

Reflexive constructions in the world's languages

Edited by

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Studies in Diversity Linguistics



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Contents

Acknowledgments	iii
I Introduction	
1 Reflexive constructions in Nungan Hannah S. Sarvary	3
2 Reflexive constructions in Walman Lea Brown & Matthew Dryer	19
3 Reflexive constructions in Waray Thomas E. Payne & Voltaire Q. Oyzon	41
II Australia	
4 The reflexive voice construction in Anindilyakwa Marie-Elaine van Egmond	71
5 The reflexive construction in Jaminjung/Ngaliwurru Eva Schultze-Berndt	97
6 Reflexive constructions in Kuuk Thayorre Alice Gaby	121
III North America	
7 Reflexive constructions in Warlpiri Mary Laughren	141
8 Coreference constructions in Zenzontepec Chatino Eric W. Campbell	175

Contents

9	Reflexive constructions in Hoocąk	
	Johannes Helmbrecht	199
10	Reflexive prefixes in Oneida	
	Karin Michelson	225
11	Reflexive constructions in Yaqui	
	Lilian Guerrero	245
 IV South America		
12	Reflexive and reciprocal in Aguaruna	
	Simon Overall	275
13	Reflexive constructions in Kakataibo (Pano, Peru)	
	Roberto Zariquiey	295
14	Reflexive constructions and middle marking in Mojeño Trinitario	
	Françoise Rose	311
Index		339

Acknowledgments

Part I

Introduction

Chapter 1

Reflexive constructions in Nungon

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This chapter gives an overview of expression of reflexivity in the Papuan language Nungon of Morobe Province, Papua New Guinea. Nungon has two sets of free personal pronouns, a “basic” set and an “emphatic” set. The emphatic set includes more formal person/number distinctions than the basic set, and is used for various pragmatic effects relating to contrast and focus, as well as for the reflexive relationship between a transitive subject and object, when they are obligatory. Nungon has no set formal marking for reflexive relationships beyond this transitive subject/object coreference, however, with interpretation of reflexivity largely context-dependent for subject/oblique coreference and other coreferential combinations.

1 Introduction

This chapter gives an overview of forms and structures related to the expression of reflexivity in the Papuan language Nungon of Morobe Province, Papua New Guinea. Nungon has no dedicated marker of reflexivity or reflexive pronoun. Instead, reflexivity is one function of the “emphatic” set of personal pronouns.

Nungon is a Papuan language of the Finisterre group within the Finisterre-Huon language family, spoken in northeastern Papua New Guinea. Nungon is an umbrella term applied to the southern four village-lects of an oval dialect continuum in the Uruwa River valley (see Figure 1.1), of which each village community historically had a distinct dialect. (The northernmost dialects are known collectively as Yau, source of the language code <yuw> that applies to the entire dialect continuum.) Nungon is spoken by approximately 1,000 people, but these are divided among the distinct dialects, such that there are no more than about 350 speakers of each dialect. All data and discussion in this chapter use the Towet village dialect.



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Hannah S. Sarvasy



Figure 1.1: Linguistic context of the Uruwa River valley (shaded), Morobe Province, Papua New Guinea (Sarvasy 2017a: 7)

A full overview of Nungan grammar is in the Nungan reference grammar (Sarvasy 2017a).¹ Some additional phonetic and phonological details are in Sarvasy, Elvin, et al. (2019); Sarvasy, Jaydene Elvin, et al. (2019); Sarvasy et al. (2020). Nungan is an agglutinating language with some fusion. Constituent order is verb-final. Grammatical relations are indicated through indexation on the verb and through postpositions. There is no grammatical gender (Sarvasy 2016b). Nungan number marking includes several “splits” (Sarvasy 2018), with different areas of the grammar involving different number systems.

Like many Papuan languages, Nungan is a clause chaining language (Sarvasy 2015; 2020a), with several non-finite verb inflections that lack tense, mood, and, sometimes, subject person/number information, which typically serve as non-final members of clause chains or multi-verb predicates (Sarvasy 2020b). Finite verb inflections obligatorily mark subject person/number, distinguishing seven forms (second person dual always has an identical form to third person dual, and the same goes for second person plural and third person plural). A sub-class

¹Nungan quantification is discussed in full in Sarvasy (2017c); imperatives and commands are covered in Sarvasy (2017b); linguistic history and comparative structures is in Sarvasy (2013; 2014); more anthropological linguistic detail on covert expression of gender and secret language are in Sarvasy (2016b; 2019a).

1 *Reflexive constructions in Nungon*

of 15 transitive verbs, most with prototypically human object arguments, also obligatorily mark object number or person/number through a verbal prefix.

This chapter primarily draws on the author’s monolingual (Nungon-only; see Sarvasy 2016a) immersion fieldwork on Nungon grammatical structures over a total of nine months (2011–2013), during which a 140,700-word corpus of Nungon natural speech was created.² The corpus contains transcribed audio- and/or video-recorded texts (mostly narratives, but including some dialogues, procedural texts, and songs; from over 40 adult consultants), as well as the author’s transcriptions of non-recorded Nungon natural speech from observation and elicitation in the field. This chapter is also informed by the author’s continued involvement since 2015 with the Towet village community to document child acquisition of the Nungon language there (Sarvasy 2019b; 2020b,a); the two much-larger corpora of child-adult conversational interactions are not used in the present chapter. Where examples in this chapter come from texts or elicitation sessions from the Nungon adult corpus, the name of the text is given as an attribution after the example.

2 Nungon personal pronouns overview

Like many other Finisterre-Huon languages (McElhanon 1973: 21), Nungon has two personal pronoun paradigms, forming a “basic” pronoun set and an “emphatic” set (full discussion of personal pronouns is in Sarvasy 2017a: 351–359). The term “emphatic” is used in deference to the tradition in Finisterre-Huon linguistics (e.g. McElhanon 1973), though “self-intensifier” could be applicable (chapters/haspelmath [this volume]). Both sets combine with grammatical relation-marking postpositions to express agency, instrument, possession, location, and accompaniment. Third person pronouns in both sets can occur with reference to inanimate objects.

Formally, the Nungon basic set includes reduced person/number distinctions compared to the emphatic set, as seen in Table 1.1. While the emphatic paradigm includes the maximal nine distinct forms for the nine possible person/number categories, the basic paradigm includes only five distinct forms. Comparison with related Finisterre languages Nukna and Nek implies that Nungon first and second person basic pronouns could have originally included distinct forms for dual

²The Nungon corpus is archived in full with the Firebird Foundation. Individual components of the corpus may be obtained through written correspondence with the author. Open-access samples of Nungon natural speech are archived with CHILDES, at: <https://childestalkbank.org/access/Other/Nungon/Sarvasy.html>.

Hannah S. Sarvasy

number, **not* (1du) and **hot* (2du), but that these have phased out over time, with the original plural (≥ 3) forms *non* and *hon* generalizing to encompass dual number as well (Sarvasy 2017a; 2018).

Table 1.1: Nungon personal pronouns

	singular		dual		plural	
	basic	emphatic	basic	emphatic	basic	emphatic
1	<i>nok</i>	<i>naga</i>	<i>non</i>	<i>nori</i>	<i>non</i>	<i>noni</i>
2	<i>gok</i>	<i>gaga</i>	<i>hon</i>	<i>hori</i>	<i>hon</i>	<i>honi</i>
3	<i>yu</i>	<i>ino</i>	<i>yu</i>	<i>yori</i>	<i>yu</i>	<i>yoni</i>

Functionally, the basic personal pronouns are unmarked, compared with the emphatic personal pronouns. But use of even the basic personal pronouns is more functionally marked than the absence of any explicit personal pronoun, which is the norm in Nungon discourse. In example (1), there is no personal pronoun or other noun phrase explicitly encoding the subject argument of the verb, which is indicated through the verbal inflection; here, no focus or contrast is entailed. But in the counterpart (2), the presence of the basic personal pronoun with reference to the subject argument entails special focus with contrastive effect on the subject argument. Finally, example (3) shows a third option with maximal contrast, achieved through an explicit emphatic pronoun. Since Nungon has no grammatical gender (see Sarvasy 2016b for more on covert gender marking), in this chapter the unwieldy “s/he” will be avoided by arbitrarily choosing male or female gender for each English free translation of third person singular pronouns and actors.

- (1) *Ongo-go-k.*
go-RP-3SG
'She went.'
- (2) *Yu onto-go-k.*
3.PRO go-RP-3SG
'She went.' [contrastive; this particular actor, not one or more others, went]
- (3) *Ino onto-go-k.*
3SG.PRO.EMPH go-RP-3SG
'She herself went.' [maximally contrastive; this actor, not one or more others, possibly with special reason or purpose, went]

1 Reflexive constructions in Nungon

The emphatic pronouns always occur in focused, contrastive, or reflexive contexts. Because they are inherently focused, they rarely co-occur with the focusing postposition =*ho*, but are attested with almost all other postpositions. The only exception is the genitive postposition =*hon*, since the emphatic personal pronouns have special “emphatic possessive” forms, used in contexts of focused, contrastive, or reflexive possession, marked with the suffix *-in* (homophonous with one of the Nungon locative markers, *-in*). Use of a genitive emphatic pronoun for contrast is exemplified in (4):

- (4) *Nan-na* *maa-no* *X, naga-in* *maa-na* *Y.*
 father-1SG.POSS name-3SG.POSS X 1SG.PRO.EMPH-GEN name-1SG.POSS Y
 ‘My father’s name was X, my own name is Y.’ [Waasiöng inoin hatno]

Examples (5) and (6) show use of the emphatic personal pronouns to highlight the similarity in attributes of two sets of actors, as a special type of contrast. Example (5) includes two personal pronouns. The first actor mentioned is referred to by a basic personal pronoun; the second set of actors are referred to by an emphatic personal pronoun. Here, the basic pronoun occurs in a relatively neutral context, but the emphatic pronoun shows a relationship between the action by the first actor and that of a second set of actors (they all went in the same direction).

- (5) ... *nok* *e-ng* *ngi-yo=gon*, *yoni* *ongo-gu-ng-an...*
 1SG.PRO come-DEP PROX-DEM=RESTR 3PL.PRO.EMPH go-RP-2/3PL-LOC
 ‘...I coming along on this side, where they had gone...’ [Waasiöng inoin hatno]

There is flexibility in the type of pronoun used to refer to the first actor presented in such contexts. For instance, in (6), the first set of actors in a similar relational context is referred to with an emphatic pronoun, not a basic pronoun (as in 5):

- (6) *Noni* *ino* *bom-mo.*
 1PL.PRO.EMPH 3SG.PRO.EMPH semblance-3SG.POSS
 ‘We are like Him.’ [Church sermon, field notes]

Note that (6) is a verbless clause; example (7) is another verbless clause. In (7), the emphatic pronoun is used anaphorically, to refer back to a previously-mentioned tree species.

Hannah S. Sarvary

- (7) *Ino wo-rok=gon.*
 3SG.PRO.EMPH DIST-SEMLB=RESTR
 ‘It is that same one.’ [Geisch nanno orugo yup]

The emphatic pronouns (apparently, for all persons and numbers), but not the basic pronouns, can also occur as apparent nominal modifiers after a name or pronoun, similar to English *he himself*. This is shown in (8).

- (8) *Dono oe-no=rot Yupna ongo-go-mok. Op-no,*
 Dono woman-3SG.POSS=COMIT Yupna go-RP-1DU husband-3SG.POSS
wo-ma-i, Dono ino, Lae ong-un-a.
 DIST-SPEC-TOP Dono 3SG.PRO.EMPH Lae go-DS.3SG-MV
 ‘Dono’s wife and I went to Yupna. Her husband, that is, Dono himself, having gone to Lae.’ [Rosarin Yupna hain]

Here, the emphatic pronoun in *Dono ino* ‘Dono himself’ follows the name *Dono* without any intervening pause, very similarly to English ‘Dono himself’.

3 Expression of reflexivity in Nungon

Demarcation of reflexivity is a specific sub-function of the Nungon emphatic pronouns. Emphatic pronouns are obligatory for reflexive reading when the transitive subject argument and object argument or oblique argument are coreferential. All person/number combinations are eligible for reflexive readings. Coreference between transitive subjects and objects is discussed in 3.1, coreference between transitive subjects and other arguments is in 3.2, and other coreference contexts are covered in 3.3. Related expressions are in §4.

3.1 Coreferential transitive subject and object

As noted above, all Nungon finite verbs index subject argument person/number through verbal suffixes. A closed sub-set of 15 transitive verbs also obligatorily index object person/number through prefixes that are often fused with the verb root. No other verbs index object person/number. In Nungon transitive clauses, the object argument itself may be: a) omitted and understood from context; b) referred to with an explicit noun phrase; c) referred to with a demonstrative or personal pronoun. Example (9) shows a transitive clause with object argument omitted, example (10) shows a transitive clause with explicit object argument, and example (11) shows a transitive clause with basic personal pronoun referring to the object argument.

1 Reflexive constructions in Nungon

- (9) *Honggit-ti!*
 grab-IMP.2SG
 ‘Grab it!’ [Field notes]
- (10) *Inowak na-go-mong.*
 cassava eat-RP-1PL
 ‘We ate cassava.’ [Rosarin Yupna hain]
- (11) *Nok na-no-ng n-u-ng=ir-a-ng.*
 1SG.PRO 1SG.O-tell-DEP 1SG.O-roll.side.to.side-DEP=be-PRES.NSG-2/3PL
 ‘They lie to me.’ [Literally: ‘They address me and roll me from side to side’] [Field notes]

As seen in (11), explicit free personal pronouns can co-occur with the object prefixes on verbs in which this is obligatory.

