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Competition for the Object Status: The Effects of Referential Factors in Mojeño Trinitario Derived and Non-Derived Ditransitive Verbs

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This paper investigates the effects of referential factors (more specifically the person hierarchy) in non-derived and derived three-participant constructions of Mojeño Trinitario, an Arawak language of Bolivia. The basic effect of referential properties in the three-participant constructions is that only one object may be indexed on the verb, and it has to be a speech act participant. Referential factors thus indirectly create a competition between the two non-agentive arguments for the object status. The person value of the two non-agentive arguments is thus conditioning a construction alternation between a double-object and an indirective alignment based on a semantic role hierarchy ordering Patient and Theme higher than Recipient and Causee. Differences along four tests of objecthood can be observed among the three types of three-participant constructions (ditransitive verb 'give', causativized and applicative-marked monotransitive roots). The clearest conclusion is that derived ditransitive verbs do not behave like non-derived three-participant verbs.

1. Introduction

Mojeño Trinitario, an Arawak language of Bolivia, has already been described as showing effects of referential factors (like person and definiteness) in the expression of the arguments of a two-participant event, more precisely in the co-argument conditioned third person subject marking system (Rose 2011a, Cf. 2.2). The aim of the present paper is to investigate whether effects of referential factors are also found in the argument encoding of non-derived and derived three-participant verbs and to compare these effects among the various constructions expressing events with three participants, and with those of monotransitive verbs as well.

The Trinitario verb roots expressing events with three participants can be grouped in different classes according to their syntactic behavior. Each class also correlates semantically with some particular type of actions. Table 1 illustrates each class with examples.

Canonical ditransitive verb	<i>ijro-ko</i>	'give'
Nomination verbs	<i>no-ko</i>	'call, appoint as'
Caused motion verbs	<i>woni-ko</i>	'take, send'
Utterance verbs	<i>echji-ko</i>	'tell, ask'

Table 1: Various classes of Trinitario verb roots expressing three-participant events

For the purpose of this paper the verb *ijro-ko* 'give' will be used as the canonical ditransitive verb. It is the verb of which the two non-agentive participants most easily compare with the patient of monotransitive verbs, with either human, animate or inanimate referents.¹ Examples (1) and (2) illustrate that the two non-agentive participants of the verb 'give', the theme and the

¹With nomination verbs, the "name/function" is not a prototypical human entity. With caused motion verbs, the recipient is generally inanimate. With utterance verbs, the "utterance" is inanimate.

recipient, can be indexed by a first person object suffix on the verb like the patient of a monotransitive verb (3). The theme and the recipient compete regarding this object property, because there is only one object suffix slot on the verb. This paper will discuss at length the competition for the object status between the two non-agentive participants of three-participant constructions, using the tests of objecthood specified in Table 2. Other classes of non-derived verbs expressing three-participant events will not be treated in this paper (Cf. Rose 2011b for the specific behavior of utterance verbs).

- (1) *ñi tata t-ijro-k-nu-yre Juanu ñi-yeno-nu-yre.*
 ART.M 1SG.father 3F-give-ACT-1SG-FUT Juan 3M-wife-1SG-FUT
 'My father will give me to Juan as his future wife.'
- (2) *su Pransiska t-ijro-k-nu eto-pe 'chatrope.*
 ART.F Francisca 3F-give-ACT-1SG one-CLF knife
 'Francisca gave me a knife.'
- (3) *ema t-kooto-k-nu-yre*
 PRO.M 3F-catch-ACT-1SG-FUT
 'He is going to catch me.'

Tests of objecthood	Non-agentive argument encoding
	Third person subject marking
	Object nominalization
	Passivization

Table 2: The tests of objecthood

This paper will also compare the argument encoding of non-derived and derived three-participant verbs. The hypothesis followed here is that monotransitive roots with causative or applicative derivation should behave like three-participant verbs, as often assumed in the literature:

Causatives of transitive predicates (e.g. *He had the servant taste the food*) are seen as modelled on simple three-participant clauses (like *I gave Mary a flower*, or *She broke it with a hammer* – i.e. mainly ditransitive and instrumental clause types). (Kemmer & Verhagen 1994: 115)

Trinitario has three causative markers, as well as three applicative markers. This paper will focus on the causative *imi-* and the benefactive applicative *-ino*. The causative *imi-* is the only causative marker that is productive with transitive verbs and thus generates derived ditransitive verb forms. The benefactive applicative *-ino* is the only applicative marker that can create competition between the two non-agentive participants to be morpho-syntactically treated like a monotransitive P since the applicative *-i'o* is linked with focalization of the applied object in a special position, and the applicative *-u* is rare. Table 3 repeats the four types of constructions that are going to be compared via the four tests of objecthood given in Table 2.

Constructions to be compared	Monotransitive verbs
	Canonical ditransitive verb <i>ijro-ko</i>
	Transitive roots with causative <i>imi-</i>
	Transitive roots with benefactive <i>-ino</i>

Table 3: The constructions to be compared

Because on the one hand this collection of papers is concerned with referential factors and on the other hand a person hierarchy $1/2 > 3$ is active in monotransitive constructions (Cf. 2.2), this paper will give much attention to speech act participants (SAPs, i.e. first or second person). For this reason, the terminology used in discussing hierarchical systems for A and P² (Cf. for instance Zúñiga 2006) is used in this paper for the two non-agentive participants of three-participant verb forms. "Local scenarios" must be understood as configurations where two SAPs interact, "mixed scenarios" include a third person participant and an SAP, and "non-local scenarios" deal with two third person participants.

