

The Syntax of Matsigenka Object-Marking*

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1 Introduction

This paper examines the syntax of verbal object marking in Matsigenka, an Arawak language of southeastern Peru. In this language, a full nominal or pronominal object is cross-referenced on the verb via one of a series of enclitics that appear at the right edge of the verbal word and covary with the object noun or pronoun in person and gender. Furthermore, the realization of these enclitics is sensitive to semantic properties of the noun or pronoun with which they covary, namely their discourse and referential statuses, that is, whether they are a speech-act participant and whether they are definite. Thus, depending on the configuration, the object of a transitive verb may be encoded by an enclitic only, by both an enclitic and a noun or pronoun, or by a noun or pronoun only.

I will use the term ‘single object construction’ to denote any surface configuration in which only one non-subject argument is present in the clause; relatedly, a ‘double object construction’ is one in which more than one non-subject argument is present in the clause. Double object constructions may be categorized into two types: a ‘simplex double object construction’ is one in which no operation is required to license an additional argument (a canonical ditransitive); a ‘complex double object construction’ is one in which an additional argument is licensed by a distinct head. Simplex double object constructions exhibit Person-Case Constraint effects common to Romance and claimed to be universal (Bonet 1991). When these constraints are violated, the language exhibits two repair strategies: one, involving the clitic =*ni*, repairs what I will come to refer to as ‘three-on-three’ configurations; the other, involving the inflectable element *ashi*, repairs configurations in which a speech act

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participant would otherwise be structurally inferior to a third person. I analyze both as prepositions. Furthermore, we will see that the instrumental applicative *-ant*, a complex double object construction, shares a number of morphosyntactic properties with simplex double object constructions, as well as the same repair *ashi*.¹ I analyze *-ant* as the head of a high ApplP (Pylkkänen 2002) that participates in roll-up head movement.

I derive Person-Case Constraint effects in Matsigenka via a relativized probe on *v*, and analyze object markers as clitic determiners (D) that are incorporated syntactically into the verbal word because of requirements of Infl. These properties lie in stark contrast to those of subject markers – outside the scope of this paper – which are obligatory with the exception of predictable anti-agreement effects (Ouhalla 1993).

The analysis of Matsigenka clause structure presented here diverges from a tradition that treats person-markers as arguments and DPs as adjuncts in polysynthetic languages (Jelinek 1984; Baker 1996), for two main reasons. First, the “free” word orders of apparently non-configurational languages are often discussed without reference to the information-structural markedness of certain of those orders. However, a cartographic view of the left periphery (Rizzi 1997) provides a way to motivate such word orders in narrow syntax. Thus a primary intuition behind the adjunthood of DPs in polysynthetic languages, namely their free ordering, is weakened. Second, the phenomenon commonly referred to as ‘clitic doubling’ – of which Matsigenka object markers are arguably an exemplar – often carries the semantico-functional load of determiners (i.e., in encoding definiteness, specificity, etc.). The claim advanced here is that these determiner-like properties are not accidental, but derived from their status as D-heads, although this idea is not new (Arregi and Nevins 2012; Nevins 2011; Sheil 2014; Uriagereka 1995; Zeller 2013).

The rest of this paper is organized as follows. In §1.1 I provide a brief overview of Matsigenka grammar. In §2 I present the empirical generalizations relevant to single object constructions, and in §§3 & 4 those relevant to simplex double object constructions. Section 5 forms the core of the paper, in which I first introduce relevant theoretical preliminaries for the ensuing analytical proposals for single and simplex double object constructions. We then begin reviewing complex double object constructions in §6, namely those that are repairs to violations of the Person-Case Constraint, before seeing in §7 how another complex double object construction, the instrumental applicative, exhibits one of the same repairs. Analytical proposals for these complex double object constructions are given in their respective sections.

1.1 Brief Language Overview

Matsigenka is a Kampan Arawak language spoken in the Urubamba and Manú river basins in the Peruvian Departments of Cuzco and Madre de Dios, respectively. There are some 10000 speakers. The language is head-marking, and strongly polysynthetic, with over thirty suffixal positions and seventy suffixes; in contrast there are only three prefixal positions. Obligatorily coded verbal morphosyntactic categories are aspect and reality status (Michael to appear), and alignment is nominative-accusative. For the interpretation of examples the following template will be useful.

¹The characterization of what configuration *ashi* repairs, however, is somewhat distinct (§7).

Information-structurally unmarked (“basic”) word order is VSO, as in (1), although this order is infrequent, as the language makes use of several distinct information-structurally marked positions, resulting in other orders in which at least one argument is preverbal.

(1) Onkotakero ina sekatsi. VSO

o- *oNko* *-t* *-ak* *-i²* *=ro* *ina* *sekatsi*
 3fS- cook -EPC -PERF -REAL.I =3fO mother.1P manioc

ENGLISH: ‘My mother is cooking manioc.’

SPANISH: ‘Mi mamá está cocinando yuca.’ (Snell 2011:814)

The language, importantly, lacks articles. Three demonstratives, which inflect for person and gender, occur preminally, and one, *oga*, frequently indexes discourse givenness (Gundel et al. 1993). Pronominal possessors are, with the exception of allomorphy unique to the third-person masculine, identical in form to verbal subject markers. Subject markers/possessors and object markers are summarized in Table 1. The 3f subject marker/possessor *o-* deletes before vowel-initial roots that were not formerly preceded by **h*.

Table 1: Matsigenka Person-Markers

	SUBJ/POSS	OBJ
1	<i>no-</i>	<i>=na</i>
1INCL	<i>a-</i>	
2	<i>pi-</i>	<i>=Npi</i>
3(m, f)	<i>i(r)-, o-</i>	<i>=ri, =ro</i>

2 Single Object Constructions

In this section I describe the morphosyntactic properties of objects of monotransitive clauses, which I refer to as ‘single object constructions’. In a single object construction, an object marker may co-occur with a nominal object, covarying in number and gender. In (2) we see that *=ro* covaries with *panko* ‘house’, a feminine noun, while in (3) *=ri* covaries with *tsineri* ‘tree tar’, a masculine noun.

(2) ...ario anta ovetsikakerora **ovanko**. OBJECT = NOUN

ario *aNta* *o-* *ovetsik* *-ak* *-i* ***=ro*** *=ra* *o-* **panko**
 surely there 3fS- build -PERF -REAL.I =3fO =SUB 3fP- house

²The realis suffix *-i* exhibits a morphophonological allomorph *-e* following perfective *-ak*. Following orthographic convention, I write <e> in the first line of representation, and <i> in the interlinearization.

ENGLISH: ‘...and there she had built her house.’
 SPANISH: ‘...y ahí había hecho su casa.’ (gtp4)

- (3) ...teratyo ontentageri **tsineri**. OBJECT = NOUN

tera =tyo o- N- teNtag -e =ri tsineri
 NEG =AFF 3fS- IRR- include -IRR.I =3mO tree.tar

ENGLISH: ‘...she didn’t include the tree tar.’
 SPANISH: ‘...no incluyó la brea.’ (kts15)

An object marker in a single object construction may also co-occur with a pronominal object, covarying in number and gender, as in (4)-(6), with first-, second-, and third-person masculine pronouns, respectively.³

- (4) ...pagaigutena **naro**. OBJECT = PRONOUN

p- ag -a -ig -u -t -e =na naro
 2S- get -EPV -PL -RET -EPC -IRR.I =1O 1SG.PRO

ENGLISH: ‘...come back for me.’
 SPANISH: ‘...regresen por mí.’ (ksv35)

- (5) ...nogiainpityo **viro**... OBJECT = PRONOUN

n- ogia -Ø -i =Npi =tyo viro
 1S- await -IMPF -REAL.I =2O =AFFECT 2SG.PRO

ENGLISH: ‘...I waited for you...’
 SPANISH: ‘...he esperado a ti...’ (mro28)

- (6) ...airikaigiri ogusoigiri **irirori**. OBJECT = PRONOUN

o- airik -a -ig -i =ri o- oguso -ig -i =ri iriro =ri
 3fS- grab -EPV -PL -REAL.I =3mO 3fS- tie.up -PL -REAL.I =3mO 3m.PRO =CNTR

ENGLISH: ‘...they [the girls] grabbed him and tied him up.’
 SPANISH: ‘...le agarraron y le amarraron a él.’ (spr42)

Finally, an object marker in a single object construction may occur independently of any nominal or pronominal object, as in (7)-(9), with first-, second-, and third-person masculine enclitics, respectively.

- (7) Atsi, ige, potsotena. OBJECT = Ø

atsi ige potsot -t -e =na
 DRCT brother.VOC paint -EPC -IRR.I =1O

³The doubling of object marker and independent pronoun results in an information-structurally marked configuration that is outside the scope of this paper.

ENGLISH: ‘Come on, brother, paint me [i.e., with annatto].’
 SPANISH: ‘A ver, hermano, píntame.’ (ktr64)

- (8) ...matsi ario namatavitaken**pi**. OBJECT = \emptyset

matsi ario n- amatavi -t -ak -e =Npi
 MTAL.NEG surely 1S- deceive -EPC -PERF -IRR.I =2O

ENGLISH: ‘...I didn’t deceive you.’
 SPANISH: ‘...yo no te engañé.’ (pir33)

- (9) ...aroegi tera aneaiger**i**. OBJECT = \emptyset

aroegi tera a- ne -a -ig -e =ri
 1PL.INCL.PRO NEG 1PL.INCL- see -EPV -PL -IRR.I =3mO

ENGLISH: ‘...we don’t see him.’
 SPANISH: ‘...nosotros no lo vemos.’ (ikm18)

Homing in on nominal objects, we see in (10)-(12) that, when a nominal object is indefinite, the object marker does not appear.⁴

- (10) ...iponatake mapu... OBJECT = NOUN

i- pona -t -ak -i mapu
 3mS- wrap.up -EPC -PERF -REAL.I rock

ENGLISH: ‘...he had wrapped a stone...’
 SPANISH: ‘...había envuelto piedra...’ (san16)

- (11) ...osuretakara ovetsikakera shima. OBJECT = NOUN

o- sure -t -ak -a =ra o- ovetsik -ak -i =ra shima
 3fS- think -EPC -PERF -REAL.A =SUB 3fS- make -PERF -REAL.I =SUB fish

ENGLISH: ‘...she thought about making fish.’
 SPANISH: ‘...pensó en crear peces.’ (isb24)

- (12) ...tyarika ineaiigi maniro... OBJECT = NOUN

tya =rika i- ne -a -ig -i maniro
 WH =INDEF 3mS- find -EPV -PL -REAL.I deer

ENGLISH: ‘...wherever they found a deer...’
 SPANISH: ‘...donde encontraban al venado...’ (mro7)

However, object markers that are coreferential with speech act participants are obligatory, as seen by comparing the grammaticality of (4) & (5) with the ungrammaticality of (13) & (14). I assume this to follow from the fact that speech act participants are definite.

⁴Observe that the nominal objects in (2) & (3) are definite.

(13) *Pagaigute naro. OBJ = PRONOUN

p- ag -a -ig -u -t -e naro
 2S- get -EPV -PL -RET -EPC -IRR.I 1SG.PRO

INTENDED: ‘Come back for me.’ (MKO)

(14) *Nogiaityo viro. OBJ = PRONOUN

n- ogia -Ø -i =tyo viro
 1S- await -IMPF -REAL.I =AFF 2SG.PRO

INTENDED: ‘I waited for you.’ (MKO)

3 Simplex Double Object Construction 1: *p* ‘give’

The description of double object constructions in Matsigenka requires distinguishing multiple objects based on their semantic role. In the following sections we will be concerned with themes, recipient-beneficiaries, and instruments, and the morphosyntactic strategies employed when objects with these semantic values are permuted according to person, with a persistent opposition between speech act participants and third persons.⁵

This section explores the syntax of object marking as it relates to the first of two simplex double object constructions, namely that involving the verb *p* ‘give’, the argument structure of which consists of three notional participants, two of which – the direct and indirect objects, or theme and recipient – are relevant for our purposes. With this verb, when the notional recipient is a speech act participant and the theme is a third person, both participants are marked on the verb. In (15), the recipient is second person and the theme is third person, the latter coreferential with the object relative clause *novetsikanakerira*.

(15) ...nonpaken**piro** ... novetsikanakerira... REC = 2; TH = 3

no- N- p -ak -e =Npi =ro n- ovetsik -an -ak -i =rira
 1S- IRR- give -PERF -IRR.I =2O =3fO 1S- make -ABL -PERF -REAL.I =REL

ENGLISH: ‘...I’m going to give you what I’m making...’

SPANISH: ‘...te voy a dar ... lo que estoy haciendo...’ (kn2.17)

As with monotransitive clauses, an object marker may be the only instantiation of a theme, as in (16), with a second-person recipient and third-person theme.

(16) ...tyanira paken**piri**? REC = 2; TH = 3

tya -ni =ra p- ak -e =Npi =ri
 WH -ANIM =SUB give -PERF -REAL.I =2O =3mO

ENGLISH: ‘...who gave it to you?’

SPANISH: ‘...¿quién te ha dado?’⁶ (tnt38)

⁵I will use the terms ‘speech act participant’ and ‘local person’ interchangeably.

Also as with monotransitive clauses, an object marker corresponding to an indefinite third-person theme is omitted, as in (17).

- (17) Koki, nonpaken**pi** imarane mamori... REC = 2; TH = 3

koki *no-* N- *p* *-ak* *-e* =N**pi** *i-* *mara -ne* *mamori*
 uncle.VOC 1S- IRR- give -PERF -IRR.I =2O 3mS- big -ANIM fish.sp.

ENGLISH ‘Uncle, I’m going to give you a big *sábalo*...’
 SPANISH ‘Tío, te voy a dar un *sábalo* grande...’ (oim26)

However, when both recipient and theme are third person, only the recipient is cross-referenced on the verb. This can be seen in (18), in which the object marker =*ri* covaries in gender with the recipient (here a male suitor), and not the theme, *shinto* ‘daughter’ (an inherently feminine noun), even though it is definite.

- (18) ...ipaker**i** irishinto otsitiki. REC = 3; TH = 3

i- *p* *-ak* *-i* =**ri** *iri-* *shiNto* *otsitiki*
 3mS- give -PERF -REAL.I =3mO 3mP- daughter oldest

ENGLISH: ‘...he_i gave him_j his_i oldest daughter.’
 SPANISH: ‘...le dio su hija mayor.’ (san8)

That a third-person recipient wins out in the competition for an object marker with ‘give’ leads to contexts in which a definite third-person theme may only be understood from the discourse, i.e., it is not instantiated by a full NP as in (18) or by an object marker. This is the case in (19). Here the recipient is another man (cross-referenced on the verb as =*ri*), while the understood theme is a fishing net, an inherently feminine noun realized overtly in the preceding sentence.

- (19) Yogari matsigenka ipakeri... REC = 3; TH = 3

i- *oga* =*ri* *matsigeNka* *i-* *p* *-ak* *-i* =*ri*
 3mS- DEM =CNTR man 3mS- give -PERF -REAL.I =3mO

ENGLISH: ‘The man gave [it] to him...’
 SPANISH: ‘El hombre le dio...’⁷ (tnt14)

Furthermore, even if the recipient is indefinite, this does not qualify a definite theme for cross-reference on the verb. This can be seen in (20), which comes from a text describing how *shitea* ‘manioc beer’ (an inherently feminine noun) is prepared and served. We see that the manioc beer is contextually definite, as evidenced via the object marker =*ro* on *kiareNk*;

⁶Note the lack of a pronominal clitic corresponding to theme in the Spanish translation of this sentence (cf. standard Spanish *¿Quién te lo ha dado?*). This is characteristic of the majority of Spanish translations of Matsigenka ‘give’ constructions, and are likely due to the Matsigenka-internal restrictions on combinations third-person recipients and themes that we will see below.

⁷Note the lack of a theme in the Spanish translation (cf. standard *El hombre se lo dio...*) – see footnote 6.

relatedly, we see that the recipient, *jime* ‘husband’, is indefinite, as evidenced by the lack of an object marker =*ri* on *p* ‘give’. (This is expected given the genericity of this text, in which it is not a unique husband in the world that is a recipient, but instead any husband of any woman preparing manioc beer.⁸) Nevertheless, *p* ‘give’ does not exhibit an object marker =*ro* that might cross-reference the theme.

(20) ...onkiarenkakerora iketyo onpaatake ojime... REC = 3; TH = 3

o- N- *kiareNk* -*ak* -*e* =*ro* =*ra* *i-* *ketyo* *o-* N- *p* -*a*
 3fS- IRR- mix.in.with -PERF -IRR.I =3fO =SUB 3mS- first 3fS- IRR- give -EPV
 -*a* -*t* -*ak* -*e* *o-* *jime*
 -CL:fluid -EPC -PERF -IRR.I 3fP- husband

ENGLISH: ‘[Upon finishing] mixing in [i.e., hot or cold water] with it [i.e., manioc beer], she will serve it first to her husband...’

SPANISH: ‘[Al terminar de] ralear, primero le servirá a su esposo...’ (yvs22)

I conclude this section by exemplifying one additional context in which *p* ‘give’ does not exhibit an object marker, even though the recipient is definite. These are reciprocal contexts in which there is coreference between agent and recipient, as in (21).⁹

(21) ...ipavakagaiga tsinane... REC = 3; TH = 3

i- *p* -*a* -*vakag* -*a* -*ig* -*a* *tsinane*
 3mS- give -EPV -RECIP -EPV -PL -REAL.A woman

ENGLISH: ‘...they gave each other women...’

SPANISH: ‘...entre ellos se daban mujeres...’ (its5)

The generalization to be drawn from this section is that a recipient is cross-referenced on *p* ‘give’, provided it is definite ((15)-(19)), while a third-person theme is cross-referenced on the verb only if the recipient is a speech act participant ((15) & (16)). Put differently, multiple third-person objects may not both be cross-referenced on the verb, nor can a single third-person object marker cross-reference a theme, even if the recipient is indefinite (20).

4 Simplex Double Object Construction 2

The simplex double object construction described in this section, unlike *p* ‘give’, involves monotransitive verbs – i.e., verbs exhibiting two, and not three, notional participants – and is characterized by: 1) a speech act participant beneficiary or recipient; and 2) a third-person theme. Thus I refer to the simplex double object construction also as a kind of ‘benefactive

⁸There is a confound in the morphology here: *jime* ‘husband’ is inalienable, and so must be morphologically possessed even when notionally indefinite.