When a transitive subject and object are exactly coreferential, the object is referred to by an emphatic pronoun, as in examples (12) and (13):

- (12) *Ino wet-do-k.*
 3SG.PRO.EMPH 3SG.O.kill-RP-3SG
 ‘He killed himself.’ [Field notes]
- (13) *Amna inggouk dogu-hi-k=ko ino aa-ng-a*
 man one ghost-put-NMZ=FOC 3SG.PRO.EMPH 3SG.O.see-DEP-MV
it-ta-k.
 be-PRES.SG-3SG
 ‘One man is looking at himself in a mirror.’ [Picture description task 4]

The emphatic pronouns are necessary for reflexive reading in examples (12) and (13). But the converse is not true: as noted in Sarvary (2017a: 355), representation of the object argument of a transitive verb with an emphatic pronoun does not necessarily entail coreference with the subject argument. The example given in Sarvary (2017a: 355) is reproduced here as (14):

- (14) *Yoiwet-ton bök obö-ng-a, hara ino we-k.*
 Yoiwet=GEN house break-DEP-MV almost 3SG.PRO.EMPH 3SG.O.kill-NP.3SG
 ‘Yoiwet’s house breaking, it almost killed her.’ [Field notes]

Here, the house (intransitive subject of the first clause, and transitive subject of the second clause) pertains to the person it nearly killed, who is mentioned in the first clause.

Hannah S. Sarvasy

In contrast to antagonistic, “extroverted” actions (König & Siemund 2000: 61), as in (9), typical “introverted” actions that are expressed using reflexives in some languages take other forms in Nungon. For instance, Nungon *guo-* ‘bathe’ is an intransitive verb, which requires a further transitivizing expansion to express bathing someone else (Sarvasy 2017a: 513–516). In Nungon, “introverted” actions like ‘dress,’ ‘shave,’ and ‘apply make-up’ are expressed with the acted-upon element (a skirt or loincloth, or a possessed body part, see 20–22 below) as the transitive object, never exactly coreferential³ with the transitive subject, as in (15):

- (15) *Högök oe inggouk yangam-o uhok wo=hon wo=hon*
 white woman one face-3SG.POSS color DIST=GEN DIST=GEN
ta-a-k.
 do-PRES-3SG
 ‘One Caucasian woman_i applies make-up here and there to her_{i/j} face.’
 [Picture description task 6]

In such expressions, the body part is usually marked as possessed in the usual way, without additional marking to show coreference between subject argument and the possessor of the body part. Removed from any particular discourse context, the most natural interpretation of (15) is one of coreferentiality. But if a non-coreferential context had already been introduced (one woman applies make-up to another person’s face), (15) would be acceptable in describing that situation as well. Introduction of the genitive emphatic pronoun to specify that only coreference is an acceptable interpretation would also introduce contrast, as seen in (16).

- (16) *Högök oe inggouk ino-in yangam-o uhok wo=hon*
 white woman one 3SG.PRO.EMPH-GEN face-3SG.POSS color DIST=GEN
wo=hon ta-a-k.
 DIST=GEN do-PRES-3SG
 ‘One Caucasian woman_i applies make-up here and there to her_j own face.’
 (Constructed)

The addition of the genitive emphatic pronoun in (16) implies that there are other potential faces to which the woman could be applying make-up, but that

³Exact coreferentiality here means that two linguistic constituents refer to exactly the same referent. This is important in Nungon because such coreferentiality governs the distribution of switch-reference markers (Sarvasy 2015). In Nungon switch-reference, body parts are not exactly coreferential with their possessors (the beings to which they belong).

1 Reflexive constructions in Nungon

the woman is applying it only to her own. In the absence of such a context, (16) is less natural than (15).

It should further be noted that there are no clear examples in the Nungon adult corpus of “inclusive” co-referentiality between transitive subject and object argument, where the referent of either subject or object is a larger group that includes the referent of the other argument. In Nungon, it is hypothetically possible, but not very natural, to explicitly break down complex groups into a pronoun conjoined with a noun phrase (*?naga orin amna torop* ‘I myself and a group of men’). Thus cases of inclusive reference likely involve use of a single pronoun or a noun phrase (such as *noni* ‘we’ or *amna torop ambarak* ‘the whole group of men’) to describe the larger group. It seems likely that, if a pronoun is used, it would be the emphatic pronoun, but this remains to be tested.

3.2 Coreference between transitive subject argument and oblique argument

As with coreference between transitive subject and object arguments, emphatic pronouns can be used to indicate coreference between a subject argument and oblique argument. However, unlike with coreference between transitive subject argument and object argument, it is unclear whether the emphatic pronouns are obligatory for obliques; it is likely that here basic pronouns can be substituted for emphatic pronouns with coreference still understood, in the right pragmatic and discourse-contextual circumstances.

Where used, the emphatic pronouns can be marked with postpositions and preserve the reflexive reading. Example (17) shows coreference between a subject argument and oblique beneficiary, and (18) shows coreference between a subject argument and oblique accompanier:

- (17) *Hu-ŋg ino=ha=gon ho-ŋg na-ŋg*
 NSG.O.take.away-DEP 3SG.PRO.EMPH=BEN=RESTR cook-DEP eat-DEP
to-ŋg it-do-k.
do-DEP be-RP-3SG
 ‘Taking them away, he used to cook and eat them (just) for himself.’
 [Fooyu ketket dogu]

- (18) *Ni-ingat h-e-ŋg-a ino=rot*
 1NSG.O-escort NSG.O-come-DEP-MV 3SG.PRO.EMPH=COMIT
n-öö-go-k.
1.o-ascend-RP-3SG
 ‘Bringing us, he took us up along with him.’ [Nusek Finsch hat]

Hannah S. Sarvary

Example (17) can be contrasted with (19), where there is no coreference between the subject and beneficiary:

- (19) *Tanak non=ta h-i-ng.*
 food 1NSG.PRO=BEN cook-NP-2/3PL
 ‘They cooked food for us.’ (Constructed)

As the benefactive postposition can be used to mark recipients as well as beneficiaries, the same forms apply in such cases.

3.3 Other coreference contexts

Reflexive interpretation is further possible in a range of other contexts, either with or without the emphatic pronouns. In these contexts, use of the emphatic pronouns usually entails a combination of reflexivity and contrast.

3.3.1 Coreference between subject and possessor

Coreference between the subject argument and possessor referent is not obligatorily indicated through use of the genitive emphatic pronouns, though this is a possibility. All possibilities are illustrated in (20-22).

- (20) *Babiya-no indar-a it-ta-k.*
 book-3SG.POSS read-MV be-PRES.SG-3SG
 ‘She_i is reading her_{i/j} book.’ (Constructed)
- (21) *Yu=hon babiya-no indar-a it-ta-k.*
 3.PRO=GEN book-3SG.POSS read-MV be-PRES.SG-3SG
 ‘She_i is reading her_{i/j} book.’ (Constructed)
- (22) *Ino-in babiya-no indar-a it-ta-k.*
 3.PRO.EMPH-GEN book-3SG.POSS read-MV be-PRES.SG-3SG
 ‘She_i is reading her_i book.’ (Constructed)

All of the three options in (20-22) allow for reflexive interpretation; (20) is the most functionally unmarked and natural. In (20) and (??), choice of a reflexive interpretation would depend on contextual knowledge. While the reflexive interpretation is the only possibility for (22), use of the genitive emphatic pronoun there necessarily entails contrast along with reflexivity: either, a) that there are other potential books with different owners available to the reading person, or b) that the reader actually wrote the book herself.

1 Reflexive constructions in Nungon

The same options are available for possession of (non-co-referential) human object arguments, as in the Nungon translations of *She killed her friend*, *He saw his boss*, etc. With these, as with (20–22), the use of a genitive-marked pronoun introduces mild (with the basic pronoun) or strong (with the emphatic pronoun) contrast, as well as, if the emphatic pronoun is used, reflexivity.

3.3.2 Coreference between subject and location

In actual discourse, subjects are rarely coreferential with spatial referents. (English *beside her* would be expressed with the comitative postposition *=rot*; *near her* would likely be expressed through the adjective *ambek* ‘near’ alone, without *her*; and *behind him* would be expressed as *mee-no-n=dek* ‘at his back.’) In one example from the Nungon adult corpus, a speaker uses the locative postposition *=dek* to describe location in discourse. Here, coreferentiality with the subject argument is expressed through use of the emphatic pronoun (marked with the locative postposition).

- (23) *Amna maa-no yo-wang-ka-t, naga=dek hi-ng-a,*
 man name-3SG.POSS say-PROB.SG-NF-1SG 1SG.PRO.EMPH=LOC put-DEP-MV
 oruk-na-i=dek.
 brother.of.male-1SG.POSS-PL=LOC
 ‘I will say the men’s names, starting from myself, on to my brothers.’
 [Böas babiya bök]

If the spatial referent were not coreferential with the subject argument and no contrast or focus were desired, either a basic pronoun or noun phrase would stand in for the emphatic pronoun *naga* in (23).

3.3.3 Coreference of non-subject arguments

Coreference of two non-subject arguments is rare-to-non-existent in the Nungon adult corpus. It may be assumed that this is dispreferred in discourse more generally. But if it were to occur, there would likely be three ways of expressing such co-reference, as with coreference of subject argument and possessor. Example (24) shows the absence of any pronoun referring to the recipient argument of ‘show’ (who is also the possessor of ‘her picture’), (25) shows the use of a basic pronoun for the possessor, and (26) shows the use of an emphatic pronoun.

- (24) *Dogu-no y-ande-ha-k.*
 ghost-3SG.POSS 3.O-show-PRES.SG-3SG
 ‘She_i shows her_j her_{i/j} picture.’ (constructed)

Hannah S. Sarvasy

- (25) *Yu=hon dogu-no y-ande-ha-k.*
 3.PRO=GEN ghost-3SG.POSS 3.o-show-PRES.SG-3SG
 ‘She_i shows her_j her_{i/j} picture.’ (constructed)
- (26) *Ino-in dogu-no y-ande-ha-k.*
 3.PRO.EMPH-GEN ghost-3SG.POSS 3.o-show-PRES.SG-3SG
 ‘She_i shows her_j her own_{i/j} picture.’ (constructed)

Here, even (26) is still ambiguous, in that the picture could pertain to the showing person or the viewing person. Such ambiguity would be reduced if one of the parties were first or second person, as in (27):

- (27) *Ino-in dogu-no y-ande-ha-t.*
 3.PRO.EMPH-GEN ghost-3SG.POSS 3.o-show-PRES.SG-1SG
 ‘I show her_i her own_{i/j} picture.’ (constructed)

Here, the picture could still belong to a third party, distinct from the showing and viewing people, but it could not belong to the showing person, who is specified to be 1SG.

3.3.4 Coreference across clauses

Coreference across clauses—whether subordinate clauses within other clauses, coordinated independent clauses, or coordinated dependent clauses in chains—is most often not indicated through emphatic pronoun use. With clause chains, in fact, there is another, highly efficient, means to track subject reference across clauses: switch-reference marking. With Nungon switch-reference, any change in subject reference from clause A to clause B within a chain requires that the verb in clause A bears switch-reference marking, even if the referent of clause A’s subject is included within that of clause B, or vice versa. This means that a listener has a clear idea at any time of the co-referentiality of subjects across clauses; while there is no similar grammatical means for tracking object or other argument reference through a clause chain, it stands to reason that knowing the reference of the subject argument of each clause can help in whittling down options for object reference in cases of ambiguity. Nungon switch-reference marking is described in detail in Sarvasy (2015; 2017a).

In clause chains, as elsewhere in the language, arguments normally lack expressions such as explicit pronouns or noun phrases if they are deemed recoverable from context. If reflexive and/or contrastive effects are desired, pronouns can be introduced: basic pronouns, for weak contrast, and emphatic pronouns

1 Reflexive constructions in Nungon

for strong contrast, as in (28), where a boy shoots at a ghost, but the arrows bounce back at him (referred to by the emphatic pronoun *ino*), instead of hitting the target.

- (28) *Dogu tem-un-a wo-rok, gun=to hata-ng
ghost 3SG.O.shoot-DS.3SG-MV DIST-SEMLB arrow=FOC jump-DEP
ino hai-ng=gon to-ng it-do-k.
3SG.PRO.EMPH cut-DEP=RESTR do-DEP be-RP-3SG*
'He_i having shot at the ghost, then, the arrow would just jump and strike him_i (instead).' [Fooyu ketket orin dogu]

It is in these cross-clausal coreference contexts that Nungon emphatic pronouns indicating reflexivity frequently occur in grammatical subject function. Example (29) is reported speech from a woman observing that, while the person she sought to meet with was not at home, he had left his portable solar charger unattended on a mound beside his house, so he could not have gone very far.

- (29) *Maa-no maa-no-no imbange orogo hinom
name-3SG.POSS name-3SG.POSS-3SG.POSS wonderful good INTENS
wo-ma-i ngo-rok it-ta-k, ino ma=ngo-k.
DIST-SPEC-TOP PROX-SEMLB be-PRES.SG-3SG 3SG.PRO.EMPH NEG=go-NP.3SG*
'His_i wonderful, very nice stuff is here like this, (so) he himself_i hasn't gone.' [Rosarin Yupna hain]

In (29), the initial reference to the absent man is as possessor reference, marked with the 3sg possessive suffix *-no*, which does not have the possibility to be marked as reflexive or non-reflexive. The second reference to him is then through the emphatic pronoun *ino*, which serves as intransitive subject argument.