Finally, a word of caution is necessary before discussing the data. My corpus of more than six hours of recording of natural data provides almost no example of non-prototypical configurations involving a first or second person theme, causee or applied argument. The consultation of the New Testament translation was also unsuccessful. Elicitation was conducted following the *Questionnaire on referential and lexical determinants of argument and predicate expression in ditransitive constructions* set up by Siewierska and van Lier (2010). One must be careful with scarce data elicited in the field on such unusual and complex discourse contexts. More specifically, the paper will not offer definitive conclusions concerning configurations involving two SAP non-agentive arguments.

2. Preliminaries: The Object of Monotransitive Verbs

Before investigating non-derived and derived ditransitive verbs, the behavior of the P argument of monotransitive verbs will be examined in order to determine criteria for objecthood.

2.1 Monotransitive verbs and non-agentive argument encoding

The arguments of Trinitario monotransitive verbs are unmarked for case and optionally expressed as NPs. When they are expressed as NPs, the usual order is SVO (4). The sole preposition *-e* ~ *-ye'e* is restricted to oblique arguments.

Person indexation on the verbs follows a nominative-accusative pattern, with prefixes for A (4)(6) or S (5) and suffixes for P (6). The distribution of the alternating third person subject prefixes is detailed in the following sub-section. Overt suffixes are only found for first and second person object (6); a third person object is not indexed on the verb (4).

(4)	<i>ma</i>	<i>t-siso</i>	<i>'chane</i>	<i>ma-m-po</i>	(<i>ma</i>	<i>'chane</i>).
	[ART.M	3-black	person] _s	3M-carry-PERF	[ART.M	person] _o
	'The black man took the man/him.'					

²A stands for the more agentive participant of a transitive clause, P for the most patientive one, and S for the single argument of an intransitive clause (Comrie 1978).

(5) *t-epeno-po*
 3-die-PERF
 'He/she died.'

(6) *ty-okpo-wokovi*
 3-meet-1PL
 'He/she meets us.'

2.2 Monotransitive verbs and third person subject marking

Trinitario presents a very particular split subject marking system limited to third person subjects and mainly conditioned by the object co-argument. A set of five verbal markers specified for humanness, number, gender and speaker's gender (*ta-*, *na-*, *s-*, *ma-*, *ñi-*)³ competes with a semantically unspecified third person prefix *ty-* ~ *t-*.⁴ Their distribution depends on transitivity in a very broad sense, i.e. the number of participants, but also referential factors of both A and P such as person and definiteness, modality, pragmatic roles of the arguments and discourse function of the utterance (Rose 2011a). Table 4 presents the third person A marking on monotransitive verbs, depending on its main conditioning factor, i.e. the person of the P (overt or not) co-argument. To summarize, a specified prefix is normally used when both P is a third person (4). When P is an SAP *ty-* ~ *t-* is used (6) just like on intransitive verbs (5).

	P 3	P 1/2
A3	<i>ta-</i> , <i>ma-</i> , <i>ñi-</i> , <i>s-</i> , <i>na-</i> (4)	<i>ty-</i> ~ <i>t-</i> (6)

Table 4: The co-argument conditioned marking of third person A

2.3 Monotransitive verbs and object nominalization

Trinitario displays many nominalization devices, among which are three object nominalizers. They differ in aspect: *-ru* (punctual as in (7)), *-giene* ~ *-gne* (general as in (8)), *-sare* (habitual as in (9)). Object nominalization is not restricted to prototypical patients of prototypical transitive verbs: the patient can be human or non-human, and the verb stem can express perception, utterance or cognition events.

(7) *to* *n-ni-ru*
 ART.NH 1SG-eat-PNCT.O.NZ
 'my lunch/dinner'

³*ta-* non-human, *na-* human plural, *s-* human singular feminine, *ma-* human singular masculine (male speaker), *ñi-* human singular masculine (female speaker).

⁴The allomorphic variation *ty-* ~ *t-* is phonologically conditioned: *ty-* is found before /a, o, u, h <j>/, *t-* is found before /i, e, all other C/.

- (8) *to* *n-ni-k-giene*
 ART.NH 1SG-eat-ACT-GEN.O.NZ
 'my food'
- (9) *to* *n-ni-k-sare*
 ART.NH 1SG-eat-ACT-HAB.O.NZ
 'my regular diet'

2.4 Monotransitive verbs and passivization

The Trinitario passive marked with *ko-...-si* promotes the P argument to subject position. The A is demoted to an oblique position, introduced by the sole Trinitario preposition *-e ~ -ye'e*, which is always inflected with a person prefix.

- (10) *ñi-ko-kopa-ko-si* *ñ-e* ' *ñi* *Peru.*
 3M-MID-kill-ACT-PASS 3M-PREP ART.M Pedro
 'He was killed by Pedro.'

In this section, four criteria for objecthood were given, two regarding the morphological encoding of arguments (encoding of the object and of a third person subject), two regarding the accessibility to syntactic constructions (object nominalization and passivization). These four criteria will now be used to compare the non-agentive arguments of three-participant verb forms with the P of monotransitive verbs and determine which ones can be considered objects.

