I transcribe the underlying form with <c> to maintain consistency, even though it is written <qu> when followed by a suffix beginning with [e] or [i]. See similar examples in (52), (56), (71), (77), (153), (154), (166), (186) and (194).

the nominalizer's final <c> becomes <r>; see example (54), which is the corresponding form of a nominalization in its possessed form.

(53) <pir Baptismoss>   (Carrera 1644: 220)

pir   Baptismo-   ss

ABESS   Christening-   REL

'without Christening'

(54) <pir chiçær>   (Carrera 1644: 255)

pir   chi-   çær

ABESS   be-   EVENT.NMLZ

'without judgement'

4.1.4.3.2.2.7. Similative <mæn> 'as'

The meaning of this postposition is difficult to determine. Carrera (1644: 160) offers two meanings, namely, 'through' and 'as'. Example (55) shows <mæn> when meaning 'as'.

(55) <Dios efquic mæn>   (Carrera 1644: 198)

Dios   ef-   quic   mæn

God   father- DEREL   SIM

'as God the Father'

Nevertheless, the attested examples in the *Arte* show clearly that this postposition also means 'according to' (see 4.1.4.3.2.2.10.).

4.1.4.3.2.2.8. Causal-final (CAU) <tim> 'for the purpose of', 'because of'

According to Carrera's account (1644: 121), <tim> means 'for the purpose of' or 'because of'. The missionary grammarian explains, as well, that it can sometimes be attached to the postposition <na> 'through', with the same meaning as that of the original <tim>. See (56) for an example of <tim>. This postposition can appear with nouns and pronouns.

(56)   <tzhæng choquiçær tim>   (Carrera 1644: 256)

       tzhæng   choc- içær   tim

       2SG.OBL   rise- EVENT.NMLZ   CAU

       'because of your Resurrection'

4.1.4.3.2.2.9. Acolytive <funæc> 'according to', 'following'

Acolytive is a label I coined myself after the Greek noun ἀκόλουθος which means 'assistant' or 'follower'. I decided to use this label to describe the meaning of the adposition <funæc> 'according to' or 'following'. I assume this meaning based on the attested examples in the *Arte*. The adposition <funæc>, also represented as <fænæc> in the *Arte,* is one of the several spatial relation markers the Mochica language presents. It requires the noun to be in the oblique case. The origin of this adposition is a body part term: <fon>, 'nose'. This way, <fun-æc> can be segmented into [nose-DEREL]. Example (57) shows the use of <funæc> orthographically represented as <fænæc>:

(57)   <Espiritu Santong ssap efænæc>   (Carrera 1644: 217)

       Espiritu Santo- ng   ssap- e   fænæc

       Holy Spirit-   OBL   mouth-OBL   ACOL

       'according to the Holy Spirit's word'

4.1.4.3.2.2.10. Acolytive <mæn> 'according to', 'following'

The postposition <mæn> also means 'according to', 'following'; see example (58). The difference between <mæn> and <funæc> is that <mæn> does not demand the noun in combination to be in the oblique case as <funæc> does.

(58)	<santa madre Iglesiang ssap mæn>				(Carrera 1644: 189)
	santa	madre	Iglesia-	ng	ssap	mæn
	holy	mother	church-	OBL	mouth	ACOL
	'according to the Holy Mother Church'				

4.1.4.3.2.3. Spatial (local) cases

4.1.4.3.2.3.1. Inessive/allative INE/ALL <nic> 'inside' / 'to', 'towards' 'goal of motion'

The postposition <nic> (59) has been proposed as a case marker by Hovdhaugen (2004: 24). Hovdhaugen identifies this suffix as a locative/allative suffix. However, I believe that <nic> can be segmented into two elements: <n-ic>. The first element would correspond to the oblique marking that Carrera represents as <-ng>, and <-ic> would be a rudimentary locative marker <-ic>, which sometimes appears as <-ic> alone, and sometimes as <-æc>. This suffix <-ic> seems to be a non-productive locative case marker which is lexicalized, for instance, in this postposition.

(59)	<cuçiang nic>			(Carrera 1644: 191)
	cuçia-	ng	nic	
	heaven-	OBL	INE	
	'in the heaven'			

4.1.4.3.2.3.2. Adessive (ADE) <lec> 'by', 'at'

Adessive case expresses presence or adjacency/proximity: 'at' or 'near' (Blake [2001] 2004: 195). The postposition that expresses this case in Mochica is <lec>. Nouns that combine with this postposition inflect for the oblique case (60).

(60) <Pedrong lec>   (Carrera 1644: 121)

　　　Pedro- ng　　　　　lec

　　　Pedro- OBL　　　　ADE

　　　'at Pedro's'

4.1.4.3.2.3.3. Antessive (ANTE) <tutæc> 'in front of'

This postposition finds its origin in a body part term, <tot>, which means face. This way, <tut-æc> can be segmented into [face-DEREL]. Nouns that combine with this postposition inflect for the oblique case, as shown in (61).

(61) <justiciang tutæc>   (Carrera 1644: 165)

　　　justicia-　　　ng　　tutæc

　　　justice-　　　 OBL　ANTE

　　　'in front of justice'

4.1.4.3.2.3.4. Postessive (POSTE) <turquich> 'behind'

A postessive case marker indicates position behind something. This use is an extended meaning, as the example provided (62) is a metaphor, not a spatial position. In Mochica, the postessive case is expressed by the postposition <turquich>. This postposition can be segmented into two elements <turq-ich>, the second element is the ABL postposition <-ich>, while the first element

remains unknown. The postposition is part of the question word 'why', as exemplified in (62). <Turquich> governs the oblique case; in (62), the interrogative pronoun 'what' <ech> appears in the oblique case <ich>, in combination with <turquich>.

(62)   <ich turquich>   (Carrera 1644: 124)

    ich   turquich

    what.OBL   POSTE

    'why'

4.1.4.3.2.3.5. Superessive (SUPE) <capæc> 'on top'

The superessive case expresses a meaning of 'on top of', 'over, 'above'. This is expressed in Mochica by the postposition <capæc>, which demands the use of oblique, as shown in (63).

(63)   <mo æizi capæc>   (Carrera 1644: 202)

    mo   æiz-   i   capæc

    DET.PROX   earth- OBL   SUPE

    'on this earth'

4.1.4.3.2.3.6. Superessive (SUPE) <lecɥæc> 'on top'

This postposition can actually be better understood as a spatial relation marker, its origin being the body part term for 'head' <lecɥ>. This way, <lecɥæc> can be segmented into [head-DEREL].

(64)   <messang lecɥæc>   (Carrera 1644: 121)

    messa- ng   lecɥæc

    table- OBL   SUPE

'on the table'

4.1.4.3.2.3.7. Subessive (SUBE) <ssecæn> 'under'

Subessive case is expressed in Mochica with the postposition <ssecæn> 'under'. There are only two examples of the use of <ssecæn>. Example (65) illustrates one of these two examples.

(65)   <cɥilping ssecæn>   (Carrera 1644: 121)

cɥilpi-   ng   ssecæn

blanket-   OBL   SUBE

'under the blanket'

4.1.4.3.2.3.8. Intrative (INTRT) <lucɥæc> 'among'

The intrative case expresses the notion of the preposition 'amidst'. In Mochica, this is expressed by the postposition <lucɥæc>, which is derived from the body part term <locɥ> 'eye'; this way, <lucɥ-æc> can be segmented into [eye-DEREL], as shown in example (66). Salas (2012b: 148-149) offers an iconic interpretation of this postposition.

(66)   <mechercær lucɥæc>   (Carrera 1644: 121)

mercherc-   ær   lucɥæc

woman-   OBL   INTRT

'amongst women'

4.1.4.3.2.4. Directional cases

4.1.4.3.2.4.1. Ablative/elative (ABL/ELA) <ich> 'from'

This case is expressed with the aid of the postposition <ich>. Hovdhaugen (2004: 25) identifies this suffix as an ablative case marker. See example (67).

(67)   <Ñam paxllæcich>   (Carrera 1644: 128)

    Ñam paxllæc-   ich

    Lambayeque-   ABL

    'from Lambayeque'

4.1.4.3.2.4.2. Allative (ALL) <totna> 'towards'

This postposition seems to be composed of two adpositions: <tot> and <na> and expresses allative case (direction towards).

(68)   <Mucup totna>   (Carrera 1644: 132)

    Mucup   totna

    Mocupe   ALL

    'towards Mocupe'

4.1.4.3.2.4.3. Perlative (PER) <na> 'through'

Hovdhaugen (2004: 53) analyzes <na> as adverbializer; nevertheless, the examples and explanation by Carrera (1644: 131) suggest that it is not. Carrera's own translation is the Spanish word "por" 'through'. This postposition expresses perlative case, the meaning of 'through' or 'along', according to Blake ([2001] 2004: 153).

(69)   <Xllapcæpna>   (Carrera 1644: 131)

Xllapcæp-   na

Mochumi-   PER

'through Mochumi'

4.1.4.3.2.4.4. Essive (ESS) <pæn> 'as'

Finnish is another language that has the essive case, where among other
functions, it expresses a state of being. Based on the attested examples in the
Arte, the postposition expresses the meaning of 'as'.

(70)   <ñang pæn>   (Carrera 1644: 189)

ñang   pæn

husband   ESS

'as husband'

4.1.4.3.2.4.5. Elative (ELA) <lequich> 'out of', 'from (the inside of)'

This postposition is definitely the result of the combination of ADE <lec> and
ABL <ich>. Carrera (1644: 128) explains that <lequich> can be used to express
'from the home of', as illustrated in (71).

(71)   <Pedrong lequich>   (Carrera 1644: 130)

Pedro-   ng   lec-   ich

Pedro-   OBL   ADE   ABL

'from Pedro's home'

4.1.4.4. Multilayer postpositional compounds

In Mochica, one finds what I call multilayer postpositional compounds. These compounds are innovated adpositions that are the result of the combination of three layers of case-marking elements: (a) the inflectional case, i.e. the oblique case, (b) a primary postposition, which according to the attested examples, can be the locative/allative postposition <nic> (spatial adposition) and (c) a secondary postposition, which is in all attested examples, the ablative postposition <ich> (directional adposition). Examples (72) - (74) show cases of multilayer postpositional compounds; in all of these examples, the third element <u> is only there as an orthographic convention, following Spanish orthography rules. The phonetic sequence [ki] is spelled <qui> in Spanish. Thus, the structure of the compound present in examples (72) - (74) can be represented as [OBL-INE-ABL]. In (73) the oblique form is <-ng>, in (73) it is <-i>, and in (74) it is <-e>.

(72)   <infiernong niquich>   (Carrera 1644: 205)

infierno-   ng   niquich

hell-   OBL   INE.ABL

'from inside hell'

(73)   <Ixllinquich>   (Carrera 1644: 228)

Ixll-   i-   nquich

sin-   OBL-   INE.ABL

'from amidst the sin'

(74)   <eng e pol en quich>   (Carrera 1644: 198)

eng-   e   pol-   e-   nquich

mother- OBL   womb- OBL-   INE.ABL

'from inside his mother's womb'

4.2. Adjectives

An adjective is a word that can be used in a noun phrase to specify some property of the head noun of the phrase (Payne [1997] 2003: 62). There are very few attested adjectives, both in colonial and post-colonial Mochica sources. Adjectives precede the nouns modifying them, many times needing the presence of the relational suffix <-o>, which I label REL₁ (75). The relational REL₁ is attached to the adjective, and in the case of a plural form, it gets attached to the noun after the plural suffix (76). Adjectives inflect like nouns for number (77) and case (78), but there are very few examples that prove this last statement. In this respect, Carrera (1644: 109) states that the adjectives can inflect for case when they appear by themselves, that is, without modifying a noun.

(75)   <ûtzho col>   (Carrera 1644: 15)

    ûtzh-   o   col

    big-   REL₁   horse

    'big horse'

Since plural marking is not mandatory in Mochica, adjectives do not always inflect for number; however, there are examples where the plural suffix appears in combination with adjectives, as in the case of (76), where the plural marker <-æn> is attached to the adjective <ûtzh> 'big'. Note that in this example the plural suffix is attached to the adjective and not to the noun, the adjective being the only and sufficient plural marking for the whole noun phrase, which means that it was not necessary to mark both adjective and noun with the plural marker.

(76)   <ûtzhæno col>   (Carrera 1644. 135)

    ûtzh-   æn-   o   col

    big-   PL-   REL1   horse

    'big horses'

There are some examples in which adjectives seem to behave as nouns, even accepting the multilayer postpositional compound <-inquich>, constituted of the oblique <-i>, the contracted form of <nic>, i.e. <nq(u)>, which expresses inessive case, and the postposition <ich>, which expresses ablative case (this was noted first by Hovdhaugen, 2004: 27); see example (77). Interestingly, all attested examples occur with the adjective <piss> 'bad', 'evil'.

(77)   <pissin quich>   (Carrera 1644: 205)

    piss-   i-   nc-   ich

    bad-   OBL-   INE-   ABL

    'from evil'

Furthermore, in the *Arte* there are several examples of noun phrases and prepositional phrases, such as in example (78), where the prepositional phrase, made up of the preposition <pir> and the relational REL1, becomes a modifier for the noun and behaves as an adjective.

(78)   <pir ssonæng ò ñofæn>   (Carrera 1644: 171)

    pir   ssonæng   ò   ñofæn

    ABESS   wife   REL1   man

    'man without wife' (single)

4.2.1. Gradation of adjectives

4.2.1.1. Comparative and superlative

Carrera (1644: 109-111) explains the formation of the comparative and superlative constructions and offers examples. He states that these two constructions do not differ much from each other. Judging on the basis of the attested examples, I conclude that the structures are similar, but differ from each other as can be seen in (79) and (80). In a comparative construction we will find the element <lecɥna> 'more' as the first element followed by the adjective involved. The personal marker clitic gets attached to the adjective. After the clitic comes the main element that is being compared. The final element of the comparative construction is the amalgamation of the noun expressing the standard of comparison, in the oblique case, and the elative postposition <lequich>. Thus, a comparative construction can be represented as [lecɥna ADJ=CLITIC- main compared element referent-OBL.ELA].

(79)   <lecɥna tarroz tzhang Pedrong lequich>   (Carrera 1644: 110)

    lecɥna   tarr   =oz   tzhang Pedro-ng   lequich

    more   strong   =2SG you   Pedro-OBL   ELA

    'You are stronger than Pedro'

(80)   <lecɥna tzhu toz tzhang mæin [sic] lequich>   (Carrera 1644: 110)

    lecɥna   tzhut   =oz   tzhang   mæiñ   lequich

    more   small   =2SG you   1SG.OBL   ELA

    'You are smaller than me'

4.2.1.2. Superlative

According to attested examples, the superlative construction can be formed as follows. First, as can be observed in (81), the relative pronoun <can> occurs preceding the adjective, in this case <peñ> 'good'. Attached to the adjective comes the clitic <=az> 'you are'. This whole first part of the structure in (81) would then mean 'you are the good one'. The second part of the structure means 'amongst all women' where <izçæc> means 'all'. The whole structure in (81) would then mean 'you are the good one amongst all women' or 'you are the best amongst all women'.

(81)   <canpe ñaz tzhang, izçæc mecher çær [sic] lequich>   (Carrera 1644: 205)

can   peñ   =az   tzhang izçæc mecherc-   ær

who/that   good   =2SG   2SG   ALL   woman-   OBL

lequich

ELA

'you are the good/best amongst all women'

4.3. Pronouns

Pronouns in Mochica are free forms that can fill the position of a noun phrase in a clause.

4.3.1. Personal pronouns

Mochica personal pronouns inflect for number and case. In relation to number, only the third person plural receives the suffix <-æn>; the other personal

pronouns (1PL and 2PL) have a distinct plural marking: <-ich>. The case of the third person plural <aiong-æn> shows how an element ending in a vowel, such as <aio>, needs the presence of <-ng> to accept the plural ending <-æn>. The question in this case is whether this <-ng> suffix is the oblique marker or just a hiatus filler. Regarding case marking on pronouns, the personal pronouns inflect for oblique case and function as possessive adjectives or ergative agents in ergative constructions; see Table 9.

Table 9.   Personal pronouns in Mochica

	Personal pronouns in direct case	**Personal pronouns in oblique case**
1SG	<moiñ>	<mæiñ(ô)>
1PL	<mæ**ich**>	<mæ**ich**(ô)>
2SG	<tzhang>	<tzhæng(ô)>
2PL	<tzhæ**ich**>	<tzhæ**ich**(ô)>
3SG	<aio>	<aiung(ô)>
3PL	<aiong **æn**>	<aiong **æn**(ô)>

Even though there is typically no overt marking for accusative case in the language, Carrera (1644:17) registers two alternatives for the accusative of the first person plural, namely <mæich> 'us' and <ñof> 'us'. This second alternative <ñof> appears in the religious texts and in the *Our Father* and *Salve Regina* prayers. Example (82) is extracted from the *Salve Regina*:

(82)   <ñô quecan ñof>   (Carrera 1644: 210)

ñôque-   c-   an   ñof

show-   BEN-   IMP   1PL.ACC

'Show us!'

4.3.2. Demonstratives

Demonstratives inflect for number and case. Carrera (1644: 18-21), presents three demonstratives, but he does not explain the criteria for the election of his terminology when referring to them. He uses the Latin terms *hic, iste*, *ille* and *is* in a confusing way. He presents <mo> as the equivalent to the first and second person demonstratives, i.e., he translates <mo> as both *hic* 'this' and *iste* 'that', and he presents <aio> as the demonstrative for the third person, *ille* 'that which is farther away', 'that over there'. As can be seen, the third person pronoun <aio> shares the same form as the demonstrative <aio>.