4 Expanded types of reflexivity in Nungon

The personal pronouns can further combine with three postpositions related to reflexivity. Two of these only co-occur with emphatic pronouns: *=nang*, which relates to physical isolation ('alone'), and the 'autoreflexive' *=wut*, indicating 'of one's own power.' The durative/restrictive *=gon*, which means roughly 'on one's own' when used with personal pronouns, can co-occur with either basic or emphatic pronouns, and indicates a more general type of aloneness than the physical isolation of *=nang* or the use of solely one's own force, as with *=wut*.

Hannah S. Sarvary

5 Summary

In sum, formal marking of reflexivity in Nungon is achieved through use of the emphatic personal pronouns: a second set of personal pronouns with more person/number distinctions than the “basic” set. The emphatic pronouns also function more generally to indicate contrast and focus; reflexivity can be understood to be a restricted sub-category of contrast.

That said, the Nungon emphatic personal pronouns are only obligatory for indication of reflexivity when the co-reference relation is between the transitive subject and object arguments. In all other contexts, the Nungon discourse style is highly permissive of formal ambiguity, apparently to be resolved by the listener based on discourse-contextual knowledge.

Abbreviations

1SG, 2DU, etc.	person and number	NEG	negative
BEN	benefactive	NF	near future
COMIT	comitative	NMZ	nominalizer
DEM	demonstrative	NP	near past
DEP	dependent	NSG	non-singular
DIST	distal	O	object
DS	different-subject	PL	plural
DU	dual	POSS	possessive
EMPH	emphatic	PRES	present
FOC	focus	PRO	pronoun
GEN	genitive	PROB	probable
IMP	immediate	PROX	proximal
	imperative	RESTR	restrictive
INTENS	intensifier	RP	remote past
LOC	locative	SEMLB	semblance
MV	medial verb	SG	singular
		SPEC	specifier
		TOP	topicalizer

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Hannah S. Sarvasy

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Chapter 2

Reflexive constructions in Walman

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Walman has two reflexive constructions, one involving a verbal prefix that occurs in the same position as first and second person object prefixes, the other a nominal construction that combines the genitive form of a pronoun with a word *ein*, which otherwise means ‘base of tree’ or ‘reason’. The verbal prefix is also used as a reciprocal construction and the majority of instances of the verbal prefix in texts are either reciprocal or lexicalized.

1 Introduction

In this paper, we discuss two reflexive constructions in Walman, a language in the Torricelli family spoken on the north coast of Papua New Guinea (Figure 2.1). One of these constructions is a verbal strategy; it involves a verbal prefix in the same position in the verb as first and second person object prefixes. The other construction is a nominal strategy and involves the genitive form of a personal pronoun followed by the word *ein* ‘base (of tree), reason’. In §2, we give a brief overview of Walman morphology. In §3, we describe the verbal reflexive construction. In §4, we discuss lexicalized instances of the verbal reflexive construction. In §5, we describe the nominal reflexive construction. And in §6, we illustrate uses of the nominal reflexive construction as a marker of focus.



Lea Brown & Matthew Dryer



Figure 2.1: Location of Walman and the other Torricelli languages (unlabeled dots).

2 Brief overview of Walman morphology

Walman verb morphology involves subject prefixes, object affixes, an applicative affix and a largely obsolete imperative construction. In (1), for example, all four verbs illustrate the 1SG subject prefix *m-*, while the verb *maltawron* ‘I look for him’ also illustrates the 3SG.M object suffix *-n* and the verb *mare* ‘I ask her’ (part of an idiom *esi are* ‘meet, encounter’) illustrates the null 3SG.F object suffix.

- (1) *Kum pe m-altawro-n runon, m-orou m-esi m-are-ø chuto.*
 1SG still 1SG-look.for-3SG.M 3SG.M 1SG-go 1SG-arrive 1SG-ask-3SG.F
woman
 ‘I was still looking for him when I met a woman.’

For the majority of transitive verbs, the third person object affixes are suffixes, like *-n* in (1). However, for a minority of verbs, they are infixes, like the 3PL object infix *-y-* in *kayko* ‘we eat them’ in (2).

- (2) *Kipin mon k-a<y>ko wuem alikiel.*
 1PL NEG 1PL-eat<3PL> fish gills
 ‘We don’t eat the gills of a fish.’

2 Reflexive constructions in Walman

The first and second person object affixes are prefixes that follow the subject prefixes, like the first person object prefix *p-* in *npaltawro* ‘He looked for me/us’ in (3).

- (3) *Runon n-arau n-p-altawro kum m-ch-a.*
 3SG.M 3SG.M-go.up 3SG.M-1OBJ-look.for 1SG 1SG-2OBJ-and
 ‘He came up and looked for us.’

The first and second person object prefixes code person but not number. Example (3) also illustrates the second person object prefix *ch-* in the form *mcha* ‘me and you’, and also illustrates the use of a verb *-a* for ‘and’ in Walman, where the first conjunct is the subject of the *and*-verb and the second conjunct is the object (Brown & Dryer 2008). Table 2.1 lists the form of the subject and object affixes.

Table 2.1: Subject and object affixes

Subject	Prefixes	Object Affixes
1SG	m-	p-
1PL	k-	
2SG	n-	ch-
2PL	ch-	
3SG.F	w-	-ø
3SG.M	n-	-n
3SG.DIM	l-	-l
3PL	y-	-y

Walman has an applicative construction that usually has either benefactive or external possession meaning, the former illustrated in (4), the latter in (5). In (4), for example, the verb *nayawron* bears a 3SG.M subject prefix *n-*, an applicative suffix *-ro*, and a 3SG.M object suffix *-n* indexing the applied object.¹

- (4) *Runon n-ayaw-ro-n nyi.*
 3SG.M 3SG.M-light.fire-APPLI C-3SG.M
 ‘He lit a fire for him.’

¹The regular form of the applicative suffix is *-re* ~ *-ro*, the choice between these based on vowel harmony. Some applicative forms are irregular, like the stem *-narin* in (6) below.

Lea Brown & Matthew Dryer

- (5) *Kum m-aram-re-n* *kayal runon*
 1SG 1SG-step.on-APPLIC-3SG.M foot 3SG.M
 ‘I stepped on his foot.’

The applicative construction is the only way to express a benefactive in Walman. Most applicative verbs in Walman are applicatives of transitive verbs. Applicatives of intransitive verbs do not have benefactive or external possession meanings, but simply add an argument. For example, the applicative of the intransitive verb for ‘speak’ adds a object denoting the addressee, as in (6).

- (6) *Ngan n-p-narin* *komunngan kipin.*
 father 3SG.M-1OBJ-speak.APPLIC story 1PL
 ‘Father told us a story.’

Applicatives of transitive verbs sometimes inflect for two objects, as in (7), where the applied object is indexed by the first person prefix *p-* and the basic object by the third plural suffix *-y*.²

- (7) *Chi n-p-olk-ro-y* *wiey kum.*
 2SG 2SG-1OBJ-pick-APPLIC-3PL two 1SG
 ‘Pick two for me!’

The only case morphology in the language is genitive case forms of pronouns, illustrated by the forms *wkum* ‘my’ and *wchi* ‘your’ in (8).

- (8) *Chrieu w-kum y-ch-arien* *nakol w-chi.*
 marks GEN-1SG 3PL-2OBJ-be.at:APPLIC house GEN-2SG
 ‘My books are in your house.’

These genitive forms are used in the nominal reflexive construction described in §4 below, even when the reflexive is not functioning as a possessor.

The nongenitive and genitive forms of the personal pronouns are shown in Table 2.2. Except for the 3SG.M form *mnon*, the genitive forms are formed with a prefix *w-*.

²With applicative verbs with two objects, we refer to the object that is not the applied object, the one that corresponds to the object of the corresponding nonapplicative verb, such as *wiey* ‘two’ in (7), as the basic object.

2 Reflexive constructions in Walman

Table 2.2: Personal pronouns

Sg		Pl	
	nongenitive	genitive	nongenitive
			genitive
1	kum	wkum	kipin
2	chi	wchi	chim
3SG.F	ru	wru	
3SG.M	runon	mnon	3PL ri
3SG.DIM	rul	wrul	wri

3 The reflexive-reciprocal prefix

Walman has a reflexive-reciprocal prefix *r-* that occurs in the same position as the first and second person object prefixes, immediately following the subject prefix, as in (9), with the verb *-eni* ~ *-enie* ‘to call someone something’.

- (9) *Runon n-r-eni* Matthew.
 3SG.M 3SG.M-REFL/RECIP-call Matthew
 ‘He calls himself Matthew.’

Compare (9) to (10), where instead of a reflexive-reciprocal prefix, we have a first person object prefix *p-*.

- (10) *Runon n-p-eni* kum Amos.
 3SG.M 3SG.M-1OBJ-call 1SG Amos
 ‘He called me Amos.’

Example (11) illustrates the same verb with a 3SG.M object suffix.

- (11) *Kum m-enie-n* runon Amos.
 1SG 1SG-call-3SG.M 3SG.M Amos
 ‘I called him Amos.’

The form of the stem in (11) is *-enie*, in contrast to the form of stem in (9) and (10), where it is just *-eni*. Many Walman verbs use a different stem with object prefixes that is different from the stem used with object suffixes and infixes.

The three examples in (12) to (14) are analogous to those in (9) to (11), except that they involve an applicative verb, namely *-ayakro* ‘to make something for

Lea Brown & Matthew Dryer

someone (or of someone's)', the applicative of *-ayako* 'make, do, happen to'. Example (12) illustrates the reflexive/reciprocal prefix *r-*, in this case coding the applied object. The verb also exhibits 3SG.F agreement with the basic object *nakol* 'house'.

- (12) *Runon n-r-ayak-ro-ø* *nakol.*
 3SG.M 3SG.M-REFL/RECIP-make-APPLIC-3SG.F house
 'He built a house for himself.'

In (13) is the same verb, but with a first person object prefix *p-*. The verb also exhibits 3PL agreement with the other object *lei* 'arrow(s)'.

- (13) *Ngan n-p-ayak-ro-y* *lei kum.*
 father 3SG.M-1OBJ-make-APPLIC-3PL arrow 1SG
 'Father made arrows for me.'

Example (14) illustrates the same verb with a 3SG.M applied object. With applicative verbs that are applicatives of those verbs that take third person object suffixes (as opposed to infixes), the verb only inflects for the applied object, in (14) with the 3SG.M suffix *-n*.

- (14) *Kum m-ayak-ro-n* *wako runon.*
 1SG 1SG-make-APPLIC-3SG.M boat 3SG.M
 'I made a boat for him.'

The reflexive-reciprocal prefix can be used for the recipient of the verb for 'give', as in (15).

- (15) *Kum m-r-erie* *oputo nyukuel chomchom.*
 1SG 1SG-REFL/RECIP-give yam food much
 'I gave myself a lot of food.'

However, the form of the stem here is different from the normal stem of this verb and only occurs with the reflexive-reciprocal prefix. The usual stem for 'give' is *-eyie* ~ *-e*, as in (16).

- (16) *Chi n-eyie-n* *runon momol?*
 2SG 2SG-give-3SG.M 3SG.M what
 'What did you give him?'

The reflexive of this verb is also used for dressing oneself, as in (17).

2 Reflexive constructions in Walman

- (17) *Kamany y-r-erie chno y-akie porukul.*
 person 3PL-REFL/RECIP-give traditional.dress 3PL-dance dancing
 'People put on traditional dress and dance.'

As noted above and illustrated in (6), expression of telling in Walman involves the applicative of the verb for 'speak' and the addressee can be reflexive, as in (18).

- (18) *Kum m-r-narin.*
 1SG 1SG-REFL/RECIP-speak.APPLIC
 'I talk to myself.'

When the subject of a verb bearing the reflexive-reciprocal prefix is singular, only the reflexive reading is possible. When the subject is plural, sentences are ambiguous (or vague) out of context between a reflexive reading and a reciprocal reading, though in practice, the intended reading of such sentences is more often reciprocal, presumably because reciprocal readings are usually more natural than reflexive readings. In (19), for example, the form *yroko* is the reflexive-reciprocal form of the verb *-oko* 'take', here meaning 'marry', and the intended reading is reciprocal, a reflexive reading not making sense here.

- (19) *Nyakom w-ri ke y-r-oko, nyakom*
 child.PL GEN-3PL also 3PL-REFL/RECIP-take child.PL
y-awaro-y.
 3PL-be.parent.of-3PL
 'Their children also married each other and had children.'

We will refer to the reflexive-reciprocal prefix as an object affix because it is in paradigmatic opposition to the first and second person object prefixes, as well as the fact that it codes the fact that the object is identical in reference to the subject. For present purposes, we treat something as an object grammatically if it is coded on the verb with an object affix. We are not aware of any useful criterion for objecthood in Walman other than the possibility of being coded by an object affix.

Expressions of situations in which someone does something that affects a body part of their own frequently employ the reflexive-reciprocal prefix, as in (20) and (21).

- (20) *Kum m-r-ulō wi.*
 1SG 1SG-REFL/RECIP-cut hand
 'I cut my hand.'

Lea Brown & Matthew Dryer

- (21) *Runon n-r-ata* *ngelie.*
 3SG.M 3SG.M-REFL/RECIP-bite tongue
 ‘He bit his tongue (accidentally).’

Sentences involving someone doing something that affects someone else’s body part are similar, with the verb exhibiting object inflection for the person, number and gender of the individual whose body part is affected, as in (22).

- (22) *Ru w-p-ulō* *woruen.*
 3SG.F 3SG.F-1OBJ-cut hair
 ‘She cut my hair.’

In (22), the noun *woruen* ‘hair’ is not the object, but a type of nonobject complement, the object being expressed by the first person object prefix on the verb. Similar comments apply to *wi* ‘hand’ in (20) and *ngelie* ‘tongue’ in (21).

Expressions of washing are more complex. First, there is an intransitive verb *okorue* ~ *-korue* that denotes only washing oneself, without reflexive-reciprocal morphology, as in (23).

- (23) *Kum m-okorue wul.*
 1SG 1SG-bathe water
 ‘I bathed.’

This verb normally combines with the noun *wul* ‘water’, as in (23). There is also a transitive verb *-ko_wue* for washing somebody else, as in (24), where the subject and object involve distinct participants.³

- (24) *Runon n-p-kowue* *wul kum.*
 3SG.M 3SG.M-1OBJ-wash water 1SG
 ‘He washed me.’

This verb can be used with a reflexive-reciprocal prefix, as in (25), but expressions of washing oneself in our data usually involve the verb *-okorue* ~ *-korue*, illustrated in (23) above.

- (25) *Kum m-r-kowue.*
 1SG 1SG-REFL/RECIP-wash
 ‘I washed myself.’

³The underscore in *-ko_wue* indicates that this is a verb that takes third person object infixes rather than object suffixes and the location of the underscore represents the location of the infix.

2 Reflexive constructions in Walman

There is a separate transitive verb *-olo* that is used for washing body parts, without reflexive-reciprocal morphology, illustrated in (26), where the body part is object.

- (26) *Ch-orou ch-olo-y motu-kol.*
 2PL-go 2PL-wash-3PL finger-PL
 ‘Go and wash your hands.’

This is one of several verbs used for washing things other than oneself.

There are relatively few instances in our texts of uses of the reflexive-reciprocal prefix with specifically reflexive meaning. Two examples from texts are given in (27) and (28). In (27), *yrsapur* ‘they untangle themselves’ is a form of the verb *-sapur* ‘loosen, untangle’.

- (27) *Lasi ru w-aro-ø y-r-sapur*
 immediately 3SG.F 3SG.F-and-3SG.F 3PL-REFL/RECIP-untangle
pra-pra lasi ru w-aro-ø y-otoplo-n runon.
 loose-loose immediately 3SG.F 3SG.F-and-3SG.F 3PL-tie-3SG.M 3SG.M
 ‘They (literally ‘she and her’) suddenly wriggled free (literally ‘untangled themselves’) and quickly wrapped themselves around him (*literally ‘tied him’*).’

There are two instances of the reflexive-reciprocal prefix in (28), in *nroko* and *wrulo*. While the literal meaning of *-oko* is ‘take’, it is combined in (28) with *rele* ‘beard’ to mean ‘shave’, so with the reflexive-reciprocal prefix, the meaning is ‘he shaves himself’.

- (28) *Ngan n-r-oko rele, nyue w-r-ulø*
 father 3SG.M-REFL/RECIP-take beard mother 3SG.-REFL/RECIP-cut
woruen.
 hair
 ‘The father shaves, the mother trims her hair.’

The uses of the reflexive constructions in (28) involve body parts, analogous to (20) to (22) above.

Some uses of the reflexive-reciprocal prefix are ones where the subject is semantically both agent and theme but where many languages would not use a reflexive form. For example, the basic meaning of the verb *-a_pulu* is ‘to spread something around, pour’, as in (29).

Lea Brown & Matthew Dryer

- (29) ... *o opucha runon n-oko-y n-a<y>pulu alpa-y*
 and thing 3SG.M 3SG.M-take-3PL 3SG.M-spread.around<3PL> one-PL
alpa-y y-anan y-an chapul.
 one-PL 3PL-go.down 3PL-be.at ground
 ‘... and he picked up things and spread them around on the ground.’

In (30), this verb is used in its reflexive-reciprocal form, with the meaning ‘to spread oneself around’, but where many languages would simply say something like ‘spread around’, without a reflexive form, even though the subject is both agent and theme.

- (30) *To Walman y-r-apulu alpa-y alpa-y y-ara*
 then Walman 3PL-REFL/RECIP-spread.aroud one-PL one-PL 3PL-come
y-ara y-an cha w-kipin eni k-an atuko.
 3PL-come 3PL-be.at place GEN-1PL now 1PL-be.at south
 ‘The Walman people had spread out in separate groups all over the area,
 coming nearer and nearer (to the coast) and settling in the places where
 we now live.’

Similarly, the verb *-elie ~ -eli* ‘throw’ when repeated means ‘to move something back and forth’, as in (31)

- (31) *Runon n-elie-n n-elie-n nyanam n-roul*
 3SG.M 3SG.M-throw-3SG.M 3SG.M-throw-3SG.M child 3SG.M-hang
yie.
 string.bag
 ‘He moved his baby son hanging in the string bag back and forth.’

In (32), we find the same repeated verb with the reflexive prefix.

- (32) *Runon n-r-elie n-r-elie.*
 3SG.MASC 3SG.MASC-REFL/RECIP-throw 3SG.MASC-REFL/RECIP-throw
 ‘He is swinging (on a swing).’

Again, the use of the reflexive form in (32) does involve identity of agent and theme, but many languages would simply express this meaning with something meaning ‘to move back and forth’, without any overt reflexive marking, as in English.

4 Lexicalized reflexive-reciprocal forms

There are many instances in which reflexive-reciprocal forms have apparently lexicalized with meanings that are not entirely predictable from the meaning of the verb that they are reflexive-reciprocal forms of (we say “apparently” since some of them might prove to simply be construals of verbs in particular contexts). Example (32) above illustrates the use of repeating *-elie ~ -eli* ‘throw’ with the reflexive-reciprocal prefix to mean ‘to move oneself back and forth’, where the subject is both agent and theme. Example (33) is similar, but because the subject is inanimate, it is not both an agent and a theme, but only a theme.

- (33) *Yie w-r-eli w-r-eli.*
 bilum 3SG.F-REFL-throw 3SG.F-REFL-throw
 ‘The bilum is swinging (e.g., in the wind).’

This use involves removal of the agent role and could be classified as an anticausative use.

The example in (34) also illustrates an instance where the semantic role normally associated with the subject of this verb is removed, but in this case the verb cannot be classified as anticausative because the role that is removed is that of a nonagentive experiencer of the verb *-kay* ‘see’, rather than an agent, although there may still be an entailment of an unspecified experiencer, so that an English translation ‘it will be seen’ is natural.

- (34) ... *cha ru w-r-kay w-kipin olsem ri*
 so.that 3SG.F 3SG.F-REFL/RECIP-see GEN-1PL like 3PL
welimi wlapum.
 younger.sibling.PL older.sibling:PL
 ‘... so that it will be seen that we are just the same as our brothers and
 sisters.’

Normally, the subject of a reflexive form of this verb is both experiencer (the one seeing) and stimulus (the one seen), but in (34), it is only stimulus.⁴

A different sort of lexicalization is reflected in (35), where the reflexive-reciprocal form of the verb *-e_risi*, a transitive verb normally meaning ‘to cook by boiling’, means something like ‘to be very ripe, to be beginning to rot’.

⁴Grammatically, the subject in (34) is the 3SG.F pronoun *ru*, which can be analysed as an expletive subject like *it* in the English translation. Semantically, the stimulus is the clause meaning ‘we are just the same as our brothers and sisters’, as it is in the English translation.

Lea Brown & Matthew Dryer

- (35) *Mikie w-r-erisi.*
 banana 3SG.F-REFL-cook.by.boiling
 ‘The bananas are rotting.’

The non-reflexive use of this verb is illustrated in (36).

- (36) *To ngotu y-ulue-ø y-e<ø>risi*
 then coconut 3PL-scratch-3SG.F 3PL-cook.by.boiling<3SG.F>
y-a<ø>ko.
 3PL-eat<3SG.F>
 ‘Then they scraped coconut, boiled it, and ate it.’

In (36), the subject is agent and the object is patient and with a ordinary reflexive verb, the subject would be both agent and patient. But like the verbs illustrated in (33) and (34), the semantic role of agent that the subject would normally have with the verb is removed in (35), so that the subject in (35) is just a patient. But in this case there is also an additional semantic change in that the banana is rotting, not undergoing the change of state associated with being cooked by boiling.

A similar example of lexicalization involves the reflexive-reciprocal form of the verb *-ikie* ‘put’, illustrated in (37).

- (37) *Runon n-r-ikie yal ein nganu wiey o kon alpa-ø.*
 3SG.M 3SG.M-REFL/RECIP-put breadfruit tree sun two and night one-F
 ‘He was stuck in the breadfruit tree for two days and a night.’

An example illustrating the non-reflexive use of this verb is given in (38).

- (38) *Chim ch-p-ikie kum m-an apar.*
 2PL 2PL-1OBJ-put 1SG 1SG-be.at bed
 ‘Put me on the bed.’

A literal interpretation of (37) would be that the man put himself up in the tree, but in the text from which this example comes, the man was put up in the tree by a flock of birds. So, like the preceding examples, the use of the reflexive-reciprocal form in (37) involves the removal of the agent. However, if that were the only difference, (37) would simply imply that he was up in the breadfruit tree, but the lexicalized use of this verb more specifically means that he was actually stuck up in the breadfruit tree and had no way to get down. Hence the

2 Reflexive constructions in Walman

lexicalization of the reflexivization of this verb also involves an added element of meaning beyond simply the removal of the agent.

A further example of a verb with lexicalized reflexive-reciprocal forms is the verb *ayako* ‘make, do, cause, happen to’, whose stem with the reflexive-reciprocal prefix is *any*. In fact, the reflexive-reciprocal form of this verb has a number of lexicalized meanings, though we restrict attention here to two of them. The first lexicalized meaning is ‘become’, as in (39).

- (39) *W-an w-an eni w-r-any siar.*
 3SG.FEM-be.at 3SG.FEM-be.at now 3SG.FEM-REFL/RECIP-make reef
 ‘And there it [the sago container] remained, until it became a reef.’

Again, this use involves removal of the semantic role that the subject of this verb would normally have (an agent, the maker). But if that were all that was involved, the meaning would be something like ‘the reef came into being’. In (39), however, *siar* ‘reef’ is not the subject, the subject (the sago container) being the thing that became a reef.⁵

A second lexicalized use of the reflexive-reciprocal form of *-ayako* ‘do, make, happen to’ is ‘happen’, illustrated in (40).⁶

- (40) *Orait ampa ru w-r-any w-ama eni nta.*
 OK FUT 3SG.FEM 3SG.FEM-REFL/RECIP-make 3SG.FEM-like now this
 ‘Well, it should happen like this.’

This use is clearly related to the non-reflexive use of this verb with the meaning ‘happen to’, illustrated in (41).

- (41) *Momol w-p-any kipin?*
 what 3SG.FEM-1OBJ-make 1PL
 ‘What could have happened to us?’

Although the use of this verb in (40) is semantically monovalent, it differs from the other lexicalized uses above in that in these other cases, it is the semantic role of the subject that is removed, while with this use of *-rany* meaning ‘happen’, it is the semantic role of the object that is removed (the thing that something happens

⁵That *siar* ‘reef’ is not subject in (39) is clear from the fact that it follows the verb. Subjects in Walman invariably precede the verb.

⁶Words in italics, like *orait* in (40), are Tok Pisin words from modern texts. Contemporary Walman is frequently a mixture of Walman and Tok Pisin.

Lea Brown & Matthew Dryer

to) while the semantic role of the subject (the thing that happens) remains the same.

The last case we will discuss of a lexicalized use of the reflexive-reciprocal prefix is with the verb *awukul* ‘lift’, whose reflexive-reciprocal forms mean ‘jump’, as in (42).

- (42) *Lasi n-ete-ø may w-ama pino, lasi*
immediately 3SG.M-see-3SG.F rope 3SG.F-like sling immediately
n-r-awukul n-aro-ø tin may akou.
3SG.M-REFL/RECIP-lift 3SG.M-and-3SG.F tightly rope finish
‘He saw a vine like a sling, so he jumped and grabbed it tightly.’

It is not immediately obvious that this use is lexicalized since one might argue that jumping really is simply lifting oneself. However, while this might apply to instances of jumping up, it is less obvious that jumping down, as in (43), involves lifting oneself, although perhaps even jumping down often initially involves slightly jumping up.

- (43) *Lasi runon n-r-awukul n-anan ...*
immediately 3SG.M 3SG.M-REFL/RECIP-lift 3SG.M-go.down
‘He immediately jumped down ...’

5 The nominal reflexive construction

In addition to the reflexive-reciprocal prefix on the verb, Walman also has a nominal reflexive construction, illustrated in (44) and (45), that involves combining the genitive form of a personal pronoun with the word *ein*, which has a range of meanings, the most basic of which is ‘base (of a tree)’ but which also can mean ‘cause, reason’. In both (44) and (45), the nominal reflexive is functioning as object.

- (44) *Runon n-r-ulø mnon ein.*
3SG.M 3SG.M-REFL/RECIP-cut 3SG.M.GEN REFL
‘He cut himself’

- (45) *Runon n-a nyoko seylieu n-r-ao mnon*
3SG.M 3SG.M-use bow ‘foreigner’ 3SG.M-REFL/RECIP-shoot 3SG.M.GEN
ein.
REFL
‘He shot himself with the gun.’

2 Reflexive constructions in Walman

All instances of this construction in our data combine with the reflexive-reciprocal prefix construction when it is an object which is coreferential with the subject, as in (44) and (45). We should also note that the only clear instances in texts of the nominal reflexive construction involve the focus use discussed in the next section. Two further examples illustrating the simultaneous use of the two constructions are given in (46) and (49).

- (46) *Runon n-r-arien mnon ein* “M-ayako-ø momol?”
 3SG.M 3SG.M-REFL/RECIP-ask 3SG.M.GEN REFL 1SG-do-3SG.F what
 ‘He asked himself “What should I do?”’
- (47) *Runon n-r-etiki nyi mnon ein.*
 3SG.M 3SG.M-REFL/RECIP-cook fire 3SG.M.GEN REFL
 ‘He burnt himself in the fire.’

Examples (48) and (49) are similar, except in these cases, the object is an applied object in an applicative clause. In (48), the verb *nrорuen* ‘he cried for himself’ is the applicative of an intransitive verb *-oruen* ‘cry’.

- (48) *Nyue w-elpete-n runon n-r-oruen*
 mother 3SG.F-quarrel.with-3SG.M 3SG.M 3SG.M-REFL/RECIP-cry-APPLIC
mnon ein.
 3SG.M.GEN REFL
 ‘When his mother yelled at him, he cried for himself.’

In (49), the verb *nrapulun* ‘pour it for yourself’ is the applicative of a transitive verb *a_pulu* ‘pour, spread around’, so the clause contains two objects, the applied object *wchi ein* ‘yourself’, indexed on the verb by the reflexive reciprocal prefix *r-*, and the basic object *wul* ‘water’.

- (49) *Chi n-r-a<ø>pulun wul w-chi ein.*
 2SG 2SG-REFL/RECIP-pour.APPLIC<3SG.F> water GEN-2SG REFL
 ‘Pour yourself some water.’

The nominal reflexive construction in Walman normally consists of the genitive form of a pronoun followed by the word *ein*. But an alternative to the use of a personal pronoun is a noun phrase consisting of an *and*-verb where both conjuncts are pronominal. In (50), for example, the nominal reflexive construction is *wru waro ein*, where *wru waro*, literally ‘of her and her’ is functioning like a pronoun denoting the same two women as the subject *ru waro* ‘she and her’, where

Lea Brown & Matthew Dryer

the first conjunct is represented by both the pronoun *ru* and the 3SG.F prefix on *waro* and the second conjunct is represented by the null 3SG.F object marking on *waro*. Apart from the fact that *wru* is in genitive form, *wru waro* is identical to *ru waro*. Since the nominal reflexive construction normally involves a personal pronoun followed by *ein*, the use of *wru waro* in *wru waro ein* means that *wru waro* is behaving here like a personal pronoun.

- (50) *Ru w-aro-ø y-r-apulun wul w-ru*
 3SG.F 3SG.F-and-3SG.F 3PL-REFL/RECIP-pour.APPLIC water GEN-3SG.F
w-aro-ø ein.
3SG.F-and-3SG.F REFL
 ‘The two women poured water on themselves.’

It is also possible to use the nominal reflexive construction with possessors, as in (51), in which case we do not get the reflexive-reciprocal prefix on the verb.

- (51) *Kum m-a<ø>ko ngu w-kum ein m-apa-ø.*
 1SG 1SG-eat<3SG.F> excrement GEN-1SG REFL 1SG-excrete-3SG.F
 ‘I was eating my own faeces, which I just excreted.’

In fact, it is possible to have a reflexive-reciprocal verbal prefix in addition to the nominal reflexive construction on a possessor, if the verb is applicative, since one of the meanings associated with the applicative construction is that of external possession, as in (52) and (53).⁷

- (52) *Runon n-r-a<ø>pon wuel mnon ein*
 3SG.M 3SG.M-REFL/RECIP-kill.APPLIC<3SG.F> pig 3SG.M.GEN REFL
n-a<ø>ko.
 3SG.M-eat<3SG.F>
 ‘He killed his own pig to eat.’
- (53) *Runon n-r-lre-y nchong nyi nakol*
 3SG.M 3SG.M-REFL/RECIP-light.fire.APPLIC-3PL catch fire house
mnon ein.
3SG.M.GEN REFL
 ‘He set fire to his own house.’

⁷Note that the verb *nrlrey* in (52) bears both a reflexive-reciprocal prefix and a 3PL object suffix. This object suffix is agreeing with *nyi* ‘fire’, which is pluralia tantum in Walman and always triggers plural agreement.

2 Reflexive constructions in Walman

It is also possible to combine the reflexive-reciprocal prefix with the nominal construction marking a possessor if the thing possessed is a body part and the act denoted by the verb applies both to the referent of the subject and the body part, as in (54) and (55).

- (54) *Runon n-r-kay chkuel nyamayki mnon ein.*
 3SG.M 3SG.M-REFL/RECIP-see eye nose 3SG.M.GEN REFL
 'He sees his own face.'

- (55) *Runon n-r-ako motu mnon ein*
 3SG.M 3SG.M-REFL/RECIP-eat finger 3SG.M.GEN REFL
 'He bit his finger.'

The possibility of using the nominal reflexive construction more generally on possessors is illustrated by (56) to (58). In (56), the possessor *wkipin ein* 'of ourselves' is modifying the noun *wlroy* 'desire', which in turn is the complement of the word *wama*, formally a form of the verb *-ama* 'be like', but in an impersonal use since there is no apparent 3SG.F trigger for the prefix *w-* on *wama* (suggesting that this has become grammaticalized as a preposition).

- (56) *Kipin k-oko-y w-ama wlroy w-kipin ein.*
 1PL 1PL-take-3PL 3SG.F-like desire GEN-1PL REFL
 'We marry them of our own free will.'

It is also possible for the nominal reflexive to function as a long distance reflexive, but only if it is a possessor in a subordinate clause, coreferential with the subject of the matrix clause. In (57), for example, *mnon ein* is the possessor of the object in the subordinate clause but refers back to the subject of the matrix clause.

- (57) *Runon n-napi kum m-ao-n ngan mnon ein.*
 3SG.M 3SG.M-say 1SG 1SG-shoot-3SG.M father 3SG.M.GEN REFL
 'He said that I shot his father.'

Similarly, in (58), *mnon ein* functions as possessor of the subject of the subordinate clause, but refers back to the subject of the matrix clause.

- (58) *Runon n-napi ngan mnon ein n-ao-n runon*
 3SG.M 3SG.M-say father 3SG.M.GEN REFL 3SG.M-shoot-3SG.M 3SG.M
 'He said that his very own father shot him.'

Lea Brown & Matthew Dryer

We have one text example, given in (59), in which the antecedent of a nominal reflexive is the subject of the first verb in a sequence of verbs with different subjects and where the clause in which the nominal reflexive occurs is not a subordinate clause. *Mnon ein* is the object of *warier* ‘it hit him’ whose subject is the breadfruit which is also subject of the two verbs *wan* ‘it was at’ and *wanan* ‘it went down’ that precede *warien* ‘it hit him’. But the antecedent of *mnon ein* is *runon* ‘3SG.M’ and intervening between *runon* and the verbs whose subject is the breadfruit is another verb *mlko* ‘I broke it off’ with a 1SG subject *kum*.

- (59) *Runon n-p-narin* *kum, to kum m-lko-ø*
 3SG.M 3SG.M-1OBJ-speak.APPLIC 1SG then 1SG 1SG-break.off-3SG.F
 yal w-an karwal, w-anan, w-arie-n mnon
 breadfruit 3SG.F-be.at tree.top 3SG.F-go.down 3SG.F-hit-3SG.M 3SG.M.GEN
 ein woruen amungko.
 REFL head bone
 ‘He spoke to me and then I picked a breadfruit that was at the top of the
 tree, and it came down and hit him on the head.’

Since this is the only example that we have like this, we are not sure what constraints there might be on how far a nominal reflexive can be separated from its antecedent. It is also possible that this is an instance of the focus use of the nominal reflexive discussed in the next section.

We should note that the nominal reflexive construction is never obligatory for possessors. In (60), for example, we get *ngan wkum* ‘my father’, not *ngan wkum ein*, even though it refers back to the subject *kum*.

- (60) *Kum m-tkre-n ngan w-kum.*
 1SG 1SG-do.same-3SG.M father GEN-1SG
 ‘I do things like my father’

Similarly, in (61) we get *cha wri* ‘their village’, not *cha wri ein*, even though it refers back to the subject *ri Chnapeli* ‘the Chinapelli’.

- (61) *Ri Chnapeli y-orou cha w-ri.*
 3PL Chinapelli 3PL-go place GEN-3PL
 ‘The Chinapelli returned to their own village.’

‘The nominal construction can also be used for reciprocal situations, as in (62), but again note that the verb contains the reflexive-reciprocal prefix *r-*.

2 Reflexive constructions in Walman

- (62) *Ri y-r-ao w-ri ein.*
 3PL 3PL-REFL/RECIP-shoot GEN-3PL REFL
 ‘They shot each other.’

6 Focus use of the nominal reflexive construction

Similar to what we find in many other languages, the nominal reflexive construction in Walman is sometimes used as a marker of focus (König et al. 2013), as in (63).

- (63) *Walman mlin w-ri ein y-ayako-ø woyue.*
 Walman true GEN-3PL REFL 3PL-make-3SG.F bad
 ‘The real Walman themselves made a mistake.’

When the item in focus is a personal pronoun not functioning as a possessor within a noun phrase, the pronoun occurs either in genitive form, as in (64), or in nongenitive form, as in (65) and (66). The focused element in (64) is the first conjunct of *naro* ‘you (sg.) and her’, which functions, in turn, as the subject of *charul* ‘you (pl.) flee’.

- (64) *Korue, w-chi ein n-aro-ø ch-arul ch-ara.*
 no GEN-2SG REFL 2SG-and-3SG.F 2PL-flee 2PL-come
 ‘Nothing, you [you yourself and her] have come here of your own accord (i.e. not through my magic).’

In (65), *kipin ein* ‘we ourselves’ is subject.

- (65) *Kipin ein monap k-ayako-ø koruen.*
 1PL REFL cannot 1PL-make-3SG.F NEG
 ‘We ourselves are not able to make any.’

In (66), *kipin ein* is the second conjunct of a conjoined noun phrase functioning as the goal of the verb *wrukuel* ‘run’.

- (66) *Ri y-alma yikel w-rukuel kalway ro w-ri y-an Prou Wokau o kipin ein.*
 3PL 3PL-die words 3SG.F-run blood part GEN-3PL 3PL-be.at Prou Wokau and 1PL REFL
 ‘When they die, a message goes around to their blood relations living in Prou or Wokau, and even amongst ourselves.’

Lea Brown & Matthew Dryer

In (67), *wkipin ein* is functioning as a possessor in *ala wkipin ein* ‘our business’.

- (67) *Kipin save k-an k-uruer k-r-elpete wkan a*
1PL know 1PL-be.at 1PL-fight 1PL-REFL/RECIP-quarrel.with later PTCL
pa ala w-kipin ein ...
that work GEN-1PL REFL
'We know that if we quarrel and fight later, that's our business, [not yours].'

As noted above, the only clear instances in texts of the nominal reflexive construction involve the focus use. Because of this and because of the fact that when it is used for the object of a verb, the verb invariably bears the reflexive-reciprocal prefix suggests that the focus use of this construction is basic and raises the possibility that all instances in elicited data are actually instances of the focus use.

7 Conclusion

In conclusion, Walman has two reflexive constructions, one involving a verbal prefix which is in paradigmatic opposition to first and second person object prefixes, the other a nominal reflexive construction that combines a personal pronoun with a word *ein*, whose meanings outside this construction include ‘base of tree’ and ‘reason’. Both constructions are also used for reciprocals. The construction with the verbal prefix has also developed idiosyncratic meanings with some verbs. The nominal reflexive construction is also used as a focus construction and in fact it is possible that all instances of the nominal reflexive construction are really instances of focus.

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2 Reflexive constructions in Walman

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Chapter 3

Reflexive constructions in Waray

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Waray is an Austronesian language spoken in the Eastern Visayas region of the Philippines. In this paper we argue that reflexive constructions of all types employ a morphologically complex reflexive nominal *kalugaringon*. This nominal, based on the root *lugaring* ‘to self-rely’/‘do on ones own’, obligatorily expresses the undergoer when actor and undergoer in the same clause are coreferential. It also may refer to locative, and genitive elements within a clause, and elements of dependent clauses (long-distance coreference), when these are coreferential with a qualifying antecedent. Depending on the context, the use of the reflexive nominal as an oblique nominal, genitive nominal, or in long distance coreference may not be required, but rather has a self-intensifying function. Finally, several examples from a large corpus of natural texts are presented and discussed.

1 Introduction

Waray (also called Waray-Waray, Winaray, or Leyte-Samarnon) is the mother tongue and language of wider communication for most inhabitants of the provinces of Samar, Eastern Samar, Leyte and parts of Biliran in the Eastern Visayas region of the Philippines.¹ With over three million speakers, it is the sixth most

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Thomas E. Payne & Voltaire Q. Oyzon

widely spoken language in the country. Unless otherwise specified, examples appearing in this paper are from Northern Leyte. Figure 3.1 illustrates the areas where Waray is primarily spoken, with the variety represented in this paper highlighted.



Figure 3.1: Location of Waray

Waray is a member of the Greater Central Philippine (GCP) sub-family of the Malayo-Polynesian family, Austronesian phylum (Blust 1991). Although we have not systematically investigated reflexive constructions in all GCP languages, deep personal experience with several GCP languages leads us to believe the generalizations presented here are applicable throughout the subfamily. Nevertheless, specific data and analyses in this paper are applicable only to Waray, and not necessarily to all GCP, much less to all "Philippine type" languages.

The present study is based on native-speaker competence, a large corpus of spoken and written data (3NS Corpora project – hereafter referred to as "the corpus"), published material in Waray, and extensive input from teachers, students, and intellectual leaders throughout the Waray speaking region.

Katarzyna Janic and an anonymous reviewer for comments on earlier drafts. Of course, any and all errors are our own. We also acknowledge and appreciate the support of Leyte Normal University, SIL Philippines, SIL International and the US Fulbright Foundation. The ISO 639-3 code for the language represented in this study is 'war'.

3 Reflexive constructions in Waray

In this paper we show that reflexivity in Waray is consistently expressed by the nominal reflexivizer *kalugaríngon* ‘self’. Agent-patient coreference can sometimes be expressed by simple intransitive constructions, but such examples may have non-reflexive interpretations depending on the context (see examples such as (18)b below).

We observe that such a phonologically “large” and morphologically complex nominal reflexivizer runs counter to the observation that reflexive constructions are usually expressed by phonologically reduced, or in other ways grammaticalized forms (pronouns, clitics or affixes) in the world’s languages. We speculate that this counter expectation may be explained by the fact that in Waray traditional culture, doing something “to oneself”, “by oneself”, “with oneself” or “for oneself” is considered culturally odd, marginal or aberrant. Indeed, ideas expressed by *kalugaríngon* constructions often have socially undesirable connotations that are unexpected given the free English translations.

The outline of the paper is the following. We begin with a brief description of the morphosyntactic typology of Waray (2), and the pronoun system (3). Out-of-context examples of various types of reflexive constructions are presented in (4) through (8). In (9) we speculate on the possible motivations for the nominal character of the Waray reflexive word. In (10) we present and discuss several examples of *kalugaríngon* from a large corpus of natural texts. Our general conclusions are presented in (11). A list of formatting conventions and abbreviations follows, before the references.

2 Morphosyntactic typology

Waray exhibits the typical morphological typology of Greater Central Philippine languages, with a high degree of morphological synthesis in verbal predicates, and a much lower degree of synthesis in referential expressions. Referential expressions (nouns and noun phrases) can be derived from multimorphemic verbs, but such morphological complexity is due to the verbal character of such nominalized forms rather than any specifically nominal categories. The following are some preliminary examples illustrating the morphological typology of Waray:

- (1) *Ini hi Nánay nagpípinamulod.*
 na-g-RED1-<in>pag-N-pulod
 DEMO1 ABS.P Mom INTR.R-DEL-IMPERF-<IT>INF-DIST-cut.wood
 ‘Mother went about cutting wood.’(Alunan 2016: 72):72

Thomas E. Payne & Voltaire Q. Oyzon

- (2) *Nagkapot-kapot* *kami* *han am'* *mga kamot.*
 na-g-RED2-kapot
 INTR.R-DEL-ATTN-hold 1EXCL.ABS OBL 1EXCL.GEN PL hand
 'We playfully held hands.'

Note that in example (1) the verb form consists of a root and six morphological elements, including prefixes, partial reduplication, an infix, and a highly fusional nasal element *N-* indicating distributive action. In contrast, the referential expression *ini hi Nanay* consists of three distinct morphological elements, two free words *ini* 'this' and *Nanay* 'Mom', and a proclitic case marking determiner *hi*. The verb form in (1) illustrates what we have found to be the maximum number of morphemes in a naturally occurring predicative word in the corpus, though more complex, yet grammatical, constructions can be concocted out of context. We find the verbal inflectional system to consist of twelve paradigmatic affixes (represented by *na-* 'intransitive realis' in examples (1) and (2)). We have also documented thirteen productive and non-paradigmatic stem-forming (or loosely "derivational") verbal elements, including all the other elements in examples (1) and (2) (Oyzon & Payne in preparation).

Example (2) illustrates another relatively synthetic verb containing a root and three morphological elements, including full root reduplication expressing what we call "attenuation." The effect of full root reduplication (RED2) is that the event is less genuine, less serious or more random than the root alone would imply. The effect in the context from which this example is extracted is reasonably captured by the adverb "playfully" in the English translation. Example (2) also illustrates that even such a central category as nominal plurality (really collectivity) in a referential expression is expressed analytically in Waray, via the particle spelled *mga* (pronounced [máŋa]). It is safe to say that there are no morphologically expressed inflectional categories affecting nouns. All morphological complexity in referential expressions is stem-forming, and most of that is identical to verb morphology, nominalization being a central feature of Waray discourse.

Grammatical transitivity is an important dimension in Waray morphosyntax. Most inflected verbs are explicitly marked as being grammatically intransitive or transitive, as will be clear from the glosses of the inflected verbs appearing in this paper. A grammatically intransitive clause is one that contains an absolute argument expressing the most affected participant, but no separate controller or starting point. A grammatically transitive clause is one which contains a controller or starting point that is separate from the absolute argument. The separate controller or starting point is either expressed in the ergative case, or

3 Reflexive constructions in Waray

is strongly implied. This grammatical distinction is independent of the semantic (inherent or ontological) transitivity of the verb root. Semantically transitive roots (those that evoke scenes that imply the participation of an undergoer and a separate actor) may be expressed in grammatically transitive or intransitive constructions, depending on discourse-pragmatic considerations. This is the basis of the famous Philippine voice (or “focus”) systems. We will have no more to say about this issue in this paper, but refer interested readers to the extensive literature on Philippine voice systems, most recently Payne & Oyzon (2018) and references cited therein.

The syntactic typology of Waray is broadly predicate-initial, prepositional and head marking. Clausal arguments or obliques may occur before the main predicate (an inflected verb or uninflected nominal predicate). There are three cases, absolute, ergative/genitive and oblique. These are indicated via pronominal form (see Table 3.1), or prenominal determiners. In addition to case, the determiners distinguish personal names from all other nouns, and identifiability (comparable, though not identical to definite vs. indefinite categories). Oblique roles are divided between locative (determiner *ha*) and general (determiners *kan* ‘personal name,’ *han* ‘perpetual’ and *hin* ‘generic’). Justification for these terms, and extensive additional details of Waray morphosyntax are forthcoming in Oyzon & Payne (in preparation)

3 The personal pronoun system

Personal pronouns in Waray vary for case (absolute, ergative/genitive, and oblique), person, and number. An inclusive vs. exclusive first-person plural distinction is also made. Table 3.1 displays the system of personal pronouns:

Note that when first-person singular acts on a second person, the enclitic form of the 1st person inclusive plural pronoun =*ta* occurs, rather than the expected =*ko*. This may be seen as a kind of actor-undergoer coreferentiality in that the speaker identifies with the undergoer when the undergoer is second person -- as though the speaker is saying ‘We (including you) act on you’, for example:

- (3) *Isusumat ta ikaw kan Nanay.*
 i-RED1-sumat
 APPL2-INCOMPL-tell 1INC.ERG 2SG.ABS OBL.P Mom
 ‘I will tell on you to Mom.’ (Lit: ‘We (including you) will tell on you to Mom.’)

Thomas E. Payne & Voltaire Q. Oyzon

Table 3.1: Personal pronouns of Waray

Person	Absolutive		Ergative/Genitive			Oblique
	Enclitic	Full form	Enclitic	Post-posed full form	Pre-posed full form	
1	SG	–	ako	=ko	nákon	ákon
	INCL	–	kita	=ta	náton	átón
	EXCL	–	kami	–	námon	ámon
	Comp	1SG>2SG		=ta ikaw		
2	1SG>2PL			=ta kamo		
	SG	=ka	ikaw	=mo	nímo	ímo
	PL	–	kamo	–	níyo	íyo
	SG	–	hiya/siya	–	níya	íya
3	PL	–	hira/sira	–	níra	íra

- (4) *Higugmaon ta kamo.*

higugma-on

love-TR.IR 1INC.ERG 2EXC.ABS

‘I love you all.’ (Lit. ‘We (including you) love you all.’)

This quasi coreferentiality is a common feature of Philippine pronoun systems. In some languages, the components of these sequences have merged to become distinct forms, though in Waray the two parts of each composite form are still pronounced as individual units.

Note also that there are two or three forms for each category in the genitive pronoun column – a preposed form, a postposed form, and for some categories an enclitic form. Example (5) illustrates the three alternative possessive constructions:

- (5) a. Enclitic genitive pronoun: *an balay ko* ‘my house’
 b. Preposed genitive pronoun: *an ákon balay* ‘my house’
 c. Postposed genitive pronoun: *an balay nákon* ‘my house’

There are subtle semantic and/or pragmatic distinctions among these three possibilities. These nuances are relevant for the use of the reflexive nominal *kalugaringon* as discussed in the following sections.

3 Reflexive constructions in Waray

4 Basic Reflexive Constructions

Waray employs the noun *kalugaríngon* ‘self’ in many situations involving coreference between an actor and some other clause constituent. We consider *kalugaríngon* to be a noun, rather than a pronoun for the following reasons. First, it does not vary morphologically for case, person or number the way pronouns do. Rather, its case is indicated via case-marking determiners, just as with nouns. Second, its person and number are indicated via adnominal genitive pronouns. Third, referring expressions headed by *kalugaríngon* may be modified like nouns in ways that pronouns may not. These properties will be illustrated in the following examples:

Examples (6)–(9) illustrate basic actor-undergoer coreferentiality expressed obligatorily with a reflexive construction:

- (6) *Nakità ko an akon kalugaríngon ha salamin.*
 na-kità
 R.SPON-SEE 1SG.ERG ABS 1SG.GEN self LOC mirror

‘I saw myself in a mirror.’

- (7) *Nasísina an akon sangkay ha íya kalugaríngon.*
 na-RED1-sina
 R.SPON-IMPERF-hate ABS 1SG.GEN friend LOC 3SG.GEN self
 ‘My friend hates (is angry with) himself.’

- (8) *Gindayaw niya an íya kalugaríngon.*
 <in>g-dayaw
 <TR.R>DEL-praise 3SG.ERG ABS 3SG.GEN self
 ‘She praised herself.’

- (9) *Ginpatay han tawo an íya kalugaríngon.*
 <in>g-patay
 <TR.R>DEL-kill ERG man ABS 3SG.GEN self
 ‘The man killed himself.’

Note that a prenominal genitive pronoun occurs before *kalugaríngon* in all of these examples. This is the dominant pattern for actor-undergoer coreferential reflexive constructions in Waray, and the first to come to mind when inventing examples out of context. Post-nominal and enclitic genitive pronouns are also grammatically possible, but far less common. Out of 323 examples of *kalugaríngon* in the corpus, all but one have an adnominal genitive possessor (ex. (43) below is the exception). Of the 322 examples of possessed *kalugaringon*, there are

Thomas E. Payne & Voltaire Q. Oyzon

five examples of enclitic genitives (see, e.g., examples (41) and (42) below), and no examples of post-posed genitive possessors (either pronominal or full NPs) of the reflexive nominal. In all the examples in this paper, *kalugaríngon* may be replaced by any semantically compatible noun with no other changes in the sentence, e.g., ‘I saw my brother in a mirror’ (ex. 6), ‘she praised her teacher’ (ex. 8), etc. However, for possessed nominals other than *kalugaríngon*, enclitic and post-posed genitive possessors are proportionally more common than they are for *kalugaríngon*. Thus it appears there is an emerging special pattern of genitive possession for *kalugaríngon* that distinguishes it from other nouns. This may be an initial step toward grammaticalization of *kalugaríngon* as a dedicated reflexive pronoun.

Another nominal property of *kalugaríngon* is that it may be modified in the same way as other nouns. First, it takes the nominal collective marker *mga* to mark plurality, just as common nouns do: *áton mga kalugaríngon* ‘ourselves’ (see example 45 below). Second, certain attribute words may occur as attributive modifiers in NPs headed by *kalugaríngon*:

- (10) a. *an ákon minimingaw nga kalugaríngon*
 ABS 1SG.GEN lonely LK self
 ‘my lonely self’
- b. *an ákon nasísina nga kalugaríngon*
 ABS 1SG.GEN angry LK self
 ‘my angry self’

None of the 323 examples of *kalugaríngon* found in the corpus for this study have adnominal attributive modifiers, so this phenomenon is clearly uncommon. However, the fact that it is even possible to modify this word distinguishes it from the class of pronouns.

The reflexive nominal *kalugaríngon* is a nominalized form based on the root *lugaring*, meaning roughly ‘self-rely, or ‘on one’s own.’ Here are some examples of this root used outside of its common reflexive context:

- (11) *Naglúlugaring na ako.*
 na-g-RED1-lugaring
 INTR.R-DEL-IMPERF-on.own now 1SG.ABS
 ‘I’m living on my own.’

3 Reflexive constructions in Waray

- (12) *Paglugaring!*
 pag-lugaring
 INF-on.own
 'Do it yourself!'

Example (12) is a basic intransitive imperative construction employing the infinitive marker *pag-*. This utterance is a mild rebuke to someone, perhaps a child, asking the speaker to do something for them.

The reflexive nominal is obligatory in an absolute role (examples (6), (8) and (9) above) when coreferential with the actor of the clause. It is also obligatory when an oblique is coreferential with the actor, as in (7), and the following. In examples (13) and (14), if a simple 3SG pronoun replaces the NP headed by *kalugaríngon*, coreference with the actor is impossible:

- (13) *Ginpadara niya an surat ha íya kalugaríngon.*
 <in>g-pa-dara
 <TR.R>DEL-CAUS-carry 3SG.ERG ABS letter LOC 3SG.GEN self
 'S/he sent the letter to her/himself' (or 'S/he had someone carry the letter to her/himself').
- (14) *Nahuwad niya an kape ha íya kalugaríngon.*
 na-huwad
 R.SPON-spill 3SG.ERG ABS coffee LOC 3SG.GEN self
 'S/he spilled the coffee on her/himself.'

Note that the verb *huwad* in spontaneous mood is translated as 'spill' in English (example 14). The same root in deliberate mood, *ginhuwad*, would be more insightfully translated as 'pour'.

The reflexive nominal does not naturally occur in an ergative role (15a) or in an absolute role in an intransitive construction (15b):

- (15) a. * *Ginpatay han íya kalugaríngon an tawo.*
 <in>g-patay
 <TR.R>DEL-kill ERG 3SG.GEN self ABS man.
 ('*Himself killed the man.')
- b. * *Nagpatay an íya kalugaríngon hin tawo.*
 na-g-patay
 INTR.R-DEL-kill ABS 3SG.GEN self OBL.INDEF man
 ('*Himself killed a man.)

Thomas E. Payne & Voltaire Q. Oyzon

These constructions, if interpretable at all, are extremely awkward and confusing. In other words, the *actor*, whether ergative or absolute, cannot reflect a distinct nominal in the clause or elsewhere. This is one property that Schachter (1977) called a "role-related subject property" of Tagalog.

However, an oblique nominal can reflect an actor argument whether the actor is ergative (examples (13) and (14) above) or absolute in a detransitive (or "antipassive", Oyzon & Payne in preparation.) construction, as in (7) above, and the following:

- (16) *Nagpatay an tawo ha íya kalugaríngon.*
 na-g-patay
 INTR.R-DEL-kill ABS man LOC 3SG.GEN self
 'Humanity has killed itself' or 'The man killed himself.'

Example 16 is a detransitive version of example (9), but the interpretation may be quite different. In (16) *an tawo* can be understood in the generic sense as "humanity." This is consistent with a general tendency for this particular word *tawo* to have a generic sense in certain contexts. This fact is tangential to the notion of reflexivity. It is not the case that all absolute actors in detransitive reflexive constructions are understood as generic (see, e.g., example (7) above).

5 Contrast between introverted and extroverted verbs

Transitive verbs that allow a human object can be divided semantically into introverted and extroverted classes (Haiman 1980: 803). Prototypical extroverted actions express socially antagonistic events such as 'kill', 'kick', 'attack', 'hate' and 'criticize', whereas introverted actions include body care (or grooming) actions such as 'shave', 'comb' and 'bathe'. In Waray, extroverted actions are expressed with inherently transitive verbs, i.e., their underived forms may be used in a transitive frame. Introverted actions, on the other hand, tend to be expressed by inherently intransitive verbs. In an intransitive frame, such verbs tend to be understood as reflexive, even without use of the reflexive nominal. In order to occur in a transitive frame, such verbs require the addition of a valence increasing morphological element.

The examples in (17) and (23) (further below) illustrate extroverted verbs expressed in transitive and detransitive reflexive constructions, in what we are calling "deliberate" (prefix *g-*) and "controlled" (infix *-um-*) moods. Deliberate mood presents a situation as something that the actor goes out of their way to perform. The situation is not something the actor normally does, but is a special,

3 Reflexive constructions in Waray

conscious act. Controlled mood depicts situations as being under the control of the actor, but with emphasis on the *effect* of the situation on the absolute argument (whether the absolute happens to be the actor or not). Often, events in controlled mood are presented as situations the controller always, naturally, effortlessly or inevitably does. In the following examples, the transitive versions are understood as more harsh, more effective or more intense than the corresponding detransitive versions. Similarly, the deliberate mood detransitives are understood as more intense than the corresponding controlled mood forms:

- (17) a. Transitive, deliberate mood

Ginkagat han áyam an íya kalugaríngon.
 <in>-g-kagat
 <TR.R>DEL-bite ERG dog ABS 3SG.GEN self
 ‘The dog bit itself’

- b. Detransitive, deliberate mood

Nagkagat an áyam ha íya kalugaríngon.
 na-g-kagat
 INTR.R-DEL-bite ABS dog LOC 3SG.GEN self
 ‘The dog nipped at itself’

- c. Transitive, controlled mood

Kinagat han áyam an íya kalugaríngon.
 <in>-kagat
 TR.R-bite ERG dog ABS 3SG.GEN self
 ‘The dog bit/bites itself (as usual).’

- d. Detransitive, controlled mood

Kumágat an áyam ha íya kalugaríngon.
 <um>-kagat
 <INTR.R.CTRL>bite ABS dog LOC 3SG.GEN self
 ‘The dog (casually) nips/nipped at itself’

Many introverted verb roots are inherently intransitive, as evidenced by the fact that they may occur in transitive frames only with the addition of causative or applicative morphology (see *Oyzon & Payne in preparation* for a discussion of verb classes). For example, the root *karigò* ‘bathe’ may occur in a simple intransitive frame, as in the following:

- (18) a. Intransitive, controlled

Thomas E. Payne & Voltaire Q. Oyzon

- Kumarigò* *an babáyi (*?ha íya* *kalugaríngon)*
 <um>*karigò*
 <INTR.R CTRL>bathe ABS woman LOC 3SG.GEN self
 'The woman bathed (herself).' (Expected, normal activity.)
- b. Intransitive,deliberate
Nagkarigò *an babáyi (ha íya* *kalugaríngon)*
 na-g-*karigò*
 INTR.R-DEL-bathe ABS woman LOC 3SG.GEN self
 'The woman bathed (herself).' (Unexpected in some way.)

Example (18a) illustrates an intransitive construction in controlled mood, implying that the event is unsurprising, effortless, normal, and fully expected. In this case, the addition of the reflexive nominal in an oblique role may be grammatical but sounds extremely odd (indicated by the double notation "??"). Example (18b) depicts a similar scene, but in deliberate mood. This implies that the event is unusual, unexpected, effortful, or surprising in some way. In this case, without the reflexive nominal, coreferentiality is still the implication ('she bathed herself'), but the clause is open to other interpretations, e.g., 'she bathed (someone else, recoverable from the context).' Still, the reflexive nominal in an oblique role forces a reflexive interpretation and the event is assumed to be unexpected for some other contextual reason. For example, the sentence becomes more interpretable with the addition of some context, such as *hin petrolyo* 'with gasoline.' Bathing oneself with gasoline would be a highly unusual activity, and hence would require the use of deliberate modality, and the explicit reflexive nominal.

As mentioned above, inherently intransitive introverted verbs may be expressed in a transitive frame with the addition of transitivizing morphology, such as the applicative suffix *an*. In this case, the actor is expressed in the ergative case and the patient in the absolute. For the clause to express actor-undergoer coreference, the reflexive nominal is required:

- (19) Transitive, applicative
Ginkarigoan *han babáyi an íya* *kalugaríngon.*
 <in>*g-karigò-an*
 <TR.R>DEL-bathe-APPL1 ERG woman ABS 3SG.GEN self
 'The woman bathed herself.'

The detransitive version of this construction is not grammatical, since the applicative *-an* always derives a grammatically transitive stem. Rather, the intransitive forms without the applicative (examples in 18) serve the function of a de-transitive applicative.

3 Reflexive constructions in Waray

Other verbs that follow this pattern are *ahit* ‘shave hair’ and *sudlay* ‘comb hair’. Here are some examples with *sudlay*:

- (20) a. *Nagsudlay* *hiya* (*han iya* *bungot*).
 na-g-sudlay
 INTR.R-DEL-comb 3SG.ABS obl 3SG.GEN beard
 ‘He_i combed (his_{i/j} beard).’
- b. *Ginsudlayan* *han Barbero an iya* *bungot*.
 <in>g-sudlay-an
 <TR.R>DEL-comb-APPL ERG barber ABS 3SG.GEN beard
 ‘The barber_i combed his_{i/j} beard.’

The root *sudlay* does not naturally occur in the controlled mode ??*sumudlay*. In example (20a), in the absence of a clarifying oblique, the actor’s head hair is the usual interpretation of the undergoer. However, this assumption can be cancelled with the mention of another kind of hair, e.g., *bungot* ‘beard’, expressed as an oblique. Also, in (20b) the first impression is that the actor and the possessor of the beard are not coreferential -- because that is a typical thing for barbers to do. Though, again, this is not necessary -- the barber may be combing his own beard.

In all cases in which a possessor may or may not be coreferential with the actor of the clause, a coreferential meaning may be enforced by the use of *kalugaríngon* in a genitive role. This is fully grammatical, but unusual in discourse, since in fact the coreference relations are normally clear enough in actual conversation. As discussed further below, the reflexive nominal in a genitive role usually functions as a kind of self-intensifier (see, e.g., *chapters/haspelmath* [this volume]), stressing the fact that the actor accomplishes the action on her or his own possession, and that this is unexpected for some reason:

- (21) a. *Nagsudlay* *hiya* *han iya* *kalugaríngon bungot*.
 na-g-sudlay
 INTR.R-DEL-comb 3SG.ABS obl 3SG.GEN self beard
 ‘He_i combed his_i own beard.’ (cf. 20a)
- b. *Ginsudlayan* *han Barbero an iya* *kalugaríngon bungot*.
 <in>g-sudlay-an
 <TR.R>DEL-comb-APPL ERG barber ABS 3SG.GEN self beard
 ‘The barber_i combed his_i own beard.’ (cf. 20b)

Thomas E. Payne & Voltaire Q. Oyzon

In (21a) and (21b), *íya kalugaríngon* ‘his self’ is treated as a nominal possessor of ‘beard’, and *íya* must be coreferential with the actor of the clause. Compare (21a) to the following. In this case, *íya amay* ‘her/his father’ is the nominal possessor of *bungot*, and coreference between *íya* and the actor is the expected, but not necessary interpretation:

- (22) *Nagsudlay hiya han bungot han íya amay.*
 na-g-sudlay
 INTR.R-DEL-comb 3SG.ABS OBL beard OBL 3SG.GEN father
 ‘S/he_i combed her/his_{i/(j)} father’s beard.’

Interestingly, the roots *suson* ‘criticize’ and *sina* ‘hate/be angry with’ fall into the grammatical class of introverted actions, though semantically they may be considered ”socially antagonistic.” The basic, underived forms of these verbs are intransitive, and the transitive forms must be derived:

(23) Intransitive, controlled

- a. *Sumuson an politiko (ha íya kalugaríngon).*
 <um>suson
 <INTR.R.CONTR>criticize ABS politician LOC 3SG.GEN self
 ‘The politician criticized himself.’ (Gently, self-reflecting)
- b. Intransitive, deliberate
Nagsusón an politiko (ha íya kalugaríngon).
 na-g-suson
 INTR.R-DEL-criticize ABS politician LOC 3SG.GEN self
 ‘The politician criticized himself.’ (Deliberate, public.)
- c. Transitive, deliberate applicative
Ginsusnan han politiko an íya kalugaríngon.
 <in>g-suson-an
 <TR.R>DEL-criticize-APPL ERG politician ABS 3SG.GEN self
 ‘The politician criticized himself.’ (Mercilessly, harshly.)

(24) Intransitive, spontaneous

- a. *Nasisina hiya ha íya kalugaríngon.*
 na-RED1-sina
 R.SPON-IMPERF-hate 3SG.ABS LOC 3SG.GEN self
 ‘He hates (is angry with) himself.’

3 Reflexive constructions in Waray

- b. Transitive, deliberate

Ginsinahan niya an íya kalugaríngon.
 <in>g-sina-an
 <TR.R>DEL-hate-APPL1 3SG.ERG ABS 3SG.GEN self
 'He hated (or got angry with) himself.'

We speculate that these roots follow the pattern of introverted verbs because there is no physical effect on the criticized/hated person. The relevant semantic distinction in Waray seems to be between events that cause a physical change vs. those that do not, rather than strictly extroverted vs. introverted actions.

Here is an example of a verb that falls into the extroverted category, even though it does not describe a socially antagonistic act. It is more similar, semantically, to a grooming verb. In this case, however, the affected body part must be mentioned, probably because, unlike 'comb', there is no particular part of the body for which scratching is a normal, everyday activity:

- (25) *Ginkalot niya an íya (kalugaríngon) likod.*
 <in>g-kalot
 <TR.R>DEL-scratch 3SG.ERG ABS 3SG.GEN self back
 'S/he scratched her/his (own) back.'

Without *kalugaríngon*, example (25) is ambiguous as to whether the possessor of the back is coreferential with the actor. With *kalugaríngon*, the reflexive interpretation is enforced. Although the effect of scratching may or may not be visible, it does involve physical rather than solely psychological effects. We speculate that it is for this reason that *kalot* 'scratch' falls into the class of "extroverted" (or physical effect) verbs.

6 Coreference between non-actor arguments

The reflexive nominal may be used to enforce coreference between non-actor arguments. For example:

- (26) *Ginsumatan kami niya bahin han ámon*
 <in>g-sumat-an
 <TR.R>DEL-tell-APPL1EXCL.ABS 3SG.ERG about OBL 1EXCL.GEN
kalugaríngon.

self

'He told us about ourselves.'

Thomas E. Payne & Voltaire Q. Oyzon

When the target and its reflection are both non-actors and first or second person, as in (26) and (28), the reflexive nominal is possible, but not necessary. Examples (26) and (27) are nearly synonymous. (26) simply emphasizes the importance of the coreference relation (similar to the self-intensifying function described above for *kalugaríngon* in a genitive role):

- (27) *Ginsumatan* *kami* *níya* *bahin han ámon.*
 <in>g-sumat-an
 <TR.R>DEL-tell-APPL 1EXCL.ABS 3SG.ERG about OBL 1EXCL.OBL
 'He told us about us.'
- (28) *Ginpakità* *ta* *ikaw* *han ímo* *ladawan.*
 <in>g-pa-kità
 <TR.R>DEL-CAUS-see 1INC.ERG 2SG.ABS OBL 2SG.GEN picture
 'I showed you a picture of you.' (or 'your picture')²

However, when the actor and the non-actor nominal are third person and the same number, there is no non-paraphrastic way to disambiguate. The examples in (29) are ambiguous with or without the presence of the reflexive nominal:

- (29) a. Transitive:
 Ginpakità *ni* *Juan hi* *Maria hin íya*
 <in>g-pa-kità
 <TR.R>DEL-CAUS-see ERG.P John ABS.P Mary OBL 3SG.GEN
 kalugaríngon ladawan.
- self picture
 'John showed Mary a picture of him/herself.'
- b. Detransitive:
 Nagpokità *hi* *Juan kan* *Maria hin íya*
 na-g-pa-kità
 INTR.R-DEL-CAUS-see ABS.P John OBL.P Mary OBL 3SG.GEN
 kalugaríngon ladawan.
- self picture
 'John showed Mary a picture of him/herself.'

²Recall that *ta ikaw* and *ta kamo* are 'composite' forms used whenever a first person participant acts on a second person participant. While =*ta* is an inclusive plural (first + second person) form, it always stands for first person singular when the absolutive is second person.

3 Reflexive constructions in Waray

Without *kalugaríngon*, (29a)–(29b) would be triply ambiguous. The picture could be of John, of Mary, or of some other 3rd person singular referent. It should be emphasized that this type of construction, though completely grammatical, is rare in conversation. In face-to-face discourse, coreference relations are usually clear from the context. This optional use of *kalugaríngon* may be seen as a kind of self-intensifying function, emphasizing the coreference relationship, or contrasting coreference with a presumption of disjoint reference.

7 Contrast between exact and inclusive coreference

There is no essential contrast between reflexive constructions involving exact vs. inclusive coreference. The expression *ngan iba* ‘and others’ can simply be added to the reflected referential expression to indicate others are included with the referent of the reflexive nominal.

- (30) *Dinádayaw niya an íya kalugaríngon ngan an iba.*
 <in>RED1-dayaw
 <TR.R.CTRL>IMPERF-praise 3SG.ERG ABS 3SG.GEN self and ABS
iba.
 other
 ‘He praises himself and others.’

This strategy seems to be available for any construction involving *kalugaríngon*.

8 Long-distance coreference

In long distance co-reference, the reflexive nominal may be used to enforce coreference relations:

- (31) *Húnahúna ni Pedro may adâ an íya kalugaríngon igo nga kwarta.*
 think ERG.P Pedro EXIST ABS 3SG.GEN self enough LK
 money
 ‘Pedro thinks that he himself has enough money.’

The construction in (31), though grammatical, is unusual in actual conversation. Normally a simple 3SG.ABS pronoun would imply, though not strictly code, coreference in situations like this:

Thomas E. Payne & Voltaire Q. Oyzon

- (32) *Húnahúna ni Pedro may adâ hiya igo nga kwarta.*
 think ERG.P Pedro EXIST 3SG.ABS enough LK money
 'Pedro_i thinks that he_{i(j)} has enough money.'

Again, this (rather uncommon) usage of *kalugaríngon* may be seen as a kind of self-intensifying usage. However, unlike self-intensifiers in European languages (e.g., Latin *ipse*, German *selbst*, or Spanish *mismo/misma*), *kalugaríngon* is syntactically constrained -- it may not appear as an appositive (33a, b), or in an actor role (see ex. (15) above):

- (33) Spanish: *Viene la reina misma.*
 German: *Die Königin selbst kommt.*
 Latin: *Regina ipsa ventura est.*
 English: *The queen herself is coming.*
- a. * Waray:
Makanhi (íya) kalugaríngon an reyna.
 coming 3SG.GEN self ABS queen
- b. * *Nagkúkuha (íya) kalugaríngon han reyna an tinapay.*
 getting 3SG.GEN self ERG queen ABS bread
 (for 'The queen herself is getting the bread.)

Such self-intensifying functions are available in Waray using the Spanish borrowing *mismo*, though this usage is not particularly common:

- (34) *Makanhi mismo an reyna.*
Makanhi an reyna mismo.
 'The queen herself is coming.'

Of the 256 examples of *mismo* in the corpus, there are none that clearly exhibit this usage. Furthermore, *mismo* never functions as a reflexivizer:

- (35) * *Ginpatay han tawo an íya mismo.* (cf. 9)
 (for: 'The man killed himself.)

9 Speculations regarding the awkwardness of *kalugaríngon* constructions in Waray

As mentioned in the introduction, we find it surprising that the reflexive form, *kalugaríngon*, is such a phonologically large and morphologically complex nom-

3 Reflexive constructions in Waray

inal. Most languages, it seems, have well structuralized and phonologically reduced patterns for expressing reflexive ideas. One may especially expect languages with highly synthetic verb morphology, such as Waray, to have some verb or verb-phrase element that expresses at least some varieties of reflexivity. Indeed, the verb morphology of Waray offers many ways of adjusting the argument relations and event type expressed by a clause, including causative, applicative (two types), reciprocal, precative, associative (one action done together with others), distributive associative (multiple actions done randomly with others), distributive (action done randomly), counter expectation, imperfective, iterative, attenuative, and others. One finds it surprising, in this context, that reflexivity should be a category that is not also well grammaticalized. Instead, we find a rather cumbersome and often awkward full nominal expression.

Our speculation on this topic is grounded in the observation that Philippine cultures, Waray in particular, are very communal societies. Acting together with others is a high cultural value. Consequently, it is often unusual, and rather aberrant that someone should act exclusively on one's own, or upon oneself. This fact is expressed in the grammar in the multiplicity of associative, mutual action and reciprocal categories in the verb, and in the inclusive/exclusive distinction in the pronoun system. The colloquial expression *paglugaring!* 'Do it on your own' or 'don't involve me/us with what you are doing' is an indicative example. This expression (based on the root *lugaring*), is used as a rebuke to somewhat ostracize somebody from a group. This is because in Waray, traditionally things are done collectively.

For another example, in traditional contexts drinking *tubâ* 'coconut wine' is a social activity. Waray even has the following lexicalized expression employing the associative infix *-Vr-*:

- (36) *irignom*
 - <Vr>g-inom
 - <ASSOC>DEL-drink
 - 'drinking session'

Traditionally there is one *tagayan*, a cup that is passed from person to person in a drinking session. Warays never drink alcohol alone. So, to do things alone, especially social activities, is odd, and a serious breach of social norms. We consider these observations to be speculation, since one must be careful not to jump too quickly from cultural observations to linguistic analyses. In this case, however, we find the speculation particularly intriguing, and perhaps worthy of serious future research.

Thomas E. Payne & Voltaire Q. Oyzon

10 The use of *kalugaríngon* in discourse

In a corpus of 1,753,050 words (3NS Corpora Project), we find 323 examples of *kalugaríngon*, or .08% of the total number of words. It is the 268th most common word in the corpus. For comparison, there are 117,231 examples of standard reflexive pronouns in the British National Corpus (Davies 2004), advertised to contain "100 million words". Thus approximately .11% of the advertised total number of words in the English corpus are reflexive pronouns. Furthermore, we did not include possessors with *own* in our search of the BNC, even though *kalugaríngon* is used this way in Waray. From this we can conclude that reflexive constructions with *kalugaríngon* are proportionally less common than similar large reflexives in English. Whether this difference is significant or not we will leave to the statisticians.

The following are a few naturally occurring examples of *kalugaríngon* from the corpus, with some observations concerning its usages. We include these examples to balance the examples earlier in the paper, most of which are devised by speakers specifically in response to a questionnaire. The out-of-context examples are fully grammatical, but apart from a discourse context, it is often unclear why a speaker would choose to use *kalugaríngon* or not.

Kalugaríngon as an absolutive nominal: Examples (37)–(39) are examples of reflexive constructions in which the reflexive nominal is obligatory. In these examples, the reflexive nominal is in the absolutive case, and its antecedent, the second-position enclitic pronoun =*ko*, is in the ergative:

- (37) *Di' ko man puydi ig-stress tak'*
dili i-g-stress iton-ákon
 NEG 1SG.ERG SO can APPL2-DEL-STRESS DEMO1.ABS-1SG.GEN
kalugaríngon ha iyo.

self LOC 2SG.OBL
 'I cannot stress myself for you.'

- (38) *Ginpakamatayan ko na hin tawâ an ak'*
<in>g-pag-ka-matay-an ákon
 <TR.R>DEL-INF-CNTREX-kill-APPL1 1SG.ERG COMPL OBL laugh ABS 1SG.GEN
kalugaríngon.
- self
 'I killed myself with laughter.'

3 Reflexive constructions in Waray

- (39) *Nag-newyear resolution man gud ak' nga pupugson*
 na-g-new.year INTR.R-new.year resolution so indeed 1SG.ABS LK imperf-force-TR.R
ko tak' kalugaríngon magsurat hin
 1SG.ERG DEMO1.ABS-1SG.GEN self ma-g-surat
bisan ano kada búlan. INTR.IR-DEL-write OBL.INDEF

about what every month

'I made a new year resolution that I will force myself to write about something every month.'

In examples (37) and (39), the form *tak'* is a blend and contraction of the demonstrative *iton* plus the pronoun *ákon*.

Kalugaríngon as a genitive modifier: All examples of *kalugaríngon* functioning as a genitive modifier that occur in the corpus express intensification of the coreference relation (or self-intensification). In example (40), *átón kalugaríngon* 'our self' is a genitive modifier within the noun phrase *an áton kalugaríngon nga dila*, 'our own tongue,' literally 'our self's tongue'. The absolute case determiner, *an*, specifies the head, *dila*, and not *kalugaríngon*.

- (40) *Yana nga may MTBMLE na kita gin-aaghat*
 <in>g-RED1-aghat
 now LK EXIST MTBMLE COMPL 1INCL.ABS <TR.R>DEL-IMPERF-encourage
an mga manunurat an mga Waraynon nga
 ma-g-RED1-N-surat waray-non
 ABS PL INR.R-DEL-IMPERF-PLC-write ABS PL Waray-PERSON.NOM LK
gamiton an áton kalugaríngon nga dila ha kada adlaw nga
 gamit-on
 use-NOM ABS 1PLINC.GEN self LK tongue in every day LK
pakigkaharampang ngan pakig-istorya ngan pati na
 pag-ki-g-<Vr>kahampang pag-ki-g-istorya
 INF-PREC-DEL-PLC-socialize and INF-PREC-DEL-speak and even COMPL
ha panutdoan hin aton mga eskwelahan
 pag-N-tutdo-an eskwela-an
 LOC INF-PLC-teach-NOM LOC 1PLINC PL education-LOC.NOM
 'Now that we have MTBMLE,³ the writers, the Waray are encouraged use

³Mother-Tongue Based Multi-Lingual Education.

Thomas E. Payne & Voltaire Q. Oyzon

our own tongue in our everyday socializing, conversation and even in teaching in our school.'

This usage of *kalugaríngon* is notionally redundant, since *an áton dila* ‘our tongue’ would have been perfectly clear. However, its usage here emphasizes the fact that the language referred to is *our own*, i.e., something that belongs to us. In a technical sense, this example also involves “long distance” reflexivization, since the antecedent for *ákon kalugaríngon* is in the previous clause, *yana nga may mtbmle na kita . . .* ‘Now that we have MTBMLE . . .’ However, this use of *kalugaríngon* is more intensive than reflexive/coreferential. The speaker is stressing that writers are using Waray, as opposed to the other languages that Waray writers usually employ.

Example (41) also illustrates *kalugaríngon* functioning as a self-intensifying genitive modifier within an NP. Again, this usage is technically redundant -- *an akon kahímo nga dugúan* ‘my bloody face’ would have been perfectly clear.

- (41) *Nasiplatan ko an kalugaríngon ko nga kahímo*
na-siplat-an R.SPON-stare-APPL 1SG.ERG ABS self 1SG.ERG LK face
dugúan, buklad an mata, laylay an dila, luho an
dugô-an blood-NOM.LOC wide.open ABS eye hang.flacidly ABS tongue hole ABS
agtang.

forehead

‘I stared at my own bloody face, eyes wide open, tongue hanging flaccidly, forehead pierced.’

Example (42) also illustrates *kalugaríngon* as a self-intensifying genitive modifier.

- (42) *An mababatián mo la mao an*
ma-RED1-bati-án ámo ABS NOM.IR-IMPERF-hear-NOM 2SG.GEN just like ABS
hururingay san mga lanyog nga humay o kun di man an
<Vr>huring-ay DIST.PLC-whisper-NOM GEN PL ripe LK rice or if not so ABS
mga huni san iba-iba nga mananap ngan tamsi o kun di man an
PL call GEN different LK animal and bird or if not so ABS

3 Reflexive constructions in Waray

kalugaríngon mo nga pagginhawa.
 self 2SG.GEN LK INF-breathe
 pag-ginhawa

'What you will hear is like the whispering of the ripe rice, if not the call of different animals and birds, if not your own breathing.'⁴

Once again, the use of *kalugaríngon* is technically redundant, since *an pagginhawa mo* 'your breathing' would have been perfectly clear.

Kalugaríngon in an oblique role: Example (43) is one of the few examples in the corpus in which *kalugaríngon* appears with no possessor. Normally one would expect either the prenominal *ákon* (as in example 44), or the post-nominal enclitic =*ko* '1SG.GEN' in this construction. However, it is a general characteristic of Waray discourse that first person forms may be omitted when the speaker's intention is clear. Therefore, one might say there is a "zero" possessor of *kalugaríngon* in this example. In this case, the reflexive nominