Mochica: Grammatical topics and external relations

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Chapter 5. Verb

5.1. Verbal personal marking in Mochica

Mochica does not deploy verbal affixes for marking person. Instead, this language makes use of special affixes that can be interpreted as clitics, taking into consideration both their promiscuous attachment (they can attach to a range of hosts) and their regular occurrence in second position, as shown in examples (118), (119), (120a), (120b), (120c) and (121). In his attempt to explain these clitics, Carrera (1644: 99-100) presents them as the conjugated forms of the "only one verb in Mochica", that is the "verbum substantivum". Verbum substantivum is the verb 'to be' in the Greco-Latin tradition. As a matter of fact, the affixes he refers to as its declinations are part of a system of non-verbal copulas in Mochica. Adelaar [2004] 2007a: 329-330) refers to these affixes as verbal personal reference markers. Hovdhaugen (2004: 35) calls them personal copula particles. I interpret the markers <-eiñ>, <-az>, <-ang>, <-eix>, <-azchi>, <-ænang> as verbal personal clitics (see Table 16).

Table 16. Mochica verbal personal clitics

	regular form	**reduced form**
1SG	=eiñ	=(i)ñ
1PL	=eix	=ix
2SG	=az	=z
2PL	=az-chi	=z-chi
3SG	=ang	=ng
3PL	=ænang	=ng

The forms that I consider the regular forms are the ones that appear most often in the attested examples in the *Arte*. Those affixes are attached to verbs ending in a consonant. The reduced forms appear attached to verbs ending in a vowel,

which are fairly uncommon. These personal verbal clitics seem to be historically related to the personal pronouns. This hypothesis finds support in the constraint that clearly forbids the use of the personal pronouns in combination with a verb and these clitics. In order to conjugate a verb in the presence of the personal pronouns, one needs to use any of the three invariant copulas, which are presented in 5.2. Examples (118) - (120c) help to clarify this rule. In (118), the presence of the pronoun corresponding to the first person singular <moiñ> makes the example ungrammatical in combination with a conjugated form of the verb <met-> 'bring' and the corresponding verbal personal clitic <=eiñ>.

(118) *<moiñ meteiñ> (Carrera 1644: 95)

moiñ met =eiñ

1SG bring =1SG

*'I bring'

In order to create a grammatical example conveying the meaning 'I bring', one has several options. These options are shown in examples (119), (120a), (120b) and (120c). Example (119) demonstrates how the verb is sufficient when combined with the verbal personal clitics. If using the personal pronoun, one needs to combine the verb with a non-verbal copula ((120a), (120b) or (120c)).

(119) <meteiñ> (Carrera 1644: 95)

met =eiñ

bring =1SG

'I bring'

(120a) <moiñ ang met> (Carrera 1644: 95)

moiñ	ang	met
1SG	COP	bring

'I bring'

(120b) <moiñ e met> (Carrera 1644: 95)

moiñ	e	met
1SG	COP	bring

'I bring'

(120c) <moiñ fe met> (Carrera 1644: 95)

moiñ	fe	met
1SG	COP	bring

'I bring'

Besides this evidence, the forms of the personal pronouns <moiñ> 'I' and <tzhang> 'you', can easily be analyzed as containing these clitics attached to the proximal <m(o)> and anaphoric <ç(io)> demonstratives/determiners, respectively. That is, one could segment these pronouns as <m(o)=iñ> 'this I am' and <tzh=ang> 'that you are' where <tzh-> may be a reduced form of <ç(io)> 'that'.

The following examples (121), (122), (123) and (124) show the promiscuity of the personal verbal clitics. Example (121) shows the 1SG personal verbal clitic <=eiñ> attached to the verb <met-> 'to bring'. As can be seen, the regular form of the clitic is attached to this consonant-final verb.

(121) <Meteiñ xllac> (Carrera 1644: 98)

met =eiñ xllac

bring =1SG fish

'I bring fish'

Example (122) shows the second person singular 2SG verbal personal clitic <=az> attached to the adpositional phrase <Dios len> 'with God':

(122) <Dios len az loc> (Carrera 1644: 210)

[Dios len] =az loc

[God COM] =2SG be

'You are with God'

Example (123) shows the second person singular 2SG verbal personal clitic <=az> attached to the determiner phrase, which contains <pup> 'wood', 'stick' as its head.

(123) <Mo pupaz mitæc moiñ> (Carrera 1644: 65)

[Mo pup] =az mit- æc moiñ

[DET.PROX stick] =2SG bring- BEN 1SG

'You bring me this wood'

The following example (124) shows the first person singular 1SG personal verbal clitic attached to the noun phrase constituted by the agent nominalization <çiam chipæc>, which means 'human being'.

(124) <çiam chipæc eiñ> (Carrera 1644: 45)

[çiam chi- pæc] =eiñ

[live be- AG.NMLZ] =1SG

'I am a human being'

5.2. Invariant copulas

Mochica has a system of copulas, which consists of the clitics presented above in Table 16 and a subsystem of three invariant copulas, namely <e>, <fe/-f> and <ang> (see Table 17). These three invariant copulas can alternate with one other without altering the meaning, as Carrera (1644: 31) clarifies with examples. There does not seem to be a clear principle governing their alternation. See examples (125), (126) and (127).

(125) <Moiñ e> (Carrera 1644: 30)

Moiñ e

1SG COP

'I am'

(126) <Moiñ ang> (Carrera 1644: 30)

Moiñ ang

1SG COP

'I am'

(127) <Moin[sic] fe> (Carrera 1644: 30)

Moin fe

1SG COP

'I am'

The copula <ang> seems to have a direct **morphological** relation to the third person clitic <=ang>. The copula <ang> is attested in some examples with the following variants: <ng>, <ong>, <æng> (Hovdhaugen 2004: 34).

Table 17. Nonverbal copulas in Mochica

<e>
<fe>, <=f>
<ang>

5.3. Copular verbs

Furthermore, Mochica has two copular verbs, namely, <chi> 'to exist', 'to be' and <loc> 'to be', 'to stand' (see Table 18).