3. The Non-Agentive Arguments of the Non-Derived Ditransitive Verb 'Give'

This section will compare the T (theme) and R (recipient) arguments of the verb *ijro-ko* 'give' and compare it to the P of monotransitive verbs. Following Malchukov et al. (2010), there are three basic ditransitive alignment types: indirective alignment when T behaves like P, and R behaves differently; secundative alignment when R behaves like P, and T behaves differently; neutral alignment when T and R both behave like P, in a so-called double-object construction. Another pattern has been called hierarchical (Siewierska 2004: 57-61) or inverse (Haspelmath 2007), when the encoding of the non-agentive arguments depends on their relative position on some referential hierarchy.

Indirective alignment	T = P ≠ R
Secundative alignment	T ≠ P = R
Neutral alignment	T = P = R
Hierarchical/Inverse alignment	Depending on relative position of T and R

Table 5: Ditransitive alignment types

3.1 The non-derived ditransitive verb 'give' and non-agentive argument encoding

As summarized in Table 6, the behavior of the T and R arguments of the verb *ijro-ko* 'give' shows a construction split between a double-object construction with neutral alignment (P=T=R) and an indirective alignment (P=T≠R).

	R 3	R 1/2
T 3	double-object construction (11) (12)	double-object construction (13)
T 1/2	double-object construction (15) or indirective alignment (16) -two elicited examples-	indirective alignment (14)

Table 6: The encoding of the non-agentive arguments of the non-derived ditransitive verb *ijro-ko*

When both T and R are third person, both non-agentive arguments occur as post-verbal NPs in either order, in a double-object construction.⁵

- (11) *su Pransiska s-ijro-ko ma Leonaato eto-pe 'chatrope.*
 ART.F Francisca 3F-give-ACT ART.M Leonardo one-CLF knife
 'Francisca gave Leonardo a knife.'

- (12) *su Pransiska s-ijro-ko eto-pe 'chatrope ma Leonaato.*
 ART.F Francisca 3F-give-ACT one-CLF knife ART.M Leonardo
 'Francisca gave Leonardo a knife.'

When T is third person and R is an SAP, then T is expressed as an NP_O and R is indexed on the verb with an object suffix. This is also a double-object construction.

- (13) *su Pransiska t-ijro-k-nu eto-pe 'chatrope.*
 ART.F Francisca 3F-give-ACT-1SG one-CLF knife
 'Francisca gave me a knife.'

In the very rare local scenario where both T and R are first or second person, T seems to be indexed on the verb with an object suffix while R is demoted to an oblique position. This is an indirective alignment.

- (14) *ñi n-iya t-ijro-k-nu p-ye'e.*
 ART.M 1SG-father 3F-give-ACT-1SG 2SG-PREP
 'My father will give me to you.'

Finally, only two elicited examples illustrate the mixed scenario where T is first or second person and R is third person. The two examples do not converge. If they were to be confirmed in a

⁵Constituent order was not tested with two human non-agentive arguments. Both are used without preposition. The corpus does not provide data with both T and R being non-human.

future field work session, they would show two different possibilities. Example (15) is a double-object construction, formally identical to that of example (13). In this specific example, there is no ambiguity on which referent is the T though, thanks to the adjunct specifying the future function of T. Example (16) shows indirective alignment, where T is suffixed on the verb, while R is demoted to an oblique position. Maybe this alternation is due to the fact that, apparently, a pronominal argument for R is never presented as a free pronoun. It is either indexed on the verb in the object suffix slot or within an inflected preposition if access to the suffix slot is not permitted (i.e. for a third person pronoun or when a first or second person is occupying this slot). More data is necessary to postulate a hierarchy NP > Pro.

- (15) *ñi tata t-ijro-k-nu-yre Juanu ñi-yeno-nu-yre.*⁶
 ART.M 1SG.father 3F-give-ACT-1SG-FUT Juan 3M-wife-1SG-FUT
 'My father will give me to Juan as his future wife.'
- (16) *ñi tata t-ijro-k-nu-yre ñi-ye'e*
 ART.M 1SG.father 3F-give-ACT-1SG-FUT 3M-PREP
 'My father will give me to him.'

At first view, the alignment type could be thought of as being hierarchical (for a discussion on hierarchical alignment on transitive verbs, Cf Rose 2003, 2009). The conditioning factor of the construction split could indeed seem to be referential factors, and more specifically the person hierarchy, in that the presence of a first or second person T is a necessary condition for the use of an indirective alignment (Cf. Table 6). This suggests an increase in morphological complexity when T is higher on the referential hierarchy than expected. However, it is not the *relative position* of T and R on the person hierarchy that determines the use of one construction or the other. A similar case is pointed at by Haspelmath (2007), with respect to Jamul Tiipay where any first or second person object (whether R or T) is indexed on the verb (Cf. Miller 2001:162-163). Haspelmath suggests that since it is not the *relative position* of R and T that is involved, hierarchical may not be the right term.⁷ Just as for Trinitario, I would talk in terms of a co-argument conditioned construction split, determined by the person value of the two non-agentive arguments.

The person hierarchy 1/2 > 3 is actually only active in Trinitario in the general morphological condition that prevents a generalized use of the double-object construction: only one suffix slot is available on the verb, and it is restricted to a first or second person object. However, the encoding of the non-agentive argument that is not suffixed on the verb in local or mixed scenarios is not conditioned by the person hierarchy. In local scenarios, where the two non-agentive arguments are speech act participants (SAPs), only one can be suffixed on the verb. In that case, only T has access to that slot, and thus shows a real object status, while R is demoted to an oblique position. It is clearly a grammatical role hierarchy T > R that applies. This analysis

⁶*ñi-yeno-nu-yre* can be analyzed as a separate predicate with the meaning "I am going to be his wife". *-nu* is its subject, just as in the nominal predicate *'jiro-nu-yre* "I am going to be a man" and *ñi-* is a possessive pronoun. This secondary predicate can be interpreted as a functive adjunct to the T argument.

⁷I would extend this criticism to the analysis of Ket (Nefedov et al. 2010), where it is also not the relative position of R and T on the person hierarchy that conditions the indexing, but the relative position of R or T in relation with A. Regarding Jamul Tiipay, Lacroix (2011) argues that the person hierarchy is actually at work specifically when R and T are two SAPs.

depends on confirmation of the grammaticality of the examples with a first or second person T. In mixed scenarios, the status of the third person non-agentive argument can be O if it is a T (13), or be either O or an oblique when it is a R (15)(16). Were we sure of the validity of examples (15) and (16), this would again indicate that T is favored over R as an O.

3.2 The non-derived ditransitive verb 'give' and third person subject marking

Table 7 represents the encoding of a third person subject on the ditransitive verb *ijro-ko* 'give' according to the person of both T and R.⁸ What stands out is that as soon as either T or R is an SAP, *ty-* is used. Thus both T and R show the same behavior as object co-argument, as with neutral alignment.

	R 3	R 1/2
T 3	<i>ta-</i> , <i>ma-</i> , <i>ñi-</i> , <i>s-</i> , <i>na-</i> (11) (12)	<i>ty-</i> ~ <i>t-</i> (13)
T 1/2	<i>ty-</i> ~ <i>t-</i> (15) (16)	<i>ty-</i> ~ <i>t-</i> (14)

Table 7: The encoding of third person A on the ditransitive verb *ijro-ko* 'give'

3.3 The non-derived ditransitive verb 'give' and object nominalization

When any of the three object nominalizers combines with the verb *ijro-ko* 'give', the nominalized element is always T. R can be expressed as an object suffix (17) (18) or as an NP_O (19). Object nominalization thus underlines the favored accessibility of T over R to O status, as in an indirective alignment system.

- (17) *to* *'chatrope* *to* *ñijroonu*⁹ *ñi* *aabeeto*
to *'chatrope* *to* *ñi-ijro-ru-nu* *ñi* *aabeeto*
 ART.NH knife ART.NH 3M-give-PNCT.O.NZ-1SG ART.M Alberto
 'the knife that Alberto gave me'

- (18) *no* *p-ijro-k-nu-gñ-ono*
 ART.PL 2SG-give-ACT-1SG-GEN.O.NZ-PL
 'those you gave me' (Jn 17:9)

- (19) *to* *tamutu* *to* *v-ijro-k-sare* *ma* *Viya*
 ART.NH all ART.NH 1PL-give-ACT-HAB.O.NZ ART.M Lord
 'all we always give to the Lord' (Mk 12:33)

⁸Whether third person arguments are pronominal or not does not make any difference as far as the third person subject marking is concerned.

⁹Systematic vowel deletion elides the /u/ of *-ru*, /r/ is then deleted with the compensatory lengthening of the preceding /o/ (Rose 2011c).

3.4 The non-derived ditransitive verb 'give' and passivization

Under passivization, the T of *ijro-ko* is promoted to S position. No suggested example with R promoted to S position was accepted by the consultants. Again T is favored over R for accessibility to subject of a passive clause, in line with an indirective alignment.

Neither A nor R is expressed in the attested examples. An oblique phrase is interpreted with some other role, such as locative in (20). Maybe this is due to the ambiguity of the sole preposition *-e* ~ *-ye'e*.

- (20) *t-k-ijro-k-si* *to* *'résa-re* *n-ñe'e*¹⁰
 3-MID-give-ACT-PASS ART.NH chicha-N.POS 1SG-PREP
 'The chicha was sold at my house *by me.'

3.5 Summary on the non-derived ditransitive verb 'give'

The construction with the non-derived ditransitive verb *ijro-ko* 'give' shows both neutral and indirective alignment, depending on the criteria (Table 8). The construction split observed indirectly depends on the person hierarchy 1/2 > 3 in that the sole object suffix slot on the verb is restricted to SAP. When both T and R compete for this slot, T is favored over R. The role hierarchy T > R is thus active.

Non-agentive argument encoding	Neutral alignment /Indirective alignment
Third person subject marking	Neutral alignment
Object nominalization	Indirective alignment
Passivization	Indirective alignment

Table 8: Summary of the alignment¹¹ of the ditransitive construction with 'give'

4. The Non-Agentive Arguments of Causativized Verbs With Three Participants

The causative *imi-* ~ *im-* ~ *em-* adds a causer to the semantic valency of the verb root, in the subject position. On an intransitive root, it therefore triggers transitivization with the agent participant (the causee) encoded as an object. On a monotransitive root, it results in a three-participant construction. This section investigates the three-participant argument structure of a monotransitive verb causativized with *imi-*.

4.1 Causativized verbs and non-agentive argument encoding

Causativization of a monotransitive root with *imi-* results in a three-participant construction, where the causer occupies the subject position, and the agent/causee and the patient compete for the object status. A construction split is observed between a double construction, where both the patient and the causee are treated as objects, and an indirective construction, where the causee is

¹⁰Here the initial consonant of the preposition *-ye'e* is nasalized by progressive assimilation of nasality from the preceding consonant.

¹¹It should be repeated here that alignment, in this paper, exclusively refers to the comparison of T and R with P.

an oblique. As shown in Table 9, the split depends on the person values of the patient and the causee.

	Causee 3	Causee 1/2
P 3	double-object construction (21)	double-object construction (22)
P 1/2	double-object construction (24) or indirective alignment (25) -few examples-	indirective alignment (23)

Table 9: The encoding of the non-subject arguments of a causativized transitive root

When both the patient and the causee are third persons, they are both expressed as NP_O in a double-object construction.

- (21) *n-im-it-ko* *to* *n-echjiriiwo* *no* *'móper-ono*
 1SG-CAUS-learn-ACT ART.NH 1SG-language ART.PL child-PL
 'I am teaching my language to the kids (litt. making them know).'

When the causee is an SAP, it is represented by an object suffix on the verb and P follows as an NP_O.

- (22) *n-woo'o* *n-im-e-ch-vi-yre* *to* *'chene*
 1SG-want 1SG-CAUS-know-ACT-2SG-FUT ART.NH way
 'I want to show you the way.'

When both the patient and the causee are SAPs, the patient is indexed on the verb, while the causee is demoted to an oblique position, introduced by a preposition. Again, since the language does not permit two object suffixes, one of the SAP has to be demoted in an indirective construction. It appears that the patient is favored over the causee for the object status.

- (23) *ñi* *pemnaksare* *ñi-woo'o* *t-im-e-ri-k-nu-yre* *a-ye'e*.
 ART.M friend 3M-want 3-CAUS-know-PLURAC-ACT-1SG-FUT 2PL-PREP
 'My friend wants to show me to you all.'

Finally, when the patient is a first or second person and the causee is a third person, two constructions are observed within the very few elicited examples illustrating this mixed scenario. The patient is always indexed on the verb with an object suffix, but the causee can either be expressed as an NP_O (24), or as an oblique (25). Example (24), when compared to example (22), is possibly ambiguous: the object suffix and the NP_O could both refer either to the patient or the causee.

- (24) *n-woo'o* *n-im-e-ch-vi-yre* *no* *t-ko-chicha-n-ono*
 1SG-want 1SG-CAUS-know-ACT-2SG-FUT ART.PL 3-VZ-son-1SG-PL
 'I want to show you to my parents.'

- (25) *ñi Pransisku ñi-woo'o t-im-kopara-k-nu-yre ñ-e ñi ñi-chicha*
 ART.M Francisco 3M-want 3-CAUS-kill-ACT-1SG-FUT 3M-PREP ART.M 3M-son
 'Francisco wants to make his son kill me.'

The alternation between the two constructions could be accounted for by two closely related explanations. The syntactic status of the causee could possibly depend on its agentivity: while a patientive/experiencer causee as in (24) involving the root *e-cho* 'to know' is expressed as an object, an agentive causee as in (25) with the verb root *kopara-ko* 'to kill' is expressed as an oblique phrase. The alternative explanation relies on the distinction between direct/indirect causation (implying the agentivity of the causee but not only, Cf. Shibatani and Pardeshi 2002). The demotion of the causee would be a sign of indirect causation: the causer in (25) is not physically involved in the caused event while in example (24) the causer engages himself in a spatio-temporal configuration where all three participants are present: the causation is direct. This hypothesis seems to be confirmed by a unique (elicited) example with both the causee and the patient being third persons, but where the causee is introduced as an oblique phrase (26). Here the causee is agentive, and the causation is very likely indirect: the relationship between the causer and the causee is probably a spoken command rather than a manipulation. A further example with both the patient and the causee being third persons, but this time both expressed as NP_O, shows that the agentivity of the causee is not important: in (27), the causee is agentive, but the causation is direct since the owner of an oxen pair (the causer) always guides them. Yet here the causee is not demoted to an oblique position. The expression of direct causation would therefore favor the expression of the causee as an object, while indirect causation would favor its demotion as an oblique. Further data is necessary to firmly confirm the link between indirect causation and the expression of the causee in an oblique phrase (elsewhere than in local configurations where this demotion is due to the morphological condition that only one SAP can be encoded by an object suffix).

- (26) *n-im-sip-ri-ko to n-ñe'e moto mu-e ma 'móperu*
 1SG-CAUS-wash-PLURAC-ACT ART.NH 1SG-PREP motorcycle 3M-PREP ART.M child
 'I have the child wash my motorcycle.'

- (27) *ñi 'chane ñ-im-chuu-ko to wiye to 'kareta*
 ART.M person 3M-CAUS-pull-ACT ART.NH ox ART.NH cart
 'The man made the oxen pull the cart.'

To summarize, monotransitive roots with the causative *imi-* show a split between a double-object construction and an indirective construction where the causee is an oblique. The conditions for the indirective construction are either a local configuration where both the patient and the causee are SAPs, or the indirect causation meaning of the construction. On the whole, there is thus a priority Patient > Causee for the patient to be encoded as an object.

As far as the encoding of non-agentive arguments is concerned, the behavior of the causative constructions (Table 9) is quite comparable to underived ditransitives (Table 6). Both show the same split between a double-object construction and an indirective construction. The conditions for the split are quite similar too. The indirective alignment is found with a first or second person P, in an obligatory way if R or Causee are SAPs, optionally otherwise.

4.2 Causativized verbs and third person subject marking

Table 10 shows that the encoding of a third person agentive argument on causativized monotransitive roots is just like that on the ditransitive verb 'give'. As soon as either the patient or the causee is an SAP, the subject is indexed with *ty-* ~ *t-*. In that respect, both the patient and the causee behave like the object co-argument of a monotransitive clause, and the alignment is neutral.

	Causee 3	Causee 1/2
P 3	<i>ta-</i> , <i>ma-</i> , <i>ñi-</i> , <i>s-</i> , <i>na-</i> (27)	<i>ty-</i> ~ <i>t-</i>
P 1/2	<i>ty-</i> ~ <i>t-</i> (25)	<i>ty-</i> ~ <i>t-</i> (23)

Table 10: The encoding of third person A on causativized monotransitive roots

4.3 Causativized verbs and object nominalization

Object nominalization on a causativized monotransitive root nominalizes the P argument. The causer is expressed as the subject/possessor of the nominalized verb and indexed with a possessive prefix, and the causee as an object indexed with an object suffix as in (28). The patient is thus favored over the causee to access object nominalization, as with an indirective alignment.

- (28) *wi-pka-yo t-ori pjokni mu-em-it-ko-n-giene jmuena Napo*
 NEG-HYP-? 3-IRR.be_good DEM.NH 3M-CAUS-know-ACT-1SG-GEN.O.NZ DEM.M Napo
 'It may be bad, what I was taught by Napoléon.'

4.4 Causativized verbs and passivization

Examples of only two monotransitive roots with both causative and passive were found, in some elicited data and in the New Testament. One of the causativized verb root involves only two participants and is therefore of no interest for this paper, and the other one is *im-itko* 'to make know'. This very limited application of the passive to causativized verb roots may be interpreted as a sign of lexicalization of *imitko*, re-analyzed as a non-derived ditransitive verb with the meaning 'to teach'. For this reason, these examples may not be highly relevant for the investigation of the syntactic behavior of causativized transitive roots.

In the examples (29) and (30), it is the causee that is promoted to the S position. The causee therefore aligns with the P of a monotransitive verb, i.e. it follows a secundative alignment. Most of the time, the patient is introduced as an NP_O, even though some other examples seem to show the patient in oblique position.

- (29) *na-em-it-ko-si ñ-e ñi Peru*
 3PL-CAUS-know-ACT-PASS 3M-PREP ART.M Pedro
 'They were taught by Pedro.'

- (30) *a-k-im-it-ko-si* *to* *je'chu-gne* *taechis'o* *ma* *Jesús.*
 2PL-MID-CAUS-know-ACT-PASS ART.NH true-INTENS story ART.M Jesus
 'You all have been taught the true story of Jesus.' (Eph 4:21)

4.5 Summary on causativized verbs with three participants

The alignment of three-participant constructions with the causative *imi-* is summarized in Table 11. The patient of a causativized monotransitive root is generally favored over the causee to access the object status. Yet the causee retains some object properties in the constructions where a double object is possible (with one or no SAP). It could even be favored for promotion to subject position via passivization. A hypothesis was raised concerning the encoding of the causee as either object or oblique (in constructions that permit either): the causee is more likely to be encoded as an oblique when the causativized verb expresses indirect causation.

Non-agentive argument encoding	Neutral alignment /Indirective alignment
Third person subject marking	Neutral alignment
Object nominalization	Indirective alignment
Passivization	Secundative alignment

Table 11: Summary of the alignment of three-participant constructions with the causative *imi-*

5. The Non-Agentive Arguments of Three-Participant Applicative-Marked Verbs

The applicative *-ino* adds a benefactive (BEN) role to the argument structure of the verb. On intransitive verbs, it results in transitivization, with the beneficiary as an object. On canonical monotransitive verbs, it results in three-participant constructions.¹²

This section deals with the three-participant constructions resulting from the applicativization of monotransitive roots with *-ino*. Only the first two criteria apply, since no data was found combining the benefactive and nominalization, nor the benefactive with passive on a monotransitive root.

5.1 Applied verbs and non-agentive argument encoding

The data does not provide any example where both P and BEN are SAPs. In all other scenarios, a double-object construction is attested (Table 12).

¹²The utterance verbs, expressing events with three participants, are syntactically monotransitive: they take only one object NP, and carry specific third person subject prefixes. The benefactive applicative is non-canonical on utterance verbs in switching the grammatical relations of the addressee and the utterance without decrease or increase in valency (Rose 2011b).

	BEN 3	BEN 1/2
P 3	double-object construction (33)-(37)	double-object construction (31)
P 1/2	double-object construction (32) -two elicited examples-	n/a

Table 12: The encoding of the non-agentive arguments of monotransitive roots with the benefactive applicative

In the mixed scenario where BEN is first or second person and P is a third person, a double-object construction is found, with BEN indexed as an object suffix and P as an NP_O.

- (31) *w-a-k-juma-puka* *ma-v-in-a-vi* *to* *vi-juma*
 1PL-IRR-VZ-illness-HYP 3M-take.out-APPL-IRR-1PL ART.NH 1PL-illness
 'If we ever get ill, He will remove our illnesses for us.'

In the other mixed scenario, where P is first or second person and BEN is a third person, a double-object construction is found, with BEN indexed as an object suffix and P as an NP_O (unexpressed in the examples available, like (32)). Since the NP_O is unexpressed, ambiguity seems likely with the other mixed scenario described right before, i.e. in (32) the object suffix could likely be interpreted as the beneficiary as is the case in (31).

- (32) *n-imkata-s-ino-vi*
 1SG-help-ACT-APPL-2SG
 'I help you instead of him. (also: ? I help him for you).'