⁹Bear in mind, however, that the theme here is indefinite, so this example does not speak directly to the fact that definite themes are disallowed on ‘give’ altogether, as was illustrated in (20).

construction’.¹⁰ The difference between the ‘give’ construction and this benefactive construction lies in the interpretation of a single third-person object marker: with ‘give’ such markers are uniformly interpreted as recipients, while here they are uniformly interpreted as themes. Matsigenka exhibits two alternate constructions that arise in configurations of two third-person objects, and of third-person recipient-beneficiaries and speech act participant themes, and these are the subject of §6.¹¹

In (22) we see a first-person beneficiary and third-person feminine theme: the former, because it is inherently definite, is cross-referenced as =*na*, and the latter, because it is contextually definite, is cross-referenced as =*ro*.

(22) ...pintsoma**na**ro oka inchataki. BEN = 1; TH = 3

pi- N- tsoma -Ø -e =na =ro o- oka iNcha -taki
 2S- IRR- lift -IMPF -IRR.I =1O =3fO 3fS- DEM tree.DEFEC -CL:shell

ENGLISH: ‘...lift these strips of bark for me.’

SPANISH: ‘...levántamelo estas vetas.’ (krt50)

In (23) we see a second-person recipient and third-person masculine theme; similarly, the (preverbal) nominal object is definite and thus an object marker appears on the verb.

(23) ...pamoritote namaken**pi**ri. REC = 2; TH = 3

p- amorito -te n- am -ak -i =Npi =ri
 2P- friend -ALIEN.POSS 1S- bring -PERF -REAL.I =2O =3mO

ENGLISH: ‘...I brought your friend to you...’

SPANISH: ‘[Aquí está] tu amigo, lo traje para que te visite.’ (spr38)

However, multiple third-person object markers are ungrammatical, as in (24).¹²

(24) *Ikogakerori. BEN = 3; TH = 3

i- kog -ak -i =ro =ri
 3mS- search.for -PERF -REAL.I =3fO =3mO

INTENDED: ‘He_i looked for her for him_j.’ (MKO)

That the marking of third-person theme objects in a simplex double object construction is conditioned by the same referential properties as in single object constructions is evidenced by (25), in which the first-person recipient is marked on the verb, and the indefinite third-person nominal theme is not.

¹⁰I will use the terms ‘recipient’ and ‘beneficiary’ to describe the semantic role of the indirect object in this construction. By recipient I mean to describe a participant who came to be the (physical or metaphorical) possessor of the theme (direct object), while by beneficiary I mean to describe a participant on whose behalf some eventuality was realized. I refer to both simultaneously as ‘recipient-beneficiary’ arguments.

¹¹Note here, however, that the “three-on-three” repair is not used with *p* ‘give’.

¹²It is important to point out that there is nothing ineffable about this combination of persons; rather, the language requires a complex double object construction as a repair to this configuration (see §6). I will refer to such configurations as ‘three-on-three’.

(25) Gutena kavuniri... REC = 1; TH = 3

ag -u -t -e =na kavuniri
 get -RET -EPC -IRR.I =1O *kavuniri*

ENGLISH: ‘Bring me *kavuniri* [a hallucinogen]...’

SPANISH: ‘Tráeme *kavuniri*...’ (art10)

Lastly, as with single object constructions, the third-person verbal object marker may be the only expression of the theme in a simplex double object construction, as in (26), where the verb *okotag* ‘show’ exhibits two object markers, neither of which has a coreferent.

(26) ...otentanakena ... okotagenarora. REC = 1; TH = 3

o- teNt -an -ak -i =na o- okotag -e =na =ro =ra
 3fS- accompany -ABL -PERF -REAL.I =1O 3fS- show -IRR.I =1O =3fO =SUB

ENGLISH: ‘...she took me [to the forest] to show it to me.’

SPANISH: ‘...me llevó [al monte] para mostrármelo.’ (kto3)

5 Syntax of Matsigenka Object-Marking

In this section I provide a syntactic account of Matsigenka object markers that has as three principal parts the following. First, co-occurrence restrictions on multiple object markers conform to well-known generalizations collectively known as the Person-Case Constraint (§5.1.1). Second, these restrictions are captured via licensing, and specifically *v* exhibits a relativized probe that searches for certain person features, namely [\pm participant] and [\pm author] (§§5.1.2 & 5.1.3). Third, object markers are clitics that carry a [$+$ fin] feature and incorporate into Infl (§5.1.4). After providing background on each of these orientations, I review their application to Matsigenka in §§5.2 & 5.3.

5.1 Theoretical Preliminaries

5.1.1 Person-Case Constraint

The Person-Case Constraint is a descriptive generalization over the permissible combinations of direct and indirect objects (in our terms, recipient-beneficiaries and themes) of different persons within a certain syntactic domain,¹³ first described by Perlmutter (1971) and made well-known with regard to the ordering of preverbal object clitics in Romance languages. One formulation of the constraint is Bonet (1991:177), who states this distribution in terms of a ‘**me lui*/I-II Constraint’, alluding to its realization in French.

(27) The **me lui*/I-II Constraint

- a. In a combination of a direct object and an indirect object, the direct object has to be third person.

¹³That is, they do not apply, for example, across adjunct boundaries or at the level of an entire sentence.

- b. Both the direct object and the indirect object are phonologically weak.

The latter clause defines the domain over which the former clause holds. In Spanish, this generalization can be substantiated as in (28). We see that, when both objects are phonologically light preverbal clitics, a speech act participant cannot be a direct object. The first of two clitics corresponds to the indirect object, while the second corresponds to the direct object.

- (28) a. Me lo dieron. ‘They gave it to me.’
 b. Te lo dieron. ‘They gave it to you.’
 c. *Le me dieron. (INTENDED: ‘They gave me to him/her.’)
 d. *Te me dieron. (INTENDED: ‘They gave me to you.’)
 e. *Le te dieron. (INTENDED: ‘They gave you to him/her.’)
 f. *Me te dieron. (INTENDED: ‘They gave you to me.’)

If a speech act participant is to be a direct object, then the indirect object must be realized as an oblique headed by *a* ‘to’, as in (29), the examples in which are to be read as repairs to (28c-f). They do not violate (27) because there is only one preverbal clitic.

- (29) a. Me dieron a él. ‘They gave me to him.’
 b. Me dieron a ti. ‘They gave me to you.’
 c. Te dieron a él. ‘They gave you to him.’
 d. Te dieron a mí. ‘They gave you to me.’

Albizu (1997:19) derives Person-Case Constraint effects via (30).

- (30) GENERALIZED PERSON-CASE CONSTRAINT
 A Person-morphosyntactic feature P_1 must be less referential or as equally referential as a Person-morphosyntactic feature P_2 that c-commands it at MC.

Stated informally, this constraint requires that the argument in Comp-V, the direct object, be equally or less referential than the argument in Spec,VP, the indirect object, which c-commands it. Referentiality is a bipartite notion here, where speech act participants are more referential than third persons. This permits, for example, multiple third-person preverbal object clitics in Spanish (31).¹⁴

- (31) a. *Se lo di.* ‘I gave it to him/her/them.’
 b. *Se los di.* ‘I gave them to him/her/them.’

Finally, there can be crosslinguistic variation in permissible combinations of multiple objects of different person, and this will become the empirical focus of approaches like that of Nevins (2007) reviewed below in §5.1.3.

¹⁴Note in (31), however, that the dative clitic is now *se*. This phenomenon by which *le* appears to change into *se* in this configuration is known as a ‘spurious-*se* effect’ and will be at issue in the following subsections.

5.1.2 Licensing & Multiple Agree: Béjar and Rezac (2003)

Unlike Albizu, for whom Person-Case Constraint effects result from *c*-command requirements stated in the grammar, Béjar and Rezac (2003) propose that the Person-Case Constraint is derivable via two mechanisms, split ϕ -probes on v and a Person Licensing Condition, which they take to be axiomatic. For them, v exhibits separate $[\pi]$ - (person) and $[\#]$ - (number) probes, and crucially, the $[\pi]$ -probe searches first. Additionally, their Person Licensing Condition states that a speech act participant must be licensed by a functional head. Thus, if an indirect object (i.e., dative, recipient) is third person, it will intervene between the probe and a lower speech act participant direct object (i.e., theme), and the derivation will crash. This is schematized in Figure 1 (Kalin and McPherson 2012:174).

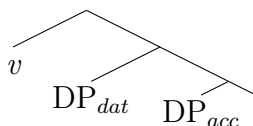


Figure 1: Canonical PCC

Béjar and Rezac’s approach relies heavily on a fundamental asymmetry between speech act participants and third persons. However, recall that Matsigenka also forbids simplex double object constructions when both recipient-beneficiary and theme are third person, and thus exhibits a stronger version of Albizu’s Generalized Person-Case Constraint – i.e., a Person-morphosyntactic feature cannot *c*-command an equally referential one. In other words, there seems to be no way to forbid configurations of two third-person objects in Béjar and Rezac’s approach, at least remaining faithful to its underlying motivation, and in the next section we review a proposal that essentially maintains Béjar and Rezac’s v -probe as relevant to deriving Person-Case Constraint effects, but one that fundamentally alters the representation of third persons in grammar.

5.1.3 Relativized v -Probe: Nevins (2007)

Nevins’ (2007) proposal is rooted in an attempt to counteract a tradition that either explicitly or implicitly assumes third person to be a ‘non-person’ – i.e., featurally underspecified in relation to speech act participants – of which Béjar and Rezac (2003) is an exemplar.¹⁵ Drawing heavily on problems of featural underspecification in phonology, Nevins proposes the featural specification for different persons in Table 2.

Table 2: Person Features (Nevins 2007:288)

	+participant	-participant
+author	1st person	
-author	2nd person	3rd person

¹⁵He is also interested in explicitly deriving the ‘spurious-*se* effects’ in Spanish, which can be seen in (31).

The feature $[\pm\text{participant}]$ defines a binary opposition between speech act participants and third persons. The feature $[\pm\text{author}]$ defines a binary opposition between the speaker and the addressee. The configuration $[-\text{participant}, +\text{author}]$ is thus logically impossible. Importantly, $[\pm\text{author}]$ is contrastive only for $[\text{+participant}]$, but not for $[-\text{participant}]$, because it is not necessary to define the latter. Following a long tradition, Nevins further observes that Person-Case Constraint effects are confined to particular syntactic domains, for him everything c-commanded by v . His proposal, then, much like Béjar and Rezac’s, involves a probe on v (although not a split probe), which enters into an Agree relation with the DPs in its c-command domain. Furthermore, languages are claimed to differ by what kind of v -probe they exhibit. That is, there is a set of relativized v -probes with different properties: some languages have a probe that searches for a DP with a $[\text{+participant}]$ feature; others – and this will be the kind that occupies us here – have a probe that searches for a contrastive $[\pm\text{author}]$ feature. This probe wants to find either a first- or second-person DP, because it is only within $[\text{+participant}]$ that $[\pm\text{author}]$ is contrastive (see above). Although third persons exhibit a $[-\text{author}]$ feature, it is not contrastive and thus not of interest to this probe. The kind of features a given probe is interested in are its ‘domain of relativization’.

These types of probes interact with two additional independent conditions, the prose versions of which are given below, where ‘P’ is ‘probe’ (ibid.:291).

- (32) CONTIGUOUS AGREE (CA): “There can be no interveners between P and x that are not in the domain of relativization that includes x.”
- (33) MATCHED VALUES (MV): “All elements within the domain of relativization must contain the same value for the feature F being agreed with.”

The first condition states that the first goal a probe encounters must exhibit a feature within its domain of relativization. That is, a probe cannot encounter an unsatisfactory goal and probe further down; instead the derivation crashes. The second condition penalizes two DPs within a probe’s search domain if they do not match for the features within the domain of relativization. Crucially, the latter condition depends on a notion of simultaneous Multiple Agree in which a probe can evaluate the featural content of the DPs within its search domain, a non-trivial assumption, but one which I will adopt below.

A language with a probe relativized for contrastive $[\pm\text{author}]$ will exhibit “strong” Person-Case Constraint effects, namely forbidding both configurations with third-person recipient-beneficiary and speech act participant themes, **as well as** configurations with two speech act participants. The way in which these restrictions are accounted for is summarized in Table 3, adapted from Nevins (2007:296).¹⁶

Configurations above the dashed line are permissible, and include those in which speech act participants outrank third persons. They are permissible because the probe interested in contrastive $[\pm\text{author}]$ searches downward, and the first DP it encounters is one that exhibits these features and they are subsequently checked. It does not incur any violations of MV, since $[\pm\text{author}]$ is not contrastive for $[-\text{participant}]$ third persons. Configurations below the dashed line are not permissible, for two different mechanical reasons: for configurations in which third persons are structurally superior to speech act participants, the structure incurs a violation of Contiguous Agree; for configurations in which a speech act participant outranks

¹⁶The configurations are to be read as recipient-beneficiaries on the left and themes on the right.

Table 3: Strong PCC Restrictions

	CA	MV
✓	1 3	
✓	2 3	
	3 1	X
	3 2	X
	1 2	X
	2 1	X

another speech act participant, Contiguous Agree is satisfied, but Matched Values is not, since the probe is able to globally evaluate the fact that the contrastive [\pm author] features are not equivalent (cf. Figure 1 for schematization).

It is important to point out that Nevins’ approach shifts the analytical focus from the licensing requirements of certain kinds of DPs (i.e., speech act participants) to the requirements of certain kinds of ν -probes. That is, it is not so much a requirement that speech act participants be licensed by ν that is important, but that a probe with features that happen to seek out speech act participants be satisfied. In his approach, third persons are still, in a way, non-persons, at least insofar as they are not within the domain of relativization of a ν -probe that is searching for contrastive [\pm author]. What is crucially different, however, is that they are featurally specified, which allows us to make specific reference to them for the purposes of disallowing configurations with third-person recipient-beneficiaries and third-person themes.

5.1.4 D and Clitic Incorporation: Arregi and Nevins (2012)

Arregi and Nevins (2012) provide an account of the distribution of clitics in Basque auxiliaries by refining the big-DP hypothesis that dates to Torrego (1992) and Uriagereka (1995), and by proposing that, since the presence of clitics is dependent on finiteness, they (must) incorporate into T and C. That is, clitics cross-referencing different arguments incorporate into different structural positions. Specifically, they propose the structure in Figure 2.

Different kinds of argument DPs (e.g., speech act participants versus third persons) are merged with different amounts of this structure, and, accordingly, clitic Ds are merged in different specifiers in those different configurations, from which they agree in case and ϕ -features with T or C. K and Part are the host of relevant person features.

Furthermore, Basque pronominal clitics must be licensed by a higher functional head, and head movement of D is special.

We assume that cliticization is a particular kind of head movement with certain properties. ... it typically skips intervening heads: ν , Asp ... and T ... Furthermore, each clitic can adjoin only to a particular host: absolutive and dative clitics

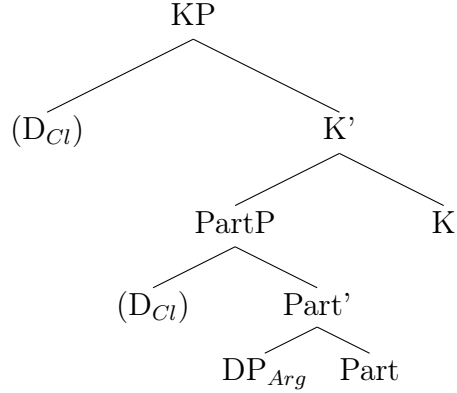


Figure 2: Structure of Big-DPs (Arregi and Nevins 2012:53)

can only adjoin to T, and ergative clitics can only adjoin to C. An important consequence of this is that there are no intervention effects in clitic movement: the absolutive clitic ... skips the c-commanding ergative clitic on its way to T ... and the ergative clitic skips the absolutive clitic in T on its way to C (since T is not a potential landing site for ergative clitics). (ibid.:58)

In what follows I do not assume the big-DP structure of Figure 2. Instead, I assume that Matsigenka object markers are actually the head of what corresponds to Arregi and Nevins' argumental DP. The intuition behind this assumption is that these object markers are the (definite) determiners that Matsigenka otherwise lacks. We have seen, however, that these object markers may also function pronominally, and it is this aspect of their morphosyntactic behavior that I see as parallel with the motivation behind the licensing requirement that Arregi and Nevins propose for Basque clitics.¹⁷ That is, D (really DP – see §5.2) needs to be licensed by Infl. An additional, but non-trivial, motivation for this approach is the fact that Matsigenka object markers appear at the right edge of the verbal word, outside of morphology I assume to be base-generated in T – which I will refer to as Infl – namely reality status marking.¹⁸

It is noteworthy that D-incorporation has been proposed as the mechanism by which (both subject and object) person-markers come to be realized on the verb in Garifuna, another Arawak language distantly related to Matsigenka (Sheil 2014). Sheil emphasizes the A-like properties of Garifuna person-markers, as well as the fact that they are in complementary distribution with independent pronouns in the language. However, we have seen that the latter is not true of Matsigenka. Ultimately, Sheil aims to round out a typology of languages based on the way they satisfy Baker's (1996:17) Morphological Visibility Condition. This results in the landing sites of moved Ds being quite distinct between Sheil and Arregi and Nevins' approaches (and motivated for quite different reasons). I take the fact

¹⁷See Arregi and Nevins (2012:52-61) for further details.

¹⁸I assume that most of the complex verbal morphology that Matsigenka exhibits is a result of roll-up head movement, but that the appearance of object markers at the right edge is the result of head movement of object markers to Infl in one fell swoop.

that Matsigenka object markers are **not** in complementary distribution with independent pronouns to be support for my analysis of them as base-generated in D, e.g., speech act participants always denote definite entities and thus are always cross-referenced by an object marker on the verb because those cross-reference markers are definite determiners.

5.2 Structure of Simplex Double Object Constructions

In this light the analysis I propose for Matsigenka simplex double object constructions is a simple one.¹⁹ It involves the general orientation that PCC effects are to be dealt via probes that need to be satisfied, that probes may be relativized, and that D clitics may syntactically incorporate, and is schematized for the example in (22), with a first-person beneficiary and a third-person theme.