Table 18. Copula verbs in Mochica

<chi-> 'to exist, to be'
<loc-> 'to be', 'to stand'

These two copular verbs occur with the verbal personal clitics. Because the verb <chi-> ends in a vowel, it takes the clitics in their reduced forms (see (128)), and because <loc-> ends in a consonant, it accepts the regular full forms of the clitics (see (129)). The copular verb <loc-> functions as an auxiliary verb when the verb in question is a Spanish loan word, as shown in (130); see Carrera (1644: 147).

(128)	<chi=ñ>	1SG	'I am'	(Carrera 1644: 37)
	<chi=z>	2SG	'you are'	
	<chi=ng>	3SG	'she/he is'	
	<chi=jx>	1PL	'we are'	
	<chi=zchi>	2PL	'you are'	
	<chingæn=ang[105]>	3PL	'they are'	

The function of verb <loc> as auxiliary is clearly explained in Carrera (1644: 147), where the colonial grammarian claims that <loc> does not have a proper meaning of his own but takes on the meaning of the verb it combines with; see example (130). Throughout the *Arte,* this verb <loc> does not appear attested conjugated according to all grammatical persons; those attested are shown in (129).

(129)	<loqu=eiñ> / loc=aiñ	1SG	(Carrera 1644: 147)
	<loc=æz> / loc=az	2SG	
	<loc=æng>	3SG	

Example (130) shows how <loc> behaves as an auxiliary to the Spanish loan verb <confesar> 'to confess'.

(130)	<confessar eiñ loc>			(Carrera 1644: 147)
	confessar	=eiñ	loc	
	confess	=1SG	AUX	
	'I am confessing'			

[105] Adelaar (personal communication, April 24, 2019) suggests that in <chi-ngæn=ang>, the segment <ngæn> may be a hiatus filler.

5.4. Tense, Aspect and Mode

It is challenging to fully understand the Mochica verbal paradigm because Carrera (1644) follows the Latin tradition strictly and appears to force the Mochica language to fit its paradigm. Moreover, Carrera's orthographic representation of words is misleading. In order to determine if there is a suffix or an independent particle involved with the verb stem, I follow a simple principle: I take the position of the verbal personal clitic as a reference. Taking the verbal stem into account, I consider suffixes all the elements that attach to it before the clitic is attached. I consider the elements that come after the clitic, to be particles. In this respect, following Carrera (1644), one can summarize that the Mochica verb codes tense, aspect and mode by means of suffixes and separate non-inflecting particles or separate words. The natures or origin of these particles are obscure. Tense, Aspect and Mode "are operations that anchor or ground the information expressed in a clause according to its sequential, temporal, or epistemological orientation" (Payne [1997] 2003: 253). In what follows, I record the forms Carrera (1644) reports in terms of tense, aspect and mood.

5.4.1. Tense and Aspect

There are two basic ways in which one can relate an event to a time line. First, by locating events relative to the present moment; in this sense, time location is an essential concept to the linguistic category of Tense. Second, one can discuss a situation's internal temporal contour (whether it is to be represented as a point on the time line, or as a stretch of the time line). This refers to aspectual operations in languages. Aspect is closely related to Tense. While Tense refers to the grammaticalized expression of location in time, Aspect refers to the "grammaticalization of expression of internal temporal

constituency" (Comrie 1985: 6; Dahl & Velupillai 2013; Payne [1997] 2003: 238). Following Carrera's account, I have decided not to tease apart Tense and Aspect and present both in this section. In relation to Tense, I follow the grammarian's proposal and offer a tense system divided into past, present and future.

5.4.1.1. Present tense

Present tense refers to the relation between the time an event takes place and the moment the clause has been uttered. In Mochica, present tense was located in a time slot reported in Carrera's account. Carrera's information deals with the concept of past (events) in this language. Carrera (1644: 65) reports that the Mochica speakers considered an event belonging to the past only after ten to twelve hours had passed. This information worried the colonial grammarian, which may have influenced his description of the language following patterns that did not apply to Mochica grammar. The fact that in Mochica there was no grammatical device for expressing all tenses as in Spanish or Latin does not mean that Mochica speakers had a different concept of time. In what follows, I record the forms Carrera (1644) reports concerning tense, aspect and mood.

The present tense is expressed with the basic verb stem and the corresponding verbal personal clitic attached to it; see example (131).

(131) <Meteiñ xllac> (Carrera 1644: 98)

Met =eiñ xllac

Bring =1SG fish

'I bring fish'

5.4.1.2. Past Tense

In comparison to the present tense, past tense is characterized by the presence of some overt markings that distinguish different past forms in Mochica. Carrera (1644) registers, following the Spanish past forms, the following forms in Mochica: the imperfect indicative ("pretérito imperfecto", see 5.4.1.2.1.), the perfect indicative ("pretérito perfecto", see 5.4.1.2.2.) and the past perfect or pluperfect ("pretérito pluscuamperfecto"; see 5.4.1.2.3.).

5.4.1.2.1. The imperfect (indicative)

The imperfect is expressed through the basic form of the verb attached to the verbal personal clitic (like in the present tense) and the particle <piñ>. Based on both the name Carrera attributes to this tense and on the translation he offers, I suggest this form to have an imperfective aspect. I propose that the particle <piñ> may be an imperfective marker. Hovdhaugen (2004: 57-58) believes that the imperfective character of this particle is only valid with the invariant copula <e> as in <moiñ e piñ> 'I was' (Carrera 1644. 31), and with the copular verb <chi-> as in <chiñ piñ> 'I was' (Carrera 1644: 37). However, example (132) shows how another verb, namely <met-> 'to bring', occurs with the first person verbal personal clitic and the particle <piñ>.

(132) <meteiñ piñ> (Carrera 1644: 47)

met =eiñ piñ

bring =1SG IPFV

'I was bringing'

5.4.1.2.2. The perfect (indicative)

This tense is expressed with the aid of the participial morpheme <Vd(V)> suffixed to the verb stem; after this suffix, the verbal personal clitic is attached, as presented in example (133). This tense has a perfective aspect.

(133) <metedaiñ> (Carrera 1644: 48)

met- ed =aiñ

bring- PTCP =1SG

'I have brought'

5.4.1.2.3. The past perfect or pluperfect

The pluperfect or past perfect is expressed through the perfect (indicative) forms, presented in 5.4.1.2.2., along with the particle <piñ>. This tense has a perfective aspect.