In the non-local scenario, where both P and BEN are third persons, a double-object construction is found with some distributional restrictions regarding the two NP_Os. Most often, either object (P in (33) and BEN in (34)) or both objects (35) are left non-explicit. An example with two NP_Os was suggested to a consultant, who rejected it as ungrammatical (36). This may be due to the underlying ambiguity resulting from the two NPs having referents with comparable semantics (here two feminine singular human referents). Other suggested examples with two NP_Os that are more distinct in terms of referential factors (like humanness in (37)) were accepted.

- (33) *n-wachri-ri-s-no* *su* *meme*
 1SG-buy-PLURAC-ACT-APPL ART.F 1SG.mother
 'I went shopping for my mother.'

- (34) *n-imu-ino-yre* *to* *na-ye'e-yore*
 1SG-see-APPL-FUT ART.NH 3PL-PREP-FUT
 'I will look (for things)¹³ for them.'

¹³In this example, the plurality of the referent of the P argument is given by the textual context.

- (35) *n-imu-ino-yre*
 ISG-see-APPL-FUT
 'I will look (for things) for him/her.'
- (36) * *n-sipo-s-no* *su* *s-amri* *su* *'seno*
 ISG-wash-ACT-APPL ART.F 3F-grandchild ART.F woman
 'I wash her grandchild for the woman.'
- (37) *naa* *p-kopnune-no* *to* *kampana?*
 PRO.INDET.PL 2SG-play-APPL ART.NH bell
 'For whom do you ring the bell?'

As far as we can tell from the available data, applicativization of monotransitive roots with the benefactive applicative systematically leads to the double-object construction. It is hypothesized that two referentially comparable objects cannot be both expressed as NPs when that can lead to ambiguity in reference-tracking.

5.2 Applied verbs and third person subject marking

There is no split in subject marking with the benefactive applicative. A third person subject is always marked with a semantically specified prefix of the set *ta-*, *ma-*, *ñi-*, *s-* and *na-*. The option with *ty-* ~ *t-* is never attested. This is the case with the three types of scenarios for P and BEN illustrated for monotransitive roots with the benefactive (Table 13). It is also the case with intransitive roots with the benefactive (38), even though *ty-* ~ *t-* is normally expected on transitive verb forms when there is an SAP object. It is not clear whether the systematic encoding of a third person subject by a specified prefix, regardless of the person of the object co-argument(s), must be explained by some particularly high semantic transitivity or as a device for reference-tracking, in a construction where A, P and BEN can show very similar referential characteristics.

	BEN 3	BEN 1/2
P 3	<i>ta-</i> , <i>ma-</i> , <i>ñi-</i> , <i>s-</i> , <i>na-</i>	<i>ta-</i> , <i>ma-</i> , <i>ñi-</i> , <i>s-</i> , <i>na-</i> (31)
P 1/2	<i>ta-</i> , <i>ma-</i> , <i>ñi-</i> , <i>s-</i> , <i>na-</i>	n/a

Table 13: The encoding of third person A on monotransitive roots with the benefactive applicative

- (38) *esu* *s-iimui-s-no-nu*
 PRO.F 3F-dance-ACT-APPL-1SG
 'She dances instead of me.'

5.3 Summary on applicative-marked verbs with three participants

With the benefactive applicative on monotransitive roots, P and BEN seem to be equal in the competition for object status. A neutral alignment is morphologically visible, both in the encoding of non-agentive and agentive arguments (Table 14). This situation clearly differs from

that of the ditransitive root *ijro-ko* 'give' and of causativized monotransitive roots, both in the encoding of non-agentive arguments and in third person subject marking.

Non-agentive argument encoding	Neutral alignment
Third person subject marking	Neutral alignment

Table 14: Summary on the alignment of applicative-marked monotransitive roots

6. Summary and Discussion

This final section summarizes the findings concerning the competition between the two non-agentive participants for the object status, the comparison of non-derived and derived three-participant clauses and the effects of referential factors in three-participant constructions.

6.1 Competition for the object status between the two non-agentive participants of three-participant constructions

Table 15 synthesizes the different types of ditransitive alignment for the three types of three-participant constructions, and for the four criteria of objecthood.

	<i>ijro-ko</i> 'give'	causativized trans.	applicative-marked trans.
Non-agentive argument encoding	Neutral /Indirective	Neutral /Indirective	Neutral
Third person subject marking	Neutral	Neutral	Neutral
Object nominalization	Indirective	Indirective	n/a
Passivization	Indirective	Secundative	n/a

Table 15: The ditransitive alignment of the three types of three-participant constructions

First, the criteria of third person subject marking is not helpful in distinguishing the two non-agentive arguments. In that respect, the ditransitive alignment is always neutral.

Second, for the other three criteria, the competition between non-agentive participants for the object status seems to function in the following way:

- when morphologically possible (i.e. except in local scenarios) and without much risk of ambiguity, use the double-object construction (neutral alignment)
- otherwise (in most cases of non-local and mixed scenarios, or when only one slot is accessible for O promotion), favor the most P-like argument as the O, demote the other to an oblique phrase (indirect alignment).

The system thus heavily relies on a semantic role hierarchy $P / T > R / \text{Causee}$. The only exception to that system may be the secundative alignment found in passivization of causativized monotransitive roots. The two semantic roles of the non-agentive arguments of the benefactive construction do not seem to be hierarchized.

6.2 Comparison of non-derived and derived three-participant constructions

Table 15 also helps comparing the three three-participant constructions studied in this paper. They differ in two ways. First, causativized verbs with three-participants differ slightly from the non-derived ditransitive verb 'give'. Passivization of the causativized monotransitive roots and the 'give' verb shows a different alignment in the promotion of Causee on the one hand, and T on the other. This discrepancy cannot be explained by referential factors, since prototypically T is non-human, and Causee is human. Second, the applicative-marked transitive verbs strongly differ from the non-derived ditransitive verb 'give'. They show a different encoding of non-agentive arguments, that are never demoted in the available examples. They also lack the split system of third person subject marking, and systematically use the specified set of third person subject prefixes.

These two differences contradict the idea that derived ditransitive verbs behave like non-derived three-participant verbs. Kemmer & Verhagen (1994: 115) state that causativized transitive roots are modelled on existing types of three-participant verbs, like ditransitive verbs or the instrumental construction. Peterson (2007:2) asserts that "languages differ in terms of whether the applicative construction serves to make the verb even more transitive (i.e. a double-object verb), or simply results in rearrangement of argument structure." This paper demonstrates that these two statements are too strong, because the same derivation in the same language can result in alignment split. Depending on the referential factors of the non-agentive arguments, the same derivation process on the same monotransitive root can either become more transitive and result in a construction comparable to ditransitive verbs or rearrange the argument structure and result in a construction with only one object comparable to P, and often the other non-agentive argument encoded as an oblique.

6.3 Referential factors and three-participant constructions

In Trinitario, referential factors clearly operate on the encoding of the arguments of two-participant verbs. This paper shows that these effects are less clear in the three-participant constructions, though they affect to some degree third person subject marking and the encoding of non-agentive arguments. Moreover, they differ depending on the type of three-participant constructions (ditransitive verb 'give', causativized and applicative-marked monotransitive roots).

On monotransitive verbs, referential factors, namely the person hierarchy $1/2 > 3$, are involved in the co-argument conditioned third person subject marking. On non-derived and derived ditransitive verbs, the person hierarchy is also visible in that domain, except for applicative-marked verbs, which show no split in third person subject marking.

The person hierarchy is also at play in the encoding of non-agentive arguments in three-participant constructions, again with the exception of applicative-marked verbs. On the ditransitive verb 'give' and the causativized monotransitive roots, the encoding of these arguments is not properly hierarchical because it does not strictly rely on their relative position on some referential hierarchy. There is a split between a neutral alignment (where both non-agentive arguments behave like the P of monotransitive verbs in a double-object construction) and an indirective alignment (where T of the ditransitive construction or the P of the causative construction behave like P, and the other non-agentive participant is demoted to an oblique position). As discussed in 3.1., the split is partly conditioned by the fact that only one SAP object can be indexed on the verb (Table 16). Thus, in the local scenario, the indirective alignment is

always found while in the non-local scenario, the double-object construction is always found. Regarding the mixed scenarios, the double-object construction is found when R or Causee is the SAP. When P or T is the SAP, a very rare situation in our corpus, the situation is more complex with some alternation. This may be due to the ambiguity of the double-object construction with the other mixed scenario. It may also be explainable through a distinction between direct and indirect causation for causativized verbs. It is interesting to note that this scenario is the less prototypical, with an SAP in the more "patientive" role, and a third person in the most "agentive or human" role. As a result, as Table 15 shows, the indirective alignment is found only when T or P is an SAP. This seems to indicate that P and T are favored over R and Causee as objects. To conclude, the role of the person hierarchy in the competition between non-agentive participants for the object status is rather small.

	R / Causee 3	R / Causee 1/2
T/ P 3	double-object construction	double-object construction
T/ P 1/2	double-object construction or indirective alignment	indirective alignment

Table 16: The encoding of the non-subject arguments of a non-derived ditransitive root or a causativized monotransitive root

7. Conclusion

This paper aimed at investigating whether effects of referential factors were found in the argument encoding of non-derived and derived three-participant constructions in Mojeño Trinitario, a language where referential factors play an important role in argument encoding of two-participant constructions (Rose 2011). For this, it studied the ditransitive alignment of non-derived and derived three-participant constructions in Mojeño Trinitario. The three-participant constructions derived through causativization and applicativization of monotransitive roots were contrasted with the non-derived ditransitive construction of the verb 'give' and the basic monotransitive construction.

In Trinitario three-participant constructions, the person value of the two non-agentive arguments is conditioning a construction split between a double-object and an indirective alignment. Since it is not the *relative position* of T and R on the person hierarchy that determines the use of one construction or the other, the label "hierarchical" was rejected for such a system. The basic effect of referential properties is that only one object may be indexed on the verb, and has to be an SAP. Referential factors thus indirectly create a competition between the two non-agentive arguments for the object status. This competition is generally solved by a semantic role hierarchy T/P > R/Causee.

More importantly, this paper is a sound illustration that derived ditransitive verb forms do not necessarily behave like non-derived ditransitive verbs. The situation would actually be even more complex if other types of non-derived ditransitive verbs were taken into account (Rose 2011b).

Abbreviations

ACT	active
APPL	applicative

ART	article
CAUS	causative
CLF	classifier
DEM	demonstrative
F	feminine (singular)
FUT	future
GEN.O.NZ	general object nominalizer
HAB.O.NZ	habitual object nominalizer
HYP	hypothetical
INDET	indeterminate
INTENS	intensive
IRR	irrealis
M	masculine (singular)
MID	middle
N.POS	non possession
NEG	negation
NH	non human
PASS	passive
PERF	perfective
PL	plural
PLURAC	pluractional
PNCT.O.NZ	punctual object nominalizer
PREP	preposition
PRO	pronoun
SG	singular
VZ	verbalizer

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