Moreover, Carrera presents <çio> as *is,* which in Latin refers to 'this or that already mentioned', i.e., it does not have reference in space but in the conversation (Lewis & Short [1879] 1958: 1003). Carrera's way of presenting the demonstratives has led to two different interpretations. Adelaar ([2004] 2007a: 331) prefers to classify <mo> as "close", <çio> as "neutral" and <aio> as "far", while Hovdhaugen (2004: 30-31) assumes <mo> is 'this', <aio> is 'that' and <çio> is "he, she, it".

Although Carrera's (1644) description of the demonstratives has led to some confusion, it nonetheless seems to indicate that the system had only the distinction between proximal and distal demonstratives in relation to the expression of distance of the referred object and the speaker. The third demonstrative, very often used in the religious texts by Carrera (1644), was used when referring to something or someone already mentioned or about to be mentioned. In comparison with the other two demonstratives, <çio> cannot be used without a context. In this fashion, the Mochica demonstrative system consists of two demonstratives related to space, <mo> and <aio>, which I call

spatial demonstratives, and one demonstrative that refers to something/someone mentioned or about to be mentioned in a context; I have decided to call this third demonstrative a discourse or anaphoric demonstrative.

Mochica demonstratives behave as pronouns and as adjectives, depending on the context in which they appear; see examples (83) and (84), respectively.

(83)   <pir ñang o çio>   (Carrera 1644: 170)

    pir   ñang   o   çio

    ABESS husband   REL1 ANA

    'that one/she without husband' (single)

(84)   <mo cɥicaca>   (Carrera 1644: 112)

    mo   cɥicaca

    PROX   skull

    'this skull'

The demonstratives in Mochica inflect for number, and the suffix represented orthographically as <-ng> is needed for attachment of the plural ending, as shown in Table 10.

Table 10. Mochica demonstratives

Spatial demonstratives	Singular	Plural
proximal	<mo> 'this' (PROX)	<mongæn>
distal	<aio> 'that' (DIST)	<aiongæn>
Anaphoric demonstrative-	**Singular**	**Plural**

<çio> 'that' (ANA)	<çiong**æn**>

Demonstratives inflect for case, as well. In Table 10, I present the demonstratives inflected for oblique case. Nevertheless, I need to add information provided by Carrera (1644: 18-20), who claims that the demonstratives inflect for accusative case, as well. Accusative case is otherwise not a productive case in Mochica, but it seems to be that it affects both the demonstratives and the first person plural pronoun, as seen in 4.3.1. With regard to demonstratives, the accusative forms would be as follows: <mo> DIR, <moss> ACC; <aio> DIR, <aioss> ACC and <çio> DIR, <çioss> ACC.

4.3.3. Interrogative pronouns

Interrogative pronouns inflect for case, but not for number; see Table 11. There are three interrogative pronoun roots: <eiñ> 'who', <ech> 'what' and <in> 'where'.

Table 11. Mochica interrogative pronouns

Interrogative pronouns-direct case	Interrogative pronouns-oblique case
<eiñ> 'who?'	<iñ>
<ech> 'what?'	<ich>
<in> 'where?'	<eiñ>

Examples (85) - (87) show the use of these interrogative pronouns.

(85)   <Eiñ æz?>   (Carrera 1644: 21)

    Eiñ   =æz

    Who.DIR   =2SG

    'Who are you?'

(86)   <Icho pæn ong mo?>   (Carrera 1644: 22)

Ich-   o   pæn-   o   =ng   mo

What.OBL-   REL1   DAT-   REL1   =COP   PROX

'What is the purpose of this?

(87)   <inong loc?>   (Carrera 1644: 126)

in-   o   =ng   loc

where-   REL1   =COP   be

'Where are you?'

4.3.4. Indefinite pronouns

I could find three distinct indefinite pronouns in the *Arte*: <onæc> 'one', which inflects only for case (oblique), having no plural form at all (Carrera 1644: 20), and <timo> 'other' (Carrera 1644: 23) and <izçæc> 'everything, all' (Carrera 1644: 24), which inflect both for case and number, as illustrated in Table 12.

Table 12. Indefinite pronouns

	Indefinite pronouns-direct case	**Indefinite pronouns-oblique case**
Singular	<onæc> 'one'	<oncærr(ô)> 'one's'
Singular	<turræc> 'some'	?
Singular	<tim(o)> '(the) other'	<tim nang (ô)> '(the) other's'
Plural	<tim nang æn> 'the others'	<tim nang æn (ô)> 'the others''
Singular	<izçæc> 'all'	<izcær(ô)>
Plural	<izçæcæn> 'all'	<izcær æn (ô)>

Examples (88) - (91) exemplify the use of these indefinite pronouns as indefinite determiners. In spite of the fact that Carrera registers these elements as pronouns within their entire declension paradigms, there are no attested examples in the *Arte* of the use of these words being used as free pronouns.

(88) <onæc pelen>   (Carrera 1644: 123)

onæc   pelen

one   day

'one, some day'

(89) <Az manado turræc casaro mecherræc?>   (Carrera 1644: 167)

Az   man-   ado   turræc casaro   mecherræc

2SG   eat-   PTCP   some   married   woman

'Have you had sex with a/some married woman?'

(90) <Manapcoz turræc, fanu, cabra, yegua, timo aninalæzta? (Carrera 1644: 168)

Man-   ap-   c-   o   =z   turræc fanu   cabra   yegua

Eat-   MID-   BEN-   REL₁   =2SG   some   dog   goat   mare

tim-   o   animal   æzta

other- REL₁   animal   NEG

'Do not you fornicate with some dog, goat, mare or other animals?'

(91) <izçæc   mecherræc>   (Carrera 1644: 15)

Izçæc   mecherræc

All   woman

'all women'

4.3.5. Relative pronoun <can> / <canang>

Carrera (1644: 15) explicitly states that there is only one relative pronoun available, but he records two forms: <can> and <canang>. However, one can be certain that the relative pronoun is <can> alone, as the form <canang> clearly contains the third person clitic, <=ang>. Example (92) is another example of <can> functioning as a relative pronoun. In this case, the second person clitic <=az> appears attached to <can>, as Carrera chose to illustrate the pronoun.

(92)   <mosso næng, canaz piicæm Dios çiec en>   (Carrera 1644: 15)

    mo   ssonæng   can   =az   pii-   c   æm   Dios

    DEM.PROX   wife   RELA   =2SG   give-   BEN   VAL$_{EM}$ God

    çiec   en

    lord   ERG

    'this wife that the Lord God gives to you'

Carrera (1644: 16) goes further with the explanation of <can>, stating that in order to create a relative clause, one should deploy a participial construction: in Mochica, nominalizations serve relativizing functions, as will be presented in Chapter 7, which is dedicated to nominalizations.

4.3.6. Quantifiers

Quantifiers are expressions whose meanings involve the notion of quantity, such as the ones resembling English *several*, *every, each, all, every,* and so forth (Gil 2013b, 2015: 707). Hovdhaugen (2004: 32-33) decides to call them "words meaning each, own". He includes <çifçif> 'each one' and <çifa>

'own, each' in his classification. I personally suggest that the following items be classified as quantifiers: <tunituni> 'many' (Carrera 1644: 15; example (93) and <çif(a)> 'each one' (Carrera 1644: 124; example 94). Based on the attested examples, I do not consider <çifçif> a quantifier. Rather, <çifçif> is better translated as the Spanish term "sendos", which has a distributive character, meaning "one for each one of the persons or items already mentioned" (DPD 2005).

(93)   <tunituni ñofæn>   (Carrera 1644: 15)

tunituni   ñofæn

many   man

'many men'

(94)   <çifa ixllæs tim>   (Carrera 1644: 235)

çifa   ixll-   æs   tim

each   sin-   REL   COM

'with each (one) sin'

4.4. Numerals and numeral classifiers

4.4.1. Numerals

Mochica has a decimal system with two forms of numerals, namely, the free forms that are used to enumerate and calculate, as in abstract counting, and a set of bound forms that are used in combination with numeral classifiers (Table 13).

Table 13. Free and bound numerals in Mochica

	Ten-based numerals Carrera (1644: 181)	Bound forms Carrera (1644: 185)
'one'	\<on**æ**c\>	\<**na**\>
'two'	\<at**p**ut\>	\<**pac**\>
'three'	\<**ço**pæt\>	\<çoc\>
'four'	\<**no**pæt\>	\<**noc**\>
'five'	\<exllmætzh\>	-
'six'	\<tzhaxlltzha\>	-
'seven'	\<ñite\>	-
'eight'	\<langæss\>	-
'nine'	\<tap\>	-
'ten'	\<çiæcɥ\>	-

The following examples show the use of these free (95) and bound forms (96):

(95)   \<onæc ñaiñ\>   (Carrera 1644: 103)

    onæc   ñaiñ

    one   hen

    'one hen'

(96)   \<çoc pong cɥelû\>   (Carrera 1644: 186)

    çoc   pong   cɥelû

    three.bound   NUM.CLF.ten   hawk

    'thirty hawks'

There are a couple of important things to consider regarding the numerals; first, one has to consider the possibility of fossilized numeral classifiers, which

is suggested by some of the free form numerals of Mochica. The Mochica numeral <onæc> 'one' may have been a lexicalized item <-Vc> (segmentable as <on-æc>). Taking into account the following other numerals <a(t)put> '2', <çopæt> '3' and <nopæt> '4', one discovers another potential ending <-pæt>[98]. The word for 'tree' in Mochica is <nepæt>, which is a plausible etymology of this potential classifier. These numerals '1' to '4' are free forms — in contrast to their coexisting Mochica bound forms, that are attached to numeral classifiers. As stated above, these free forms are used for citing or reckoning.

In languages that have classifiers, it is common to find numerals recorded with extra morphology (for an example from Hibito and Cholón, see Eloranta, 2017). One piece of evidence for this conclusion is that, cross-linguistically, general classifiers tend to be attached to the citation form of numerals, probably because speakers tend not to count in abstract terms, but rather conceptualize numbers as reckoned items or objects. Therefore, one can suggest that the elements <-æc> and <-pæt> were likely nominal elements such as nominal classifiers that remain fossilized in the numerals[99].

4.4.2. Numeral classifiers

Mochica has a set of attested morphemes, called "ways of counting" by Carrera (1644: 181-188), which are in fact numeral classifiers. They are used to count in pairs: <luc> and <felæp>; in tens <pong>, <ssop>, <cǫo(quixll)>

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[98] Variation between <u>, <æ> and <i> is very common in the Mochica colonial representations.

[99] Numeral classifiers occur in numerical or quantifying expressions, and noun classifiers occur independently of other modifiers in a noun phrase (Aikhenvald 2000: 90).

and <cæss>; in hundreds, <palæc> and <chiæng>; and in thousands, <cunô>. There are also two mensural classifiers, <col> and <ñofæn>. The classifier <xa>[100] is used for counting times. In (97) I offer an example of a noun phrase containing a numeral classifier, namely <pong>, which is used to count in tens. Chapter 8 is dedicated to the explanation of the Mochica numeral classifier system.

(97)   <exllmætzh pong cuculì>   (Carrera 1644: 183)

exllmætzh   pong   cuculì

five   NUM.CLF   dove

'fifty doves'

4.5. Word formation

I have identified the following word formation mechanisms in the Mochica language: compounding (4.5.1.), derivation (4.5.2.) and reduplication (4.5.3.).

4.5.1. Compounding

A compound is a word formed from two or more different words. The dominant semantic property of compounds is that the meaning of a compound is either more specific than or completely different from the combined meanings of the words involved in the compound (Payne [1997] 2003: 92-92). In relation to the process of compounding, I have identified two types of compounds: adjective-noun compounds (4.5.1.1.) and noun-noun compounds (4.5.1.2.).

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[100] Hovdhaugen (2004: 26) considers <xa> an ordinal and a frequentative suffix. Salas (2011b) calls this element both a quantifier and an operator.

4.5.1.1. Adjective-noun compound

The single example of an adjective-noun compound noun is presented in (98). It is the case of <tzhuted> 'uvula' (Carrera 1644: 180), which can be segmented in <tzhut> 'small', 'little' and <ed> 'tongue', which shows that 'uvula' in Mochica meant 'little tongue', most probably because of its shape.

(98)   <tzhuted>   (Carrera 1644: 180)

    tzhut-   ed

    small-   tongue

    'uvula'

4.5.1.2. Noun-noun compound

There are two ways of forming a noun-noun compound in Mochica. The first strategy is to attach one noun to the other with the aid of an oblique marker; see example (99). The other strategy of attaching two nouns is pure juxtaposition; see example (100). The following cases exemplify noun-noun compounds: <locɥe chiçis> (Carrera 1644: 181), <locɥe catæn> 'lacrimal' (Carrera 1644: 180), <cul xllang> 'sunset' (Carrera 1644: 187), <lecɥ chipæc> 'adult' (Carrera 1644: 145).

(99)   <locɥe chiçis>   (Carrera 1644: 181)

    locɥ-   e   chiçi-   s

    eye-   OBL   girl-   REL

    'pupil of the eye[101]'

---

[101] In Spanish, the "girl of the eye" is the literal translation of the "pupil of the eye". It is questionable whether this term for pupil was originally a Mochica term, as it looks very much like a calque from Spanish.

(100)   <cul xllang>   (Carrera 1644: 187)

    cul   xllang

    blood   sun

    'sunset'

4.5.2. Derivation

Derivation in word formation implies addition of affixes; in what follows I present several derivational affixes of Mochica.

4.5.2.1. Preposition <pir>

I have found in the *Arte* the following examples of new words that constitute the result of the combination of the preposition <pir>, which means 'without' and a noun. For instance, we have <pir ssonæng> which means 'single man' (literally 'without wife') where <ssonæng> means 'wife' (Carrera 1644: 146); <pir ñang> 'single woman' or literally 'without husband' where <ñang> means 'husband' (Carrera 1644: 146) and <pŭrchópok> which means 'the evil' (Middendorf 1892: 58). The case of this last example is interesting because it is represented with different orthography than the one used by Carrera (1644). In Middendorf's orthography the word <pir> 'without' appears written as <pŭr> and the noun following, i.e. <chópok> is the result of the process of nominalization derived from verb <chi-> 'to be' and the agentive nominalizer <-pæc>. The word <chipæc> had several meanings according to the *Arte*, such as 'the being', 'judgement', 'grace', etc. Satan, the evil, would be 'the one without grace'.

4.5.2.2. Suffix <–cu>

The suffix <-cu> seems to be a productive derivational suffix that helps to create new nouns, but its semantics are not clear. The following nouns are the result of the affixation of <-cu> to an existing noun: <ñangcu> 'male' (Carrera 1644: 28), <quichcu> 'pinkie' (Carrera 1644: 178), <lecɥcu[102]> 'thumb' (Carrera 1644: 178), <eizcu[103]> 'abdominal cavity' (Carrera 1644: 178). Let us take example (101) to illustrate this derivation with the aid of <-cu>. In this case, <ñangcu> can be segmented into two elements: <ñang> and <-cu>, <ñang> meaning 'man' (Carrera 1644: 145) and <-cu> remaining unknown.

(101) <ñangcu>   (Carrera 1644: 28)

    ñang-   cu

    man-   cu

    'male'

4.5.2.3. Suffix <-mæd>

The suffix <-mæd> means "to do something in company with" (Carrera 1644: 26). This suffix, according to Carrera (1644: 26), gets affixed to a verb, resulting in a nominal that refers to the person who does something together with others or the act of being together with others (Carrera (1644: 26);

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[102] The word <lecɥcu> can be segmented into <lecɥ> and <-cu>, where the first element <lecɥ> means 'head'.

[103] The word <eizcu> can be segmented into <eiz> and <-cu>, where the first element <eiz> means 'child'. Note that the same element is present in the word for 'uterus' <eiztic> (Carrera 1644: 180) where the first element is <eiz> 'child' and the second element <-tic> is a locative nominalizing suffix, as will be presented in 7.1.1.3. The element <eiz> means 'child'.

Hovdhaugen (2004: 68)). Example (102) shows the case of the nominal resulting from the affixation of <-mæd> to the verb <ñeiñ-> 'to play'.

(102) <ñeiñmæd>   (Carrera 1644: 27)

     ñeiñ-   mæd

     play-   mæd

     'the one who plays in company with'

Hovdhaugen (2004: 68, fn 58) suspects that this suffix is also present in the word 'brother' <cɥecɥmæd> and, following the pattern for nouns derived from verbs after affixation of <-mæd>, he wonders which verb this word derives from. My suspicion is that this word does not derive from a verb, but rather from another noun <cɥecɥ>, which corresponds to the body part term for 'cheek'. The same kind of process, that is the affixation of <-mæd> to a noun, seems to have occurred in the formation of the words registered by Middendorf: <chächmäd> 'sister's sister' (Middendorf 1892: 58) and <kässmäd> 'cousin' (Middendorf 1892: 58).

4.5.2.4. Derivation with negation suffix <-un(o)>

The affixation of the suffix <-un(o)> consists of a derivational process which results in a new lexical item that expresses negation. Under the rubric of negation, the concept involved in this process is privation rather than merely contrary negation. The examples and translations provided by Carrera (1644: 139-140) clarify that this suffix means 'without doing something'. The derivational suffix is actually only <-un>, the vowel <-o> being the relational REL$_1$; see example (103). The cases where this form <-o> appears are the ones in which the resulting form has an attributive function, as an adjective modifying the noun.

Besides this relational, the <-un> suffix accepts the ending <-ta>, as well; see example (104). This element <-ta> occurs regularly in combination with the negative suffix <-un> / <-æn> as <unta> / <ænta>, and according to multiple attested examples in the *Arte*, one can infer that this form mainly appears when accomplishing a predicative function, as can be seen in (104).

(103) <quemuno Maria>   (Carrera 1644: 210)

     quem-   un-   o   Maria

     maculate-   NEG-   REL$_1$ Maria

     'immaculate Maria'

(104) <Dios i eng æpæc çæn que munta>   (Carrera 1644: 261)

     Dios-   i   eng   æpæc çæn   quem-   unta

     God-   OBL   mother always too   maculate-   without

     'mother of God always immaculate'

4.5.2.5. Lexical nominalization

Mochica is rich in nominalizations, both lexical and grammatical. I dedicate Chapter 7 to nominalizations. In this section, I will just mention the four nominalizing suffixes, which fill the function of creating nouns from verbs in Mochica. For this purpose, I have created Table 14, which categorizes the nominalizers by type and provides an example of each.

Table 14. Mochica deverbal nominalizing suffixes

Form	Type of nominalizer	Example	Section
<-(V)çVc> / <-(V)ssVc>	event	<læm-> 'to die' <læmiçæc> 'death'	7.1.1.1.
<-(V)pVc>	agentive	<chi-co-> 'to be-CAUS' = 'to create' <chicopæc> 'creator'	7.1.1.2.
<-tVc>	instrumental	<caxll-> 'to urinate' <caxlltæc> 'bladder'	7.1.1.3.
<-Vc>	locative, instrumental, etc.	<man-> 'to drink' <manic> 'drinking vessel'	7.1.1.4.

4.5.3. Reduplication

Total reduplication is a common and productive word formation process of
Mochica. Total reduplication doubles the entire word or stem, as can be
observed in the following examples in 4.5.3.1. (nouns), 4.5.3.2. (adjectives)
and 4.5.3.3. (pronouns). I have decided to divide the reduplication cases into
these three groups even though one cannot be sure that, for instance,
reduplication of nouns necessarily involves nouns as the input for
reduplication. The lack of information on vocabulary makes this task
speculative. Moreover, one cannot be sure of the specific function of these
reduplications, whether they expose pluralization of the nouns, or
intensification of the adjectives. However, the case of reduplication of
pronouns (4.5.3.3.) clearly deals with pronouns as input; this can be assured
because one can clearly see the pronominal forms in the attested
reduplications.

4.5.3.1. Reduplication of nouns

As already stated, one cannot be sure about the original word class that was the base of this reduplication. One only knows the resulting form, which is a noun. The most probable scenario is that the base form is also a noun that gets reduplicated. Considering <poc poc> 'soothsayer-bird' in (105), one can suspect that it is an onomatopeic animal name. The form of the reduplication in (106) is the noun <tuni> meaning 'world', 'town'. Interestingly, after reduplication, this noun conveys the meaning of 'a lot of' or 'many'and I have considered it a quantifier (4.3.6.).

(105)

<çac çac>	'hair'	(Carrera 1644: 177)
<lam lam>	'liver'	(Carrera 1644: 180)
<puf puf>	'lung'	(Carrera 1644: 177)
<poc poc>	'soothsayer-bird'	(Carrera 1644: 144)
<rreng rreng>	'trachea'	(Carrera 1644: 177)
<kochkoch>	'seaweed'	(Middendorf 1892: 61)
<semsem>/<somsom>	'tail'	(Middendorf 1892: 62)
<tektek>	'wing'	(Middendorf 1892: 62)

(106)

<tunituni>	'a lot', 'many'	(Carrera 1644: 15)

4.5.3.2. Reduplication of adjectives

Even though we do not always know the base form that originates these reduplications, the resulting form after reduplication is an adjective. The best

bet is to suggest that reduplication in this case conveys intensification of the probable original adjective.

(107)

<irrirr>	'(very) big'	(Carrera 1644: 194)
<tzhic tzhic>	'inmense'	(Carrera 1644: 194)

4.5.3.3. Reduplication of pronouns

The reduplication of the pronouns <eiñ> 'who', <ech> 'what' and <çif> 'each one' results in some of the forms obtaining a distributive function, see (108). Such a distributive function has been reported for Tamil reduplicated pronouns (Nadarajan 2006: 50). The distributive function implies that the resulting forms "specify different kinds of objects or links to different objects within a relationship". This is the explanation for the formation of <çifçif> and its distributive character, presented in 4.3.6.

(108)

<eiñ eiñ>	'whoever'	(Carrera 1644: 144)
<ech ech>	'everything'	(Carrera 1644: 160)
<çifçif>	'one for each one of the persons or items already mentioned'	(Carrera 1644: 124)

4.6. Noun Phrase structure and word order

4.6.1. Noun Phrase structure

The head of a phrase is the element that determines its syntactic function, and the rest of the elements are generally considered dependents (Payne [1997] 2003: 31). Some languages mark the relationship between the head and the dependent on the head, while others mark it on the dependent (Payne [1997] 2003: 31); still others combine both strategies or use none at all (Nichols 1986: 56). Nichols (1986) carried out a typological study based on numerous languages, managing to establish certain patterns of morphological marking that become a consistent choice of marking in the morphosyntax of each language (Nichols 1986: 66; Payne [1997] 2003: 31). Her analysis is based on two concepts: the concept of "headedness" and the concept of presence/location of the morphemes that mark the syntactic relationships (Nichols 1986: 56). A noun phrase's head is a noun that can be modified by several elements. In this section, I will present the modifiers that can can modify the head of the Mochica noun phrase and will account how these elements interact within the NP. In this manner, I will deal briefly with demonstratives in 4.6.1.1., adjectives in 4.6.1.2., numerals and numeral classifiers in 4.6.1.3., quantifiers in 4.6.1.4., and oblique-genitive modifiers in 4.6.1.5.

4.6.1.1. Demonstratives

As stated in 4.3.2. the three demonstratives in Mochica (the proximal PROX <mo>, the distal DIST <aio> and the anaphoric ANA <çio>) can behave as demonstrative pronouns and demonstrative adjectives. When they behave as pronouns, they can themselves function as the head of the NP. When they behave as adjectives, they can be modifiers of the head within anc NP. In

relation to demonstratives, the preferred order in Mochica is [DEM-N], as exemplified in (109).

(109) <mæiñ efeio angmo cꭓilpi>   (Carrera 1644: 107)

mæiñ   ef-   e-   io   ang   mo   cꭓilpi

1SG.OBL   father-   OBL-   REL₁   COP   DET.PROX   blanket

'This blanket is my father's.'

4.6.1.2. Adjectives

There are extremely few attested adjectives in the *Arte.* Adjectives in Mochica appear in the pre-head position. Amongst the few examples of adjectives, there are adjectives behaving as head modifiers and adjectives behaving as independent heads of NPs. Example (110) shows the adjective <peñ> 'good' functioning as the modifier of <nepæt> 'tree'.

(110) <peño nepæt>   (Carrera 1644: 15)

peñ-   o   nepæt

good-   REL₁   tree

'good tree'

4.6.1.3. Numerals and numeral classifiers

Numerals and numeral classifiers were presented briefly in 4.4.1. and 4.4.2., respectively. A numeral can either modify the head of an NP or itself be the head of an NP. In general, there are very few examples of numerals modifying an NP head because the manner of counting in Mochica demands the use of numeral classifiers. Both numerals and numeral classifiers occupy the pre-head position when modifying within an NP. In what follows, I present

examples of both a numeral (111) and a numeral classifier (112) modifying an NP.

(111) <Aio mang metonæc ñaiñ>   (Carrera 1644: 103)

   Aio   m-   ang   met   onæc   ñaiñ

   DIST   OPT-   COP   bring   one   hen

   'He may bring one hen'

(112) <noc pong mecherræc>   (Carrera 1644: 183)

   noc   pong   mecherræc

   four.BOUND   NUM.CLF.ten   woman

   'forty women'

4.6.1.4. Quantifiers

Quantifiers precede nouns in Mochica, as in example (93), repeated here as (113).

(113) <tunituni ñofæn>   (Carrera 1644: 15)

   tunituni   ñofæn

   many   man

   'many men'

4.6.1.5. Oblique modifiers in possessive constructions

Alienable and inalienable possessive constructions include a marked possessor noun in the oblique-genitive case (I offer an exhaustive analysis of nominal possession in chapter 6). Examples (114) - (117) illustrate possessive constructions. The constructions illustrated by (114) and (115) are cases of inalienable possession in Mochica: the possessed noun in both structures is

the same term of consanguinity, 'son', which, in this language, is expressed as possessed by way of the inalienable possession construction.

(114) <Heuãg eizæn>   (Carrera 1644: 210)

     Heua- ng   eiz-   æn

     Eva-   OBL   child- PL

     'Eva's children'

(115) <tzhæng eiz>   (Carrera 1644: 205)

     tzhæng   eiz

     2SG.OBL   boy/child

     'your child'

In (114) the possessor is the genitive nominal phrase <Heuãg> 'of Eva', and the head of the construction is <eizæn> 'children'; in (115), on the other hand, the possessor is <tzhæng>, 'you', corresponding to the oblique form of the 2SG, and <eiz> 'son' is the head. Based on examples (114) and (115), it can be determined that the order of the possessor noun/pronoun and the possessed noun is of the GenN type or "genitive preceding head noun" (Dryer 2013).

The examples in (114) and (116) are constructions with a nominal possessor, while those in (115) and (117) have a pronominal possessor. Thus, from these examples, it can be stated that in Mochica there is no deviation from the GenN order, unlike in some languages, where pronominal possession implies a distinctive construction that requires a different word order[104].

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[104] Such alternations in word order occur in French, in which the NGen word order of the nominal genitive ("le père de Jean" 'the father of Jean') contrasts with the word order of the pronominal genitive ("son père" 'his/her/their father') (Dryer 2013).

The GenN order not only occurs in cases of inalienable possessive constructions, but also in alienable possessive constructions, both with nominal and pronominal possessors. The examples in (116) and (117) show alienable possessive constructions:

(116) <Pedrong colæd>   (Carrera 1644: 6)

    Pedro- ng   col-   æd

    Pedro- OBL   llama- REL

    'Pedro's horse/llama'

(117) <mæiñ colæd>   (Carrera 1644: 104)

    mæiñ   col-   æd

    1SG.OBL   llama- REL

    'my horse/llama'

Crosslinguistically there are numerous strategies used to express possession. In some languages, the possessor occurs with an affix in the genitive case (Croft 1990: 29, Dryer 2013), as can be seen in Mochica. Thus, on the basis of these examples and, as a summary, it can be said that the oblique-genitive case marked on the possessor is a morphosyntactic means (or strategy) that Mochica uses to establish the relationship of possession between two NPs. In addition to the oblique-genitive case marked on the possessor, Mochica employs morphemes suffixed to the head of the possessive phrase that function as relationals, as in (116) and (117). These suffixes suggest that double marking also represents a strategy of expressing possession in this language.

4.6.2. Word order in NPs

Table 15 offers a summary of the distribution of the noun modifiers within noun phrases. As can be seen, the only possibility is that all modifiers have a pre-head position.

Table 15. Distribution of NP modifiers

type of modifier	pre-head	post-head
demonstratives	+	-
adjectives	+	-
numeral	+	-
numeral classifiers	+	-
quantifiers	+	-
modifying nouns	+	-
attributive possession	+	-