(134) <metedaiñ piñ> (Carrera 1644: 48)

met- ed =aiñ piñ

bring- PTCP =1SG IPFV

'I had brought'

5.4.1.3. Future Tense

There are two ways to express the future in Mochica: with the future particle <ca> (5.4.1.3.1.) and with the aid of grammaticalized verb 'to go' <t-> (5.4.1.3.2.).

5.4.1.3.1. Future particle <ca>

When explaining the future form, Carrera (1644: 33) offers examples with the element <ca>. Considering the distribution of <ca>, I conclude that it is not a

suffix, but rather a particle. The examples provided by Carrera (1644) concern the copular verb <chi-> (135) and the invariant copula <e> (136). Other verbs than those presented in (135) and (136) do not occur with the particle <ca>; the verb <met-> 'bring' and all other verbs behave following the pattern shown below in (138).

(135) <chiñ ca> (Carrera 1644: 39)

chi =ñ ca

be =1SG FUT

'I will be'

(136) <moiñ e ca> (Carrera 1644: 33)

moiñ e ca

1SG.DIR COP FUT

'I will be'

5.4.1.3.2. Verb <t-> 'to go'

Payne ([1997] 2003: 253) and Dahl & Velupillai (2013) claim that future tense markers often derive historically from free-standing verbs meaning 'want', 'come' or 'go'. In Mochica, the verb 'to go' <tæ-> seems to be grammaticalized, as <t-> functions as a future prefix; it precedes the verb stem, which is then followed by the future particle <ca> (137). Example (138) shows how the particle <ca> can be used to express the future tense with verbs other than copular ones. Carrera (1644: 49) explains that the addition of the particle <ca> does not affect the meaning of the future construction in (137).

(137) <Tiñ met> (Carrera 1644: 49)

T =iñ met

go =1SG bring

'I will bring'

(138) <tiñ metca> (Carrera 1644: 80)

t =iñ met ca

go =1SG bring FUT

'I will bring'

5.4.2. Mode

According to Payne ([1997] 2003: 244), "mode describes the speaker's attitude toward a situation, including the speaker's belief in its reality, or likehood".

5.4.2.1. The optative mode

Dobrushina, van der Auwera and Goussev (2013) refer the term optative to "an inflected verb form dedicated to the expression of the wish of the speaker". In Mochica, one discovers the optative form <ma->, which seems to be a verb, as shown in 5.4.2.1.1. Moreover, these authors consider the subjunctive, the desiderative and the imperative as categories related to the optative. That is why I include the imperative category under the optative mood in 5.4.2.1.2.

5.4.2.1.1. The optative form <ma->

The element <ma-> appears between the verb stem and the personal verbal clitic. Adelaar ([2004] 2007a: 337) interprets it as desiderative. Middendorf (1892: 139-140) assumes this <ma-> morpheme to be a subjunctive form (the

German Konjunktiv) serving as optative. Hovdhaugen (2004: 45-46) sees <ma-> as an irregular verb and refers to it as the "optative-subjunctive verb". I consider the approach that treats this element to be a verb the most appropriate with respect to the position <ma-> occupies and its status as a clitic hosting element. In relation to <ma->, I prefer to think of its function as expressing optative mode. Example (139) shows the paradigm presented by Carrera (1644: 40) with the copular verb <chi-> 'to be'. The same pattern occurs with other verbs, such as <met-> 'to bring''; see (140).

(139)	<chi ma=iñ>	'I may be'	(Carrera 1644: 40)
	<chi ma=z>	'you may be'	
	<chi ma=ng>	'she/he may be'	
	<chi ma=ix>	'we may be'	
	<chi ma=zchi>	'you may be'	
	<ching æn m=ang>	'they may be'	

(140)	<met-ma=iñ>	'I may bring'	(Carrera 1644: 81-82)
	<met-ma=z>	'you may bring'	
	<met-ma=ng>	'she/he may bring'	
	<met-ma=ix>	'we may bring'	
	<met-ma=zchi>	'you may bring'	
	<met-æn-m=ang>	'they may bring	

Interestingly, when the personal pronoun is present in the structure, the formation of the optative is slightly different, due to the constraint rule seen in (118). The presence of the pronoun does not allow the presence of the verbal personal clitic. This way, the verb <ma-> only accepts the ending of one of the invariant copulas <-(a)ng>, as shown in (141).

(141) <moiñ mang chi> (Carrera 1644: 34)

moiñ	m	=ang	chi
1SG.DIR	OPT	=COP	be

'I may be'

5.4.2.1.2. The imperative

Imperatives serve to express the speaker's wish about a future state of affairs. In this respect, they are like optatives; but in contrast to these, they convey an appeal to the addressee(s) to help make the future state of affairs true (van der Auwera, Dobrushina & Goussev 2013).

In general, one can state that Mochica presents a dedicated morphological marker <-an> for the second person singular imperative; this is shown in example (142). For the second person plural imperative, the marking is <an-chi>, as shown in example (143). Interestingly, Carrera (1644: 50) registers the use of the optative for the second person and third person singular and plural as imperative forms; see examples (144a) and (144b). With the small sample of examples with the imperatives formed with the optative forms, one cannot affirm that there would be imperative morphology dependent on the type of verb. The use of the optative in the examples in (144a) and (144b) is probably just the option of weakening the imperative mode when presenting wishes or demands.

(142) <Metan> (Carrera 1644: 50)

Met-	an
bring-	2SG.IMP

'Bring!'

(143) <Metanchi> (Carrera 1644: 50)

Met- an- chi

bring- 2SG.IMP- PL

'Bring!'

(144a) <metmaz> (Carrera 1644: 50)

met- m =az

bring- OPT =2SG

'Bring!' ('You may bring')

(144b) <metmang> (Carrera 1644: 50)

met- m =ang

bring- OPT =3SG

'He/She may bring'

Carrera (1644: 117-118) explains that the particle <an> can also precede the base form of the verb, when it is in the singular; see example (145). In the plural, the structure changes and the verb comes in between <an> and the pluralizing element <chi>; see example (146). The resulting structures recorded in the *Arte* have an imperative meaning, as noted by Adelaar ([2004] 2007a: 337) and can be translated as 'Come to [verb in infinitive]!'. Adelaar ([2004] 2007a: 337) proposed 'Come and …!' as the translations of these expressions.

(145) <An man> (Carrera 1644: 138)

An man

IMP eat

'Come to eat!'

(146) <An metchi> (Carrera 1644: 138)

An met- chi

IMP bring- PL

'Come (PL) to bring (it)!'

5.5. Verbal derivation suffixes

In this section, I concentrate on valency markers in Mochica. Mochica presents five valency changing devices: two increasing valency grammatical morphemes, namely, the causative <-co> and the benefactive-applicative <-(æ)c>, and three decreasing valency markers, which I identify and gloss as: valency marker <-æp>, valency marker <-er> and valency marker <-em>. The most common morphological valency decreasing operations are reflexives, reciprocals, passives and antipassives. I prefer to simply call the two latter markers valency markers in spite of their clear origin as passive markers. The valency markers <-er> and <-em> are considered passive marker traces in the discussion of ergativity in 5.6.

5.5.1. Valency increasing marker: causative <-co>

The grammatical devices for expressing the general notion of causing someone to perform a certain action, deployed by many languages, are referred to as "causatives" (Palmer 1994: 214). Some languages present a special morphological causative affix, which attaches to the base verb (Palmer 1994: 214; Kulikov 2001: 887). Mochica has a morphological causative suffix <-co>, previously identified by Torero (2002: 358), Adelaar ([2004] 2007a: 339) and Hovdhaugen (2004: 40). Causative constructions can be formed on the basis of intransitive (147) and transitive verbs (148). Example (147) shows the case of the intransitive verb <chi-> 'to be' with the causative <-co>, forming <chico-> 'to create', and example (130) shows the case of the

causative suffix <-co> attached to the transitive verb <met->, creating the form <metco-> meaning ‘to make someone bring’.

(147) <chicopæc> (Carrera 1644: 5)

chi-	co-	pæc
be-	CAUS-	AG.NMLZ

‘the creator’

(148) <metecoiñmola> (Carrera 1644: 65)

Met(e)-	co	=iñ	mo	la
bring-	CAUS	=1SG	DET.PROX	water

‘I make (someone else) bring this water’

Moreover, the causative appears very often in combination with the decreasing valency marker <-em>, as shown in (149). Hovdhaugen (2004: 40) and Adelaar [2004] 2007a: 339) recognize the frequent occurrence of the combination of both markers and assume the resulting marker to be a “portmanteau form *-quem*”. Furthermore, the causative suffix appears in combination with the applicative-benefactive <-(V)c>, as shown in (150).

(149) <Tzhæng eiñ funoquem> (Carrera 1644: 71)

Tzhæng	eiñ	funo-	qu-	em
2SG.OBL	1SG.DIR	eat-	CAUS-	VAL_{EM}

‘You make me eat’

(150) <ixllæss ef quec çæc> (Carrera 1644: 209)

ixll-	æss	ef-	qu-	ec-	çæc
sin-	REL	forgive-	CAUS-	BEN-	EVENT.NMLZ

‘forgiveness of sins’

5.5.2. Valency increasing marker: applicative-benefactive suffix <-(V)c>

According to Payne ([1997] 2003: 186), an applicative is a valency increasing operation that brings a peripheral participant into one more central role by making it a direct object. In an applicative construction, "the number of object arguments selected by the predicate is increased by one with respect to the basic construction" (Polinsky 2013). Thus, an applicative construction is an instance of a double object construction. Torero (2002: 352) and Adelaar ([2004] 2007a: 339) have previously called the suffix <-(V)c> applicative, while Hovdhaugen (2004: 40) prefers to call it benefactive. In my analysis, the suffix in question is an applicative, and its semantic role is mainly that of a benefactive. Example (151) shows a benefactive construction with the applicative suffix <-(V)c> attached to verb <met-> 'bring'. The vowel /e/ in <met-> gets raised to /i/, probably by the presence of the benefactive suffix <-(V)c>.

(151) <mitcan moiñ pei> (Carrera 1644: 109)

mit-	c-	an	moiñ	pei
bring-	BEN-	IMP	1SG	grass

'Bring the grass to me'

5.5.3. Valency decreasing marker: Valency marker <-er>

The suffix <-er>, along with its variant <-ær>, is presented in Carrera (1644: 53-59) as a passive marker. I nonetheless have decided not to refer to it as a passive marker. The reason behind this decision lies in the fact that the trace of a passive marking function can be observed in ergative-like constructions.

In a fully developed ergative alignment, such a trace would no longer be identifiable. See example (152) for an ergative construction in Mochica.

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

eng-	en	eiñ	tzhac-	ær
mother-	ERG	1SG	take-	VAL$_{ER}$

'My mother takes me.'

5.5.4. Valency decreasing marker: valency marker <-em>

The suffix <-em> with its variant <-æm> is presented in the *Arte* as a passive marker. According to the colonial grammarian's explanations and examples (Carrera 1644: 59, 85), one can be quite certain that <-em> and <-er> were interchangeable. Examples (153) and (154) show structures with the valency marker <-em>.

(153) <Pedrong az xllipquem>

Pedro-	ng	=az	xllip-	c-	em
Pedro-	ERG	=2SG	call-	BEN-	VAL$_{EM}$

'Pedro is calling you'

(154) <tzhæng eiñ funoquem>

tzhæng	=eiñ	funo-	c-	em
2SG.ERG	=1SG	eat-	BEN-	VAL$_{EM}$

'You are making me eat'

5.5.5. Valency decreasing marker: <-æp>

The suffix <-æp> has previously been recognized as a valency reducing marker by Hovdhaugen who also refers to it as a passive marker (Hovdhaugen 2004: 41). Torero (2002: 357-358) suggests that it is a reflexive suffix. Personally, I consider it a middle voice marker. Torero's and my suggestion coincide to some extent, especially if one considers that very often middle voice and reflexives get confused in the literature. I have based my decision to analyze this marker as a middle voice marker on functions of the attested examples, and how they correspond to proposed definitions of middle voice – rather than reflexive – semantics. First, concerning middle forms, Kulikov (2013: 265) claims that they typically concentrate on the activity of the base verb on the first argument, since they intransitivize the base verb. On the other hand, Kulikov (2013: 268) describes the reflexive as a derivation that encodes the referential identity of the main argument of the initial structure and some other argument, as in *Mary likes Mary = Mary likes herself*. After examining the available examples, I think the marker <Vp> is most accurately characterized as a middle. In (155) - (159), I illustrate all the examples attested in the *Arte* containing this valency marker <(V)p> as <-æp> in (155) and (157) and other variants, <-ep> in (156) and (158) and <-up> in (159).

(155) <eiæp[106] mang tzhæng polæng mæn> (Carrera 1644: 203)

ei-	æp-	m-	ang	tzhæng	pol-	æng	mæn
do-	MID-	OPT-	COP	2SG.OBL	will-	REL	ACOL

'It shall be done according to your will'

[106] Salas (2002: 95) claims that <eiæp-> means 'to believe' but this is not correct.

(156) <ñofæn pæn ang eiepædo, Iesu Christo> (Carrera 1644: 116)

ñofæn	pæn	ang	ei-	ep-	ædo,	Iesu Christo
man	DAT	COP	do-	MID-	PTCP	Jesus Christ

'Jesus Christ became man'

(157) <En æz tæpæpnæm> (Carrera 1644: 61)

En	æz	tæp-	æp-	næm
Wish	2SG	flog-	MID-	PURP

'Do you wish to be flogged?'

(158) <cɥumepeiñ> (Carrera 1644: 66)

cɥum-	ep	=eiñ
to drink alcohol-	MID	=1SG

'I get drunk'

(159) <rru cɥup ssæc> (Carrera 1644: 219)

rrucɥ-	up-	ssæc
shed-	MID-	EVENT.NMLZ

'bloodshed'

5.6. Ergative constructions in Mochica

Hovdhaugen claimed that Mochica is a "rather special kind of a split ergative language" (2004: 74), based on the fact that the language exhibits recurrent use of passive constructions and the presence of the "agentive case" *–n*. However, I propose instead that attested examples in Mochica are suggestive of the language's transitional state, from a nominative to an ergative system. This system in transition shows traces of an older accusative-like system, namely the passive markings.

The Mochica ergative system can be seen as a system in development, which means that Mochica has not fully emerged as an ergative language. In order to understand the Mochica ergative system in development, relevant information provided by Carrera (1644: 10[107]) needs to be mentioned: the preferred and more elegant form of speaking Mochica was by means of the so-called passive construction. When explaining the use of the oblique forms with kinship terms and specifying that these forms are used in passive constructions, Carrera adds: "This is the elegant way of speaking, and it is so often used, that they use it so much that they never use active [forms]".

This said, I consider the possibility that the thus far called *passive construction* is the basic transitive clause in Mochica. The non-fully ergative system shows the traces of the passive marking, which in turn shows that it has not completely transformed into a full ergative alignment, where such traces would no longer be present. Examples (160) and (161) show ergative constructions in Mochica:

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

eng-	en	eiñ	tzhac-	ær
mother-	ERG	1SG	take-	VAL$_{ER}$

'My mother takes me.'

[107] It is important to note that the pagination in the *Arte* is messy and confusing, sometimes the numeration goes incorrectly like in this case, where according to the original pagination, this quote would be on page 11 but if one follows the pages, it is actually page 10.

(161) <mæiñ ang metær xllac> (Carrera 1644: 98)

mæiñ	ang	met-ær	xllac
1SG.ERG	COP	bring-VAL$_{ER}$	fish

'I bring fish.'

In a construction like the one exemplified in (160) and (161), the following characteristics can be mentioned:

a. the verb bears the trace of a passive marking: VAL$_{ER}$ in both cases (160) and (161). The verb seems to be more like a peripheral element. A more advanced ergative system does not show tracking of older accusative valency marker;

b. the object and intransitive subject are unmarked;

c. the agent is marked with the oblique case that in these constructions I gloss as ergative ERG, as in (161), but can accept a special marking <-en> if it is a noun belonging to the class constituted of kinship terms, as in (160).

Such a construction is the one I consider the basic transitive clause in Mochica.

5.7. Constituent order

It is often assumed that free word order implies a significant amount of morphological marking. Nevertheless, Mochica presents rather free constituent order, with a lack of overt morphological distinction between arguments. Mochica has a preferred order, that is, Agent-Verb-Object order in transitive active clauses and Verb-Subject in intransitive clauses (Hovdhaugen 2004: 72-73). In relation to the free order of arguments in Mochica, Torero (2002: 32) identifies three orders, namely SVO, VSO and OSV, as shown in (162), (163), and (164) and (165), respectively. Mochica

copulas and clitics are constrained to the clause initial or second position (Hovdhaugen 2004: 72-73).

5.7.1. SVO Order

(162) <Moiñ ang met xllac> (Carrera 1644: 97)

Moiñ	ang	met	xllac
1SG	COP	bring	fish

'I bring fish'

5.7.2. VSO Order

(163) <Meteiñ xllac> (Carrera 1644: 97)

met	=eiñ	xllac
bring	=1SG	fish

'I bring fish'

5.7.3. OSV Order

(164) <Pupeiñ met mæiñan ainæm> (Carrera 1644: 102)

pup	=eiñ	met	mæiñ	an	ai-	næm
wood	=1SG	bring	1SG.OBL	house	do-	PURP

'Wood I bring to build my house' / 'I bring wood to build my house'

'Food I bring for you' / 'I bring food for you'

5.8. Clause combinations

In every language there are different ways of combining elements to create more complex expressions. In this section, I deal with the strategies Mochica deploys when combining clauses, which essentially means combining verbs.

Coordination (5.8.1.) and subordination (5.8.2.) are the means of combining clauses in Mochica.

5.8.1. Coordination

The term coordination refers to the linkage of two or more clauses of equal grammatical status. In this way, it involves a syntactic construction in which units of the same type get combined into a larger unit while still retaining the same semantic relations with other surrounding elements such as verbs, phrases, subordinate clauses or full sentences (Haspelmath 2007: 1). All languages seem to have morphosyntactic means of achieving coordination. The particle or affix that serves to link the elements of a coordinate construction is called the coordinator. The most common coordinator is 'and' and its equivalents in other languages, but other semantic types of coordinators also exist, such as 'or', 'but' and 'for'. Each of these coordinators create different coordinations: conjunctive, disjunctive, adversative and causal, respectively (Haspelmath 2007: 1-2). One can find all of these coordinate constructions in Mochica, shown in examples (166) - (169) below; all coordinators and coordinations in Mochica were first noted by Hovdhaugen (2004: 59-63), who calls the coordinators "conjoining particles".

5.8.1.1. Conjunctive coordination

The conjoining element <allo> meaning 'and', 'also', 'too', according to attested examples, is used to conjoin numerals, as in **<**pacpong allo onæc> 'ten and one'. Hovdhaugen (2004: 59-60) considers that <allo> functions as a coordinator of clauses; however, the only element I would consider to be a clausal coordinator is the particle <çæn>, which in most cases is located at the

end of the clause. Example (166) is the answer to the question of where the Virgin Mary is (Carrera 1644: 211).

(166)

<Cuçiang nic fe loc, moix tana ærqueng tana çæn> (Carrera 1644: 211)

Cuçia-	ng	nic	fe	loc	moix	tana	ærc-	eng	tana	çæn
Heaven-OBL		INE	COP	be	soul	COM	flesh-	DEREL	COM	and

'(She) is in the heaven, (she is) with her soul and (she is) with her flesh.'

5.8.1.2. Disjunctive coordination

The element <æzta>, meaning 'or', is used for conjoining disjunctive clauses; it occurs in sentence final position, as does the conjunctive coordinator <çæn>. Example (167) is a question posed in relation to sins regarding sexual intercourse in the confessionary part of Carrera's work (1644).

(167)

<Aiapcoz mo mæno ixll iglesiang nic, sementeriong nicæzta?> (Carrera 1644: 169)

Aiapcoz mo mæno ixll iglesiang

Ai-	apc-	oz	mo	mæn-	o	ixll	iglesia- ng
do-	AG.NMLZ-	2SG	DET.PROX	ACOL-	REL$_1$	sin	church-OBL

nic sementeriong nicæzta

nic-	sementerio-	ng	nic	æzta
INE	cemetery-	OBL	INE	or

'Have you committed this kind of sin in the church or in a cemetery'

5.8.1.3. Adversative coordination

Hovdhaugen (2004: 62) registers <xain> as 'but'. Nevertheless, I believe that the element meaning 'but' is actually <xaiñ>. Example (168) shows the use of <xaiñ>.

(168)

<ixll eix tæca xaiñ çie maix llica, çio ech ech, pisso chiçæc pæn> (Carrera 1644: 173)

ixll eix tæca xaiñ çie maix llica

ixll	=eix	tæca	xaiñ	çie	ma-	ix	llica,
sin	=1PL	go	but	DEM.ANA	OPT-	1PL	wish/want

çio ech ech, pisso chiçæc pæn

çio	ech ech	piss-	o	chi-	çæc	pæn
DEM.ANA	everything	bad-	REL$_1$	be-	EVENT.NMLZ	ESS

'But we sin, if we want everything with bad intention'

5.8.1.4. Causal coordination

The particle <ap> is the causal coordinator; example (169) demonstrates its use.

(169)

<aiessti mo ixnam ixllinic, ap, çio mæno luninic caf læssæc> (Carrera 1644: 223)

aiessti mo ixnam ixllinic, ap, çio

aiessti	mo	=ix	nam	ixll-	i-	nic	ap	çio
this way	DET	=1PL	fall	sin-	OBL-	INE	for	DEM.ANA

mæno luninic caf læssæc

mæn-	o	lun-	i-	nic	caf	l-	æssæc
ACOL-	REL1	day-	OBL-	INE	work	be-	EVENT.NMLZ

'This way we fall into sin for we worked during that (referring to Sunday) day'

5.8.2. Subordination

Subordination involves one independent clause and one or more dependent clauses. An independent clause is fully inflected and can, on its own, be integrated into discourse. A dependent clause depends on some other clause for at least part of its inflectional information (Payne [1997] 2003: 306). I have identified the following means of subordinating clauses in Mochica: the sequential suffix <-top> (5.8.2.1.), the purposive suffix <–næm> (5.8.2.2.), the obligation particle <chæm> (5.8.2.3.) and nominalization as a subordinating strategy (5.8.2.4.).

5.8.2.1. Sequential suffix <-top>

Hovdhaugen (2004: 46-48) analyzes and registers several examples of the use of <-top>. He identifies <-top> as a sequential suffix. There are clear examples in the *Arte* that show this sequential character of <-top>; see example (170). In (170), the sequential <-top> marker is in bold.

(170) <Poncio Pilatong ssap mæn rronom çæc ñomtop. Cruzær capæc quessæc top, çiung ca pæc læmtop, xllangæmtop, altop olo infiernong nic, çoc lunær nico choc top, læmædæno chip çær lucu quich, puytop cuçiang, nic> (Carrera 1644: 207)

<Poncio Pilatong ssap mæn rronom çæc ñomtop.>

Poncio	Pilato-	ng	ssap	mæn	rronom	çæc	ñom-	**top**
Pontius	Pilate-	OBL	word	ACOL	suffer	EVENT.NMLZ	receive-	SEQ

<Cruzær capæc quessæc top, çiung ca pæc læmtop>

Cruz-	ær	capæc	que-	ssæc	**top**	çiung	capæc	læm-	**top**
Cross-	OBL	SUPE	nail-	EVENT.NMLZ	SEQ	3SG.OBL	SUPE	die-	SEQ

<xllangæmtop, altop olo infiernong nic,>

xllang-	æm-	**top**	al-	**top**	ol-	o	infierno-	ng	nic
bury-	VAL$_{EM}$-	SEQ	descend-	SEQ	fire-	REL$_1$	hell-	OBL	INE

<çoc lunær nico choc top, læmædæno,>

çoc	lun-	ær	nic-	o	choc-	**top**	læm-	æd-	æn-	o
three.BOUND	day-	OBL	INE-	REL$_1$	resurrect-	SEQ	die-	PCTP	PL-	REL$_1$

<chip çær lucų quich, puytop cuçiang, nic>

chi-	pçær	lucųqu	ich	puy-	**top**	cuçia-	ng	nic
be-	AG.NMLZ	INTRT	ABL	ascend-	SEQ	heaven-	OBL	INE

The literal translation of the extract of the Creed prayer would be: '(He) received suffering after Pontius Pilate's orders and they nailed him on top of a cross on which he died, they buried him, he descended to the fire of hell, after three days he rose from amidst the dead ones and ascended to heaven'. (He suffered under Pontius Pilate, was crucified, died and was buried. He descended into hell. On the third day he rose again. He ascended into heaven.)

5.8.2.2. Purposive suffix <–næm>

The suffix <–næm> was referred to as a "dative gerund" by Carrera (1644: 53, 69, 60). In the Latin grammatical tradition, the term 'gerund' refers to verbal nouns, i.e. nominalizations. This label used by Carrera is misleading, but it offers some idea of its function. In Latin, the dative gerund was thought to express purpose, but in fact, the purposive was more commonly expressed with the preposition *ad* and the allative gerund (Luraghi 2010: 43[108]). Carrera (1644), following the Greco-Latin tradition of grammatical description, applied the term 'dative gerund' to the Mochica suffix <-næm>. This suffix can be analyzed as a purposive suffix and is sometimes used, according to Carrera's own recommendations, in connection with verbs meaning 'to wish' <loc-> and 'to say' <eng-> (Carrera 1644: 60), as in other languages of the

[108] "The dative denotes transfer, and possibly its original function was to denote Direction; extension of the dative to Purpose is based on its directional meaning. The Latin dative inherited this function to a limited extent only; the preposition ad, which conformed to the same metaphor, occurs with gerunds" (Luraghi 2010: 43). Moreno (2014: 55) mentions that the gerund in Spanish sometimes has the meaning of purpose.

world. Example (171) represents how <-næm> functions in a purposive clause in connection with the verb ‘to wish’:

(171) <funonæmeiñloc> (Carrera 1644: 60)

funo-	næm	=eiñ	loc
eat-	PURP	=1SG	wish/want

‘I want to eat’.

Examples (172) and (173) illustrate clauses in which the suffix <-næm> functions as a purposive suffix without the verb ‘to wish’:

(172) <Pupeiñ met mæiñ an ainæm> (Carrera 1644: 102)

Pup	=eiñ	met	mæiñ	an	ai-	næm
Wood	=1SG	bring	1SG.OBL.GEN	house	make-	PURP

‘I bring wood to construct my house’

(173)

<Diosi cæfæroiñ fel ame, tzhæng ssap næmnæm, tzhang çæn ixllæss en quich ssælnæm> (Carrera 1644: 163)

Dios-	i	cæf-	ær[109]-	o	=iñ	fel	ame,	tzhæng	
God-	OBL	pay-	NMLZ-	REL_1	=1SG	sit/be	this way	2SG.GEN	

ssap	næm-	næm[110],	tzhang	çæn	ixll-	æss-	e-	n	quich
word	listen-	PURP	2SG	too	sin-	REL-	OBL-	INE	ABL

ssæl-	næm
absolve-	PURP

'This way I am here as God's substitute to listen to you and to absolve you from your sins'.

This suffix very often appears in combination with the valency markers <-er>, as in (174a), and <-em>, as in (174b).

(174a) <meternæm> (Carrera 1644: 163)

met-	er-	næm
bring-	VAL_{ER}-	PURP

'to be brought'

[109] <cæfær> is registered by Carrera (1644: 143) as barter, payment done for something and substitute of someone. <cæp-> is registered as 'to pay' by Carrera (1644: 156).

[110] The verb <næm-> 'to listen' and the purposive suffix <-næm> are surprisingly identical.

(174b) <metemnæm> (Carrera 1644: 163)

met- em- næm

bring VAL$_{EM}$- PURP

'to be brought'

5.8.2.3. Obligation particle <-chæm>

The obligation particle <-chæm> serves the function of aiding to create adverbial clauses with obligational modality. Carrera (1644: 78), in his Mochica grammatical description, claims that <-chæm> is similar to the Latin future in *-rus*. Interestingly, Cholón, another extinct Andean Peruvian language, has a nominalizer *-lam* that refers to an event in the future or an obligation (Alexander-Bakkerus 2005: 255; 2011: 202). In the colonial grammatical description of Cholón by De la Mata ([1748] 2007: 135), *-lam* is compared to the future participle in *-rus,* as well. Hence, we can conclude that both missionaries tried to subsume the tense and modality (future and obligation) that they could recognize in *-lam* and <-chæm>, under the term of future participle *-rus.* Thus, <-chæm> is an element that has the modality of obligation, as shown in examples (175), (176), and (177).

(175) <Chiñchæm> (Carrera 1644: 39)

Chi =ñ- chæm

Be =1SG- OBLIG

'I have to be'

(176) <Chefnamco ang chæm> (Carrera 1644: 78)

chefnam- co ang chæm

get hungry- CAUS 3SG OBLIG

'That one must make the others hungry.'

Example (177) shows <–chæm> used with a Spanish loan verb attached to the copular verb <loc->. The form <locchæm> precedes the Spanish loan verb ‘to confess’.

(177) <Amexllec çænez locchæm confessar> (Carrera 1644: 163)

Amexllec	çæn	=ez	loc-	chæm	confessar
Now	as well	=2SG	be-	OBLIG	confess

‘Now as well you have to confess’

5.8.2.4. Nominalization as subordinating strategy

Subordination strategies in the languages of South America vary greatly, but nominalization is among the most common (Gildea 2008: 11), being characteristic of both Andean languages (van Gijn, Haude & Muysken 2011:10) and Amazonian languages (Dixon & Aikhenvald, 1999: 9). As regards the role of the constituents in the matrix clauses, the subordinate clauses attested in Mochica fall into three functional types: complements, relative clauses and adverbial clauses.

As can be seen in Table 19, many of the suffixes used for lexical nominalization are also used for grammatical nominalization.

Table 19. Lexical and grammatical nominalizers

form	**lexical nominalization**	**section**	**grammatical nominalization**	**section**
<-(V)çVc> / <-(V)ssVc>	event	7.1.1.1.	complementation causal-adverbial	5.8.2.4.2. 5.8.2.4.3.1.
<-(V)pVc>	agentive	7.1.1.2.	embedded argument "headless relative"	5.8.2.4.1.
<-tVc>	locative	7.1.1.3.		
<-Vc>	locative, instrumental	7.1.1.4.		
<-(V)do>	stative	7.2.2.	relativization	5.8.2.4.1.

5.8.2.4.1. Nominalizations serving a relativizing function

Two nominalization constructions, namely agentive nominalization with the <-(V)pæc> nominalizer (7.1.1.2.) and the <-Vd-o> stative nominalizer (7.2.2.), serve a relativizing function in Mochica, as can be observed in examples (178), (179) and (180) respectively. Examples (178) and (179) are cases of headless relative clauses formed with the suffix <-(V)pæc>:

(178) <Tzhichfe [sic] ænta missa acapæc> (Carrera 1644: 44)

Tzhæich-	fe	ænta	missa	ac-	apæc
2PL-	COP	NEG	mass	hear/listen-	AG.NMLZ

'You are the ones who do not listen to mass.'

(179) <aioæne chang tunapæc> (Carrera 1644: 44)

aio-	æn	e	chang	tun-	apæc
that-	PL	COP	brother	kill-	AG.NMLZ

'Those are killers.'

In (179) Carrera himself translates the headless relative clause <chang tunapæc> as killers, literally it would mean 'the ones who kill the brother(s)'.

In example (180), the suffix <-Vd(o)> has a relativizing function:

(180)

<Æntaz taf queix Limac tædô ñofæn> (Carrera 1644: 16)

Æntaz	ta-	f	queix	Lima-	c	t-	æd-	ô	ñofæn
NEG	yet-	COP	return	Lima-	LOC	go-	STATIVE.NMLZ-	REL1	man

'The man who went to Lima has not yet returned.'

5.8.2.4.2. Nominalization serving a complementation function

In the case of complement clause formation in Mochica, the nominalizer involved is <-(V)ssVc> / <-(V)çVc> (see 7.1.1.1.). The relevant examples are shown in (181) and (182).

(181) Confessar læçæc fe poc penitençia (Carrera 1644: 233)

Confessar	læ-	çæc	fe	poc
Confess	be-	EVENT.NMLZ	COP	name/call

penitençia
penance
'The confession is called Penance.'

(182) <la lecɥæc tæ çæc fe poc Baptismo> (Carrera 1644: 233)

la	lecɥ-	æc	tæ-	çæc	fe	poc
water	head-	LOC	go-	EVENT.NMLZ	COP	name

Baptismo

Baptism

'Getting water on the head is called Baptism.'

5.8.2.4.3. Nominalization serving an adverbial function

Adverbial clauses can be defined as clausal entities that modify, in a general sense, a verb phrase or a main clause, and express a conceptual-semantic concept such as simultaneity, causality, conditionality, etc. (Hetterle 2015: 2).

In Mochica, one type of adverbial clause that originated in a nominalization can be identified: the causal clause.

5.8.2.4.3.1. Adverbial causal clauses with the nominalizer <-(V)ssVc>

Example (183) illustrates an adverbial causal clause with the event nominalizer <-(V)ssVc>.

(183) <Santa Iglesiang ssap mænoix cæp, christiano chissæc> (Carrera 1644: 231)

Santa Iglesia-	GEN	ssap	mæn	=oix	cæp,
Holy Church-	GEN	word	according	=1PL	pay,

christiano	chi-	ssæc
christian	be-	EVENT.NMLZ

'According to the Holy Church's teaching, we pay (tithe is implied) because of being Christians'.

5.9. Adverbs

Carrera (1644: 159-161) registers a large number of words that he considers adverbs. I have grouped them as manner, time and locative adverbs.

5.9.1. Adverbs of Manner

<ame>	'this way'	(Carrera 1644: 124)
<aie>	'this way'	(Carrera 1644: 124)
<rripæn[111]>	'suddenly'	(Carrera 1644: 124)
<tipæn>	'suddenly'	(Carrera 1644: 124)
<tuctamæn>	'suddenly'	(Carrera 1644: 124)

[111] Cerrón-Palomino (personal communication, January 14, 2020) suggests that <rripæn> is a Spanish loan from *derrepente* 'suddenly'. The same Spanish term has entered Quechua as *lirripinti.*

5.9.2. Adverbs of Time

Adverbs of time are temporal adverbs that describe "parts of the day and other temporal relations" (Hovdhaugen 2004: 53).

<pelen>	'yesterday'	(Carrera 1644: 123)
<molún>	'today', 'this day'	(Carrera 1644: 123)
<onæc pelen>	'the other day'	(Carrera 1644: 123)
<çie xllec>	'then'	(Carrera 1644: 123)
<ñuchallo>	'a (short) while ago'	(Carrera 1644: 123)
<nang vss>	'a while ago'	(Carrera 1644: 124)
<æpæc>	'always'	(Carrera 1644: 124)

5.9.3. Locative Adverbs

<Min>	‘here’	(Carrera 1644: 127)
<Aiin>	‘there’	(Carrera 1644: 127)
<çin>	‘there’	(Carrera 1644: 127)
<Çiuc>	‘over there’	(Carrera 1644: 127)
<Çinana>	‘in the same place’	(Carrera 1644: 127)
<Çietna>	‘over there’	(Carrera 1644: 127)
<Metna>	‘a bit close’	(Carrera 1644: 127)
<Muquic[sic][112]>	‘from here’	(Carrera 1644: 127)
<Çiuquich>	‘from somewhere else’	(Carrera 1644: 127)
<Olecų totna>	‘upwards’	(Carrera 1644: 127)
<Çæc totna>	‘downwards’	(Carrera 1644: 127)
<Ledæc>	‘outside’	(Carrera 1644: 127)
<Olpæc>	‘inside’	(Carrera 1644: 127)

[112] I presume that the form may be <muquich> instead of <muquic> because the suffix <-ich> expresses ablative case, as seen in 4.1.4.3.2.4.1.