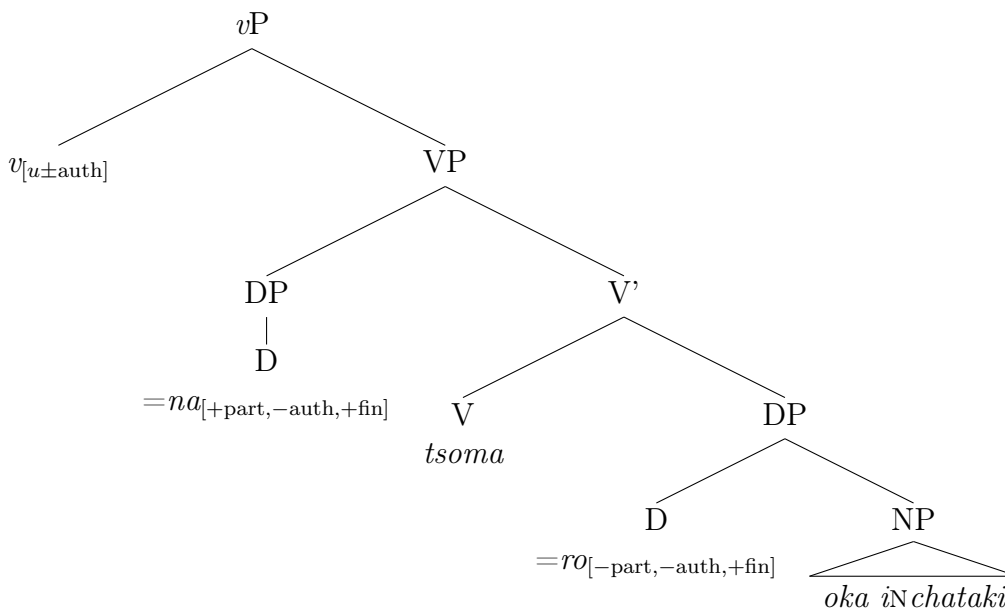


Figure 3: Simplex Double Object Construction

Matsigenka exhibits a relativized uninterpretable probe $v_{[u\pm\text{auth}]}$ that searches for a contrastive author feature.²⁰ It probes downward simultaneously for both the higher and lower DPs, and enters into an Agree relation with both of them. In this configuration, the probe can then evaluate three important things: 1) it has found a contrastive author feature on the first-person object marker =na; 2) Contiguous Agree is not violated because =na occurs in the structurally higher position; and 3) Match Values is not violated because the [-auth] feature of =ro is not contrastive, and thus does not enter into the evaluation of Matched Values. Importantly, a configuration with a second-person beneficiary and third-person theme will be permissible, but configurations of a third-person beneficiary and speech act participant

¹⁹For now this proposal concentrates on non-‘give’ constructions. Because ‘give’ apparently tolerates three-on-three configurations of a certain kind, I postpone a fuller analysis of both simplex double object constructions to future research.

²⁰Note that in what follows I will assume that the external argument in Matsigenka is introduced via a higher VoiceP, not discussed here.

theme **or** two third-persons will be not be permissible, in the first instance because (and only because) Contiguous Agree is violated, and in the second instance because there are no contrastive author features (and because Contiguous Agree is also violated). Similarly, configurations of two speech act participants will not be permissible because of a violation of Match Values. We thus derive a strong PCC effect in Matsigenka, in which speech act participants must dominate a third person and a third person only. These ungrammatical (and hence starred) configurations are schematized in Figures 4-6, respectively.

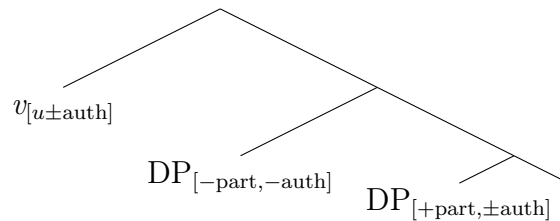


Figure 4: *3-Over-1/2

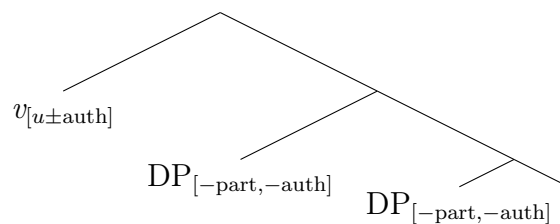


Figure 5: *3-Over-3

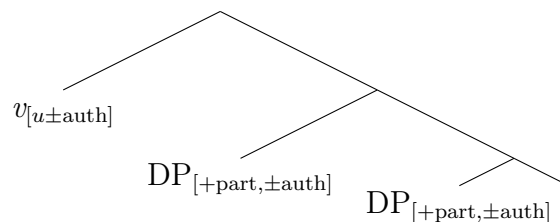


Figure 6: *1/2-Over-1/2

I posit that the Agree relation established between $v_{[u\pm auth]}$ and each DP does not constitute licensing, but that it is merely a formal mechanism by which $v_{[\pm auth]}$ comes to have a say over the permissible configurations of DP arguments within its c-command domain. Furthermore, the way in which $v_{[u\pm auth]}$ interacts with the arguments in its c-command domain is through the heads of those arguments, namely D. In contrast, actual licensing is achieved via Infl, and for now I will adopt Arregi and Nevins' [+fin] feature as a way to achieve this, although, given that object marking does not correlate with finiteness in Matsigenka, there are presumably better ways to go about this. Now, once the verb has head-moved out of VP, we will be left with a string of clitics that will each be the target of $Infl_{u\text{fin}}$, which, like $v_{[u\pm auth]}$, can simultaneously establish an Agree relation with both object DPs, and, unlike $v_{[u\pm auth]}$, license them, and incorporating them into Infl. Note that both probes interact

with the arguments they are interested in via D. This of course begs the question of how D comes to enter into permissible configurations with an NP, and I leave this DP-internal line of inquiry for future research.

The idea that $v_{[u\pm\text{auth}]}$ interacts directly with D makes significant predictions for configurations in which object markers are suppressed due to the semantico-referential constraints described in §2, namely when a third-person argument is indefinite. Local-over-three configurations with indefinite themes (see (25)) are permissible because, just as a third-person theme does not enter into the evaluation of Contiguous Agree or Match Values when it is overt, it does not enter into the evaluation when it is non-overt. Three-over-three configurations in which both arguments are indefinite are not permitted because, as when they are overt, $v_{[u\pm\text{auth}]}$ is not satisfied because there is no contrastive author feature. Local-over-local configurations can never lack object markers because, for independent reasons, they are always definite. The final case, in which an indefinite third-person recipient-beneficiary is superior to a speech act participant theme, is problematic (Figure 4), because there is no object marker to force a violation of Contiguous Agree; thus we might expect Matsigenka to permit indefinite third-person recipient-beneficiaries if the theme is a speech act participant, which is not attested. This suggests that the direct interaction with D may need to be rethought, and I leave this to future research.

5.3 Structure of Single Object Constructions

Given the analytical burden of $v_{[u\pm\text{auth}]}$ in accounting for restrictions on the person of multiple objects, it is worth considering the structure of simple monotransitive clauses. Specifically, we can entertain two hypotheses: 1) either v is inactive in monotransitive clauses; or 2) it exhibits a different kind of probe from ditransitive clauses. The first hypothesis is based on the observation that, in ditransitive clauses, the function of v is to restrict combinations of different persons, while in monotransitive clauses there are no such combinations that need to be restricted. The second hypothesis is based on the intuition that, if v is concerned with the person of the argument(s) within its c-command domain, then it should be concerned in this way at all times. Furthermore, Nevins (2007) gives us the formal machinery to make hypothesis two viable, namely in the form of a probe that can be relativized to contrastive participants.²¹ Hypothesis two, then, would involve a v -probe that searched for this featural value, which would be satisfied by an argument of any person.

It is not immediately obvious which of these two hypotheses is appropriate for Matsigenka, and Nevins does not discuss how his relativized v -probes carry over to monotransitive clauses. I propose here, however, that, if the interaction between v and D is correct, there is a slight amount of Matsigenka-internal evidence favoring hypothesis one over hypothesis two. Relevant here are monotransitive clauses with indefinite third-person themes, as in (10)-(12). In these instances, there is no contrastive participant feature to satisfy the above-described probe on v , and thus any derivation involving that probe would crash. In contrast, if monotransitive verbs in Matsigenka do not project vP whatsoever, then we more straightforwardly account for the non-restriction on the person of direct objects in the language. This line of reasoning is consonant with the idea that v is not directly involved in licensing anyway,

²¹Note that, unlike $[\pm\text{author}]$, $[\pm\text{participant}]$ is always contrastive.

and its absence in this regard is thus trivial. A notable byproduct of this proposal is that *v* can be thought of as necessary for introducing an additional argument into the clause, but instead of that argument being the external argument as in traditional approaches, it is the recipient-beneficiary (dative) argument. Moreover, its role in the introduction of this argument is only indirect – i.e., it is not introduced in Spec,*v*P – and derives from the fact that the configuration of multiple objects must be evaluated by a probe that lives on *v*.

6 Repairs to Person-Case Constraint Violations

Matsigenka exhibits two repairs to the Person-Case Constraint violations we have thus far encountered. The first repairs configurations of two third-person objects, and involves what I will refer to as the ‘benefactive applicative’ =*ni*, an enclitic immediately following reality status marking and immediately preceding person-marking (§6.1). The second repairs configurations in which a speech act participant is a theme, and involves an inflectable element *ashi* and an independent pronoun (§6.2). I will analyze both as the heads of prepositional phrases. Following Peterson (2007), I refer to the object inherent in the event structure of a verb as a ‘base object’, and to the object of a verb introduced via an applicative as an ‘applied object’. The term ‘object’ subsumes both of these categories.

6.1 Benefactive Applicative =*ni*

When both recipient-beneficiary and theme are third person, Matsigenka exhibits a construction characterized by the enclitic =*ni* APPL:BEN and a single object marker that is coreferential with the applied object. In (34), we see that the object marker =*ri* covaries in person and gender with the applied object *virakocha* ‘white man’, a masculine noun, and not the base object *tsinane* ‘woman’, a feminine noun.

(34) ...inkogakenerira tsinane **virakocha**... REC = 3; TH = 3

i- N- *kog* -*ak* -*e* =*ni*²² =**ri** =*ra* *tsinane* **virakocha**
 3mS- IRR- search.for -PERF -IRR.I =APPL:BEN =3mO =SUB female white.man

ENGLISH: ‘...in order to search for a woman for the white man...’

SPANISH: ‘...a buscarle mujer para el colono...’ (vpp107)

In (35), the covariance relation is obscured, since both *ivenkiki* ‘plant sp.’ and *jina* ‘wife’ are feminine nouns. I include it here to illustrate the order of multiple nominal objects in this construction, namely theme followed by beneficiary, or base followed by applied object.

(35) ...yamakenerora ivenkiki **ijina**... REC = 3; TH = 3

i- *am* -*ak* -*i* =*ni* =**ro** =*ra* *iveNkiki* *i-* **jina**
 3mS- bring -PERF -REAL.I =APPL:BEN =3fO =SUB plant.sp. 3mP- wife

²²The benefactive applicative =*ni* exhibits a morphophonological allomorph =*ne* following -*e*, which may be either the morphophonological allomorph of realis -*i* (see footnote 2) or basic irrealis -*e*. Thus contrast, for example, the string -*ig-i=ni=ri* with -*ig-ak-e=ne=ri*.

ENGLISH: ‘bringing *piripiri* to his wife...’
 SPANISH: ‘...trayendo *piripiri* a su esposa...’ (mak6)

In the two preceding examples, the nominal themes are indefinite, and so it is not surprising that there is no object marker on the verb coreferential with it. However, in this construction, there is actually competition for the single third-person object marker slot on the verb, and even a definite nominal theme does not qualify for it, as seen in (36). In this example, the beneficiary is expressed only via the object marker =*ri*, while the theme is expressed via the noun *mire* ‘beverage’. This noun is inherently feminine, and is contextually definite, but it does not trigger a coreferential object marker on the verb, which would be =*ro*. This competition is characteristic of all Matsigenka applicative constructions.

(36) Yovetsikakeri imire... BEN = 3; TH = 3

i- ovetsik -ak -i =ni =ri i- mire
 3mS- prepare -PERF -REAL.I =APPL:BEN =3mO 3mP- beverage

ENGLISH: ‘He prepared him his drink...’
 SPANISH: ‘Le preparó su bebida...’ (kt2.12)

In examples (22)-(36) the person of the theme has been held constant, and the person of the beneficiary has been permuted. In this context, when the beneficiary is a speech act participant, Matsigenka exhibits a simplex double object construction; when the beneficiary is another third person, the language exhibits a complex double object construction, namely that involving the benefactive applicative =*ni*. The rest of this section is devoted to describing the morphosyntactic properties that obtain when the person of the theme is held constant as a speech act participant, i.e., either first or second person.

6.2 Benefactive Noun *ashi*

Contexts in which the theme is a speech act participant and the recipient-beneficiary is either the other speech act participant or a third person are characterized by the following properties: 1) the speech act participant theme is expressed (minimally) as an object marker on the verb; and 2) the beneficiary is expressed via inflecting the element *ashi*.²³ For example, in (37), the theme is second person, and is expressed via the object marker =*Npi viro* and the (syntactically optional) pronoun *viro*; the beneficiary is first person, and is expressed via a collocation of the benefactive pro-form *ashi*, inflected for first person, and the pronoun *naro*. Unlike *viro*, *naro* is obligatory. Thus we can think of the beneficiary in this construction as an oblique, which is not cross-referenced on the verb.

(37) Ikogakenpi viro nashi naró. BEN = 1; TH = 2

i- kog -ak -i =Npi viro n- ashi naró
 3mS- search.for -PERF -REAL.I =2O 2SG.PRO 1S- ASHI 1SG.PRO

ENGLISH: ‘He looked for you for me.’
 SPANISH: ‘Te ha buscado para mí.’ (MKO)

²³Note that *ashi* elsewhere functions as a possessive pro-form, e.g., *n-ashi naró* ‘mine’.

Similarly, in (38), the theme is first person, and is expressed via the object marker $=na$ and the (syntactically optional) pronoun *naro*; the beneficiary is third person, and is expressed via the same collocation, except that in this case, the benefactive pro-form is, expectedly, inflected for third person.

(38) Okogakena naro irashi irirori. BEN = 3; TH = 1

o- kog -ak -i =na naro ir- ashi iriro =ri
 3fS- search.for -PERF -REAL.I =1O 1SG.PRO 3mS- ASHI 3m.PRO =CNTR

ENGLISH: ‘She looked for me for him.’

SPANISH: ‘Ella me ha buscado para él.’ (MKO)

Thus we have seen that this construction, which I will refer to as the ‘*ashi* benefactive construction’, is defined by the person of the theme, namely that it be a speech act participant, and not by the person of the beneficiary.

6.3 Interim Summary: Benefactive Constructions

Table 4 summarizes the logical possibilities of combinations of themes and beneficiaries of different persons. We see a simple double object construction employed when the theme is third person and the beneficiary is a speech act participant, a complex double object construction involving the applicative $=ni$ when both theme and beneficiary are third person, and the *ashi* benefactive construction elsewhere.

Table 4: Combinations of Theme and Recipient-Beneficiaries

		THEME		
		1	2	3
BEN	1		$=Npi_{th}$ n- <i>ashi</i> _{ben}	$=na_{ben}$ $=ri_{th}$
	2	$=na_{th}$ p- <i>ashi</i> _{ben}		$=Npi_{ben}$ $=ri_{th}$
	3	$=na_{th}$ ir- <i>ashi</i> _{ben}	$=Npi_{th}$ ir- <i>ashi</i> _{ben}	$=ni$ $=ri_{ben}$

It is noteworthy that what is prioritized in this system is the marking of speech act participant objects on the verb, which is common to all configurations in which a speech act participant is conceptually present in event structure. This yields the result, as we have seen, that the speech act participant marked on the verb in one construction corresponds to the beneficiary, and in another construction corresponds to the theme.

6.4 $=ni$ and *ashi* as Prepositions

In this section I lay out an account of $=ni$ and *ashi* that, despite their surface dissimilarities, analyzes them both as (different kinds of) prepositions. The intuition behind this is twofold. The first stems from the morphological properties of $=ni$, which, unlike what I will come to refer to as ‘true applicatives’ in Matsigenka (see §7), occurs at the right edge of the verbal

word, and not, for example, nearer to the verb root.²⁴ The second comes from the order of full nominal and pronominal objects when they are overt. In both (34) and (37), for *=ni* and *ashi*, respectively, we saw that the recipient-beneficiary (the apparent applied object) follows the base object. This is unlike true applicatives, in which the applied object rigidly **precedes** the base object.

We begin with *=ni*, as in Figure 7, schematized for the example in (34): *=ni* is the head of a PP that is an adjunct to VP and selects for a full DP.

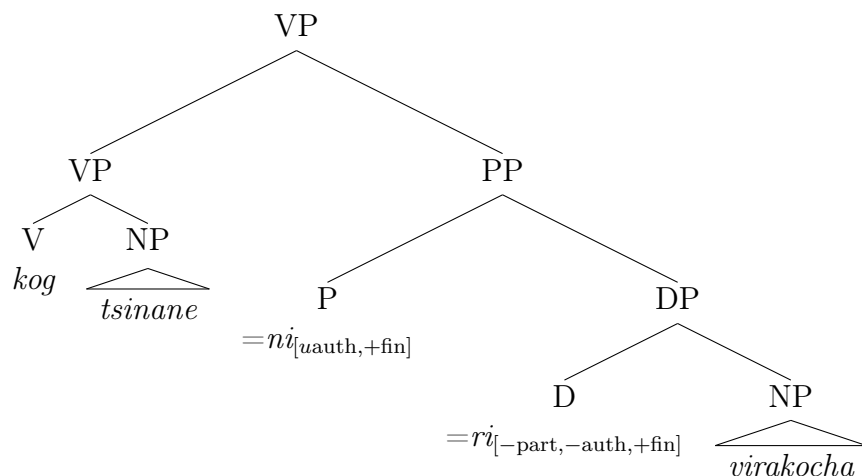


Figure 7: Benefactive Applicative *=ni* as Preposition

The component parts of this structure are meant to closely parallel those of *vP* in terms of relativized probes and clitic incorporation. Here, P functions like *v* in exhibiting such a relativized probe, but in this case the domain of relativization of the probe is distinct. Instead of searching for a contrastive author feature like *v*, *=ni* searches for a non-contrastive author feature. In further contrast to *v*, *=ni* is additionally exhibits its own [+fin] features, which will require that it be incorporated into the verbal word at Infl.

This approach derives a noteworthy restriction of the *=ni*-construction in Matsigenka, namely that it occurs only when a recipient-beneficiary is third person.²⁵ Furthermore, this Matsigenka construction is interesting within an analytical framework that makes use of probes relativized to the features [\pm participant] and [\pm author] in that it rounds out the typology of the types of relativized probes expected based on the combinations of different values of these two features, and applies it to a construction in which no Person-Case Constraint effects are present.

Now we turn to *ashi*, which, although also a preposition, exhibits strikingly different properties from *=ni*, as illustrated in Figure 8, schematized for (37): *ashi* is the head of a PP that is an adjunct of VP and selects for only an NP (and not a DP).

The fact that *ashi* selects only for an NP derives the fact that object markers covarying in number and gender with the complement of *ashi* never occur. Relatedly, *ashi* exhibits no

²⁴As an illustration, the instrumental applicative *-ant*, one such true applicative that we will encounter below, occurs a full thirteen suffixal positions to the left of *=ni*.

²⁵However, it does not derive the more specific generalization that the theme in such constructions must **also** be third person – see §8.

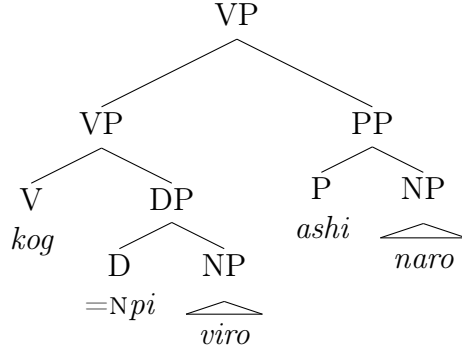


Figure 8: *ashī* as Preposition

relativized probe in the way that *v* and P do, and this derives the generalization that its complement may be either a speech act participant or third person (see (38)). We also predict that, as seen, the nominal or pronominal complement of *ashī* will be linearized following the direct object (i.e., theme) of the verb. This begs an important question, however: if Matsigenka transitive verbs, as we have seen, exhibit no restriction on the person of their direct object, and there are no restrictions on the complement of *ashī*, why is *ashī* not used to license a recipient-beneficiary argument universally in the language?²⁶ Recall that *ashī* is only employed to license a recipient-beneficiary when the theme is a speech act participant, but there is no hierarchical relation in Figure 8 between the theme and beneficiary that would allow us to derive this restriction, say, via c-command. This, to my mind, is ultimately a larger question of how to restrict repair structures such that they are in complementary distribution with their unrepaired counterpart, and, although important, is one that I will postpone for future research.

7 Instrumental Applicative *-ant*

In this final section we explore two ways in which instruments are expressed in Matsigenka. In the first construction, used when the instrument is third person, *-ant* APPL:INSTR occurs as a verbal suffix. In the second construction, used when the instrument is a speech act participant, *ashī* surfaces. Thus the purpose of this section is to illustrate one more way in which *ashī* is a repair for an illicit configuration of persons, although, as we will see, such a configuration is illicit for very different reasons than in the simplex double object construction, where illicitness derived from the dissatisfaction of a relativized probe.

Turning to *-ant*, observe that, in addition to the person restriction just mentioned, when both instrument and theme are third person (i.e., in the *-ant*-construction), there is competition for the single third-person object marker slot analogous to the benefactive applicative. This is shown in (39), in which the object marker *=ri* covaries in gender with the masculine noun *tsineri* ‘tree tar’ and not the feminine noun *vanki* ‘feather’. Note that, unlike the

²⁶I thank Nico Baier for bringing this to my attention.

benefactive applicative, the instrumental applicative involves the order instrument-theme, or applied object-base object, and is thus a true applicative in the terminology above.

- (39) Yontsirekantakari **tsineri** ivanki. INSTR = 3; TH = 3

i- oNtsirek -aNt -ak -a =ri tsineri i- vaNki
 3mS- adhere -APPL:INSTR -PERF -REAL.A =3mO tree.tar 3mP- feather

ENGLISH: ‘He adhered the feather with *tsineri*.’

SPANISH: ‘Pegó con *tsineri* la pluma.’ (MKO)

Reversing the order of the nominal objects results in ungrammaticality (40).

- (40) *Yontsirekantakari ivanki tsineri. INSTR = 3; TH = 3

i- oNtsirek -aNt -ak -a =ri i- vaNki tsineri
 3mS- adhere -APPL:INSTR -PERF -REAL.A =3mO 3mP- feather tree.tar

INTENDED: ‘He adhered the feather with *tsineri*.’ (MKO)

When the instrument is third person and the theme is a speech act participant, as in (41), both objects appear cross-referenced on the verb. That is, the same competition does not occur as occurs between two third-person objects. Furthermore, unlike the simplex double object constructions in (22) & (23) – in which a speech act participant marked on the verb was invariably interpreted as a recipient-beneficiary when a third-person object marker was also present – here there is no such interpretation for the speech act participant. Thus, as elsewhere, marking of a speech act participant object on the verb is maintained.

- (41) ...povetsikantakenarora **paroto**... INSTR = 3; TH = 1

p- ovetsik -aNt -ak -i =na =ro =ra paroto
 2S- make -APPL:INSTR -PERF -REAL.I =1O =3fO =SUB tree.sp.

ENGLISH: ‘...you created me from the *balsa* tree...’

SPANISH: ‘...me has creado del árbol *paroto*...’ (tas9)

Turning now to the second morphosyntactic strategy relevant to the instrumental construction, we see that, when the notional instrument is a speech act participant, the instrumental applicative suffix *-ant* is not employed, and the pro-form *ashi* surfaces. This is shown in (42) & (43), with first- and second-person instruments, respectively. The theme is the only object of the verb, the instrument is expressed as an oblique via *ashi*.²⁷

- (42) Irirori yovetsikakenpi nashi naro. INSTR = 1; TH = 2

iriro =ri i- ovetsik -ak -i =Npi n- ashi naro
 3.PRO =CNTR 3mS- make -PERF -REAL.I =2O 1S- ASHI 1SG.PRO

²⁷Contexts in which speech act participants function as instruments are admittedly difficult to devise. Here the context provided was biblical.

ENGLISH: ‘He created you from me.’
 SPANISH: ‘Él te ha creado de mí.’ (MKO)

(43) Naro novetsikagetakeri pashi viro. INSTR = 2; TH = 3

naro n- ovetsik -a -ge -t -ak -i =ri p- ashi viro
 1SG.PRO 1S- create -EPV -DISTR -3PC -PERF -REAL.I =3mO 2S- ASHI 2SG.PRO

ENGLISH: ‘I created them from you.’
 SPANISH: ‘Yo les he creado de ti.’ (MKO)

Table 5 summarizes the logical possibilities of combinations of themes and instruments of different persons. We see the applicative suffix used when the instrument is third person, and an *ashi* instrumental construction elsewhere.

Table 5: Combinations of Theme and Instrument

		THEME		
		1	2	3
INSTR	1		=Npi _{th} n-ashi _{instr}	=ri _{th} n-ashi _{instr}
	2	=na _{th} p-ashi _{instr}		=ri _{th} p-ashi _{instr}
	3	-ant ... =na _{th} =ri _{instr}	-ant ... =Npi _{th} =ri _{instr}	-ant ... =ri _{instr}

Unlike the space of benefactive constructions, which was divisible into three domains (simplex double object construction, the applicative =*ni*, and the *ashi* benefactive construction), the space of instrumental constructions is divisible into two domains: the applicative *-ant*, and the instrumental *ashi* construction. Like benefactive constructions, however, we see the marking of speech act participant objects on the verb prioritized, although here such speech act participants are interpreted uniformly as themes, whereas in the benefactive constructions they varied between theme and beneficiary interpretations. Lastly, and perhaps most salient, we see that the applicative morphemes =*ni* and *-ant*, which can be described as assigning particular semantic roles to the applied objects they introduce, are only employed when they can (and must) assign such a role to a third-person applied object. When either the applied object is to be a speech act participant, or a speech act participant must be marked on the verb because it is present in event structure, or both, Matsigenka resorts to other morphosyntactic means, the distribution of which is summarized in Tables 4 & 5.

7.1 Instrumental *-ant* as High Applicative

The goal of this section is to propose an account of *-ant* that derives the person restrictions seen in the first part of §7. It relies heavily on the intuition that true applicative structures in Matsigenka are fundamentally different from simplex double object constructions, although, intriguingly, they exhibit the same repair (cf. *ashi*). I couch an analysis of Matsigenka applicatives²⁸ in Pytkänen’s (2002) typology of high and low applicatives. For Pytkänen,

²⁸Here applicatives are illustrated only by *-ant*. Certain other applicatives display different person restrictions, and will be the subject of future work.

high applicatives are merged above VP and ‘denote a relation between an event and an individual’, while low applicatives are merged below VP and ‘denote a relation between two individuals’ (ibid.:19). Furthermore, ‘the applied argument asymmetrically c-commands the direct object’, which she notes as a common syntactic property of applicative constructions crosslinguistically. Instrumental applicatives in this framework are said to be high.

A high applicative analysis of *-ant* is the structure in Figure 9, schematized for (39): the applicative *-ant* is merged as the head of ApplP, which is itself merged above VP; the applied object is merged in Spec,ApplP.

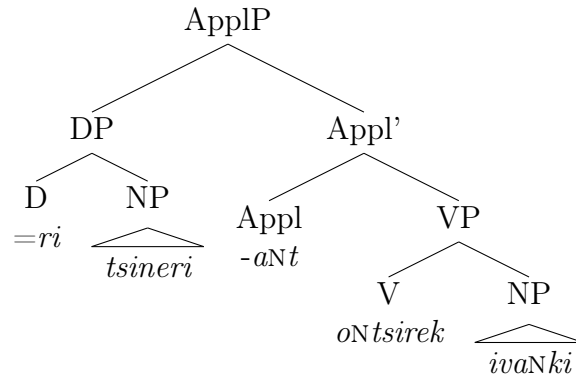


Figure 9: High Instrumental Applicative *-ant*

The high structure is analytically appealing for several reasons. First, it abides by the typological generalizations regarding the semantics and c-command properties of applicatives laid out by Pykkänen. As such, the applied object is, for example, available for relativization over the base object, as shown in (44) & (45).

- (44) ...irai irantsikantaenparira. RELATIVE CLAUSE

ir- ai ir- N- atsik -ant -a -eNpa =rira
 3mP- tooth 3mS.IRR- IRR- bite -APPL:INSTR -REG -IRR.A =REL

ENGLISH: ‘...teeth with which to bite him.’

SPANISH: ‘...dientes con que morderlo.’ (oim28)

- (45) ...ivankipage integatantakenparorira ichakopite. RELATIVE CLAUSE

i- vaNki -page i- N- tega -t -ant -ak -eNpa -ro =rira
 3mP- feather -PL 3mS- IRR- adorn -EPC -APPL:INSTR -PERF -IRR.A -3fO =REAL
i- chakopi -te
 3mP- arrow -ALIEN.POSS

ENGLISH: ‘...feathers with which to adorn their arrow.’

SPANISH: ‘...las plumas de la ala para adornar su flecha.’ (ovc6)

Second, situating the applicative head above V (and not below it) also facilitates a head movement analysis of word formation in Matsigenka, which, although outside the scope of

this paper, is relevant here insofar as V is available to head-move and left-adjoin to Appl. This correlates, furthermore, with the fact that *-ant* appears near to the verb root, as opposed to, say, aspect and reality status, which are heads positioned higher in the structure. Third, it predicts the order of multiple nominal objects in this construction to be applied object-base object, the attested pattern.

Based on the person configurations we saw in the simplex double object construction, it seems that the relativized probe $v_{[u\pm\text{auth}]}$ cannot be at work here because structures as in Figure 10 – schematized for (41) – are permissible, even though a speech act participant theme (base object) is in a structurally inferior position to a third-person applied object. It was exactly this configuration that was illicit in the simplex double object construction.

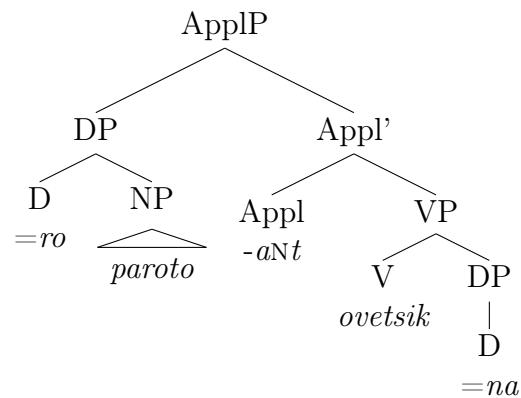


Figure 10: High Instrumental Applicative *-ant* with SAP Theme

However, although not illustrated here, Appl appears to be merged above *v* in Matsigenka. This follows if one believes that causatives should be the overt realization of *v*: in this language, the causative suffixes precede *-ant* linearly, and thus should be analyzed as inferior to it structurally, given the above remarks on head movement (i.e., [Appl [*v* [V]]]). Thus it may be that the person configuration in Figure 10 is licit because *v* does not dominate all of it. Nevertheless, I will for now assume that Appl simply exhibits a requirement that the DP in its specifier be third person.

Finally, I conclude this section by raising two outstanding issues regarding multiple object markers in *-ant*-constructions. The first issue concerns their relative ordering. In Figure 10 we see that the base-generated order of these two clitics *=ro* and *=na* does not correspond to their surface order (i.e., *=na=ro*). For now I will assume that, during the process by which these clitics are incorporated into Infl, they are reordered due to a requirement of Infl itself. The second issue concerns combinations of two third-person object markers. As we have seen in this section, and as we saw for the simplex double object construction, combinations of multiple third-person object markers in Matsigenka are universally ungrammatical. In the simplex double object construction this was derived via the type of relativized probe involved in that construction, while here it is not obvious how we might make recourse to the requirements of such a probe. However, I would like to suggest, as a line of inquiry for future research, that both independent requirements on Spec,ApplP (see above) **and** on $v_{[u\pm\text{auth}]}$ might be at work in this construction. That is, a second object marker is licit if it is a speech act participant, but not if it is another third person, the exact distribution

predicted based on what we have seen of $v_{[u\pm\text{auth}]}$.

8 Conclusion

Throughout this paper we have observed a persistent asymmetry between speech act participants and third persons as they relate to verbal object marking in Matsigenka. At least one of the former is obligatorily marked on the verb if conceptually present in event structure, whereas the latter exhibit greater variability. Third persons may go unencoded on the verb for different reasons: it may be because, as D-heads, they were never merged into the structure to begin with; or it may be because they cannot stand in a structurally superior position to a speech act participant, or to each other; or it may be because of restrictions on the number of permissible determiners of the same person on Infl. That is, because Matsigenka object markers are here analyzed as D-heads, a variety of different mechanisms are required to prevent certain co-occurrences of them on the verb itself. Put differently, as D-heads they are free to merge as necessary given the referential properties of their complement NPs, but their surface realization is restricted by independent mechanisms. These co-occurrence restrictions are most succinctly accounted for in the simplex double object construction, but they have not formed the focus of the analytical proposals for the repairs to PCC-violated structures (the complex double object constructions), particularly as regards *=ni*, *ashi*, and the instrumental applicative *-ant*. That Infl might participate in the restriction of these co-occurrences seems to me an important starting point for future research.

Another way of framing a question of trade-offs here is to ask whether the analytical benefit gained by positing that verbal object markers are D-heads overcomes the additional formal machinery (especially *v*-probes) necessary to account for clearly non-free combinations of otherwise freely merged D-heads (*modulo* referentiality). I believe that it does.

A variety of other concerns should permeate any future investigation of object marking in Matsigenka. What is the nature of DP-internal agreement? What are the details of the mechanism by which object markers come to be incorporated into Infl? Does locality play a role here? Is it Ds, DPs, or NPs that require licensing? I expect the answers to these questions to be compatible with the analytical proposals developed so far in this work.

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A Abbreviations & Verbal Morphology

A	a-class verb
ABL	ablative
ADJ	adjective
ADJVZR	adjectivizer
AFF	affect
ALIEN	alienable
ALIEN.POSS	alienable possession
ALL	allative
AND	andative
ANIM	animate
APPL:INDR	indirect applicative
APPL:MOTV	motive applicative
ASSOC.MOT:DIST	distal associated motion marker
ASSOC.MOT:DIST.REG	distal regressive associated motion marker
AUG	augmentative
CAUS:INFL	influential causative
CAUS:MED	mediative causative
CL	classifier
CNTR	contrastive
COORD	coordination
COP	copula
DEP	departive
DEF	defective root
DRCT	directive
DUR	durative
EPC	epenthetic consonant
EPV	epenthetic vowel
EXST	existential
f	feminine
FEM.EGO	female ego
FRUST	frustrative
HORT	hortative
I	i-class verb
IMP	imperative
IMPF	imperfective aspect
INCL	inclination
INDR	indirect
INT	intentional
INTENT	intentional
INAN	inanimate
IRR	irrealis
LOC	locative

MAL.PLRACT	malefactive pluractional
m	masculine
NEG	negative
O	object
ONOM	onomatopoeia
PAS	passive
PL	plural
PERF	perfective aspect
PRO	pro-form
PURP	purposive
REAS	reason
RECP	recipient
REG	regressive
REL	relativizer
RET	returnative
S	subject
SUB	subordinator
SUBJ.FOC	subject focus
TRNS	transitive
VERIF	verificational

1	2	4	NI	CLASS	APPL	CAUS
-a (AND)	do.well	4			APPL	
-re (REV)	-agantsi	-aa			-ako (INSTR)	-(ak)ag (INFL)
						-akagant (MED)

APPL	INCL	APPL	DISSIM	RECIP	APPL	APPL	MOT.OBL
-vent (MOTV)	-vintsa	-ashi (INTENT)	-manpeg	-vakag	-imo (PRES)	-ant (INSTR)	-vi
-anont (BEN)		-apitsa (SEP)					

CHAR.A-PASS	VERIF	DUR.CHAR	MAL.PLRACT	21	ANGER	ADV	FRUST
-ant	-asano	-unte	-na	-ge (DSTR)	-ut	-aman	-ve
				-vage (DUR)		-anink	
				-uma (QUANT)			
				-garant (PART)			

PLRACT	PLUR	REACT	DIR	ASPECT	REAL	PERS1	PERS2
-apini	-ig	-ma	-an (ALL)	-ak (PERF)	-i	=na (1O)	=ri (3mO)
			-apa (ABL)	-a (REG)	-e (IRR)	=Npi (2O)	=ro (3fO)
			-u (RET)	-Ø(IMPF)		=ni/=ne (APPL)	
			-av (TRNS)				
			-apanu (INTRP)				
			-apanaa (MIDPT)				
			-aki (ASSOC.MOT)				
			-aa (ASSOC.MOT)				

Table 7: Matsigenka Verbal Suffix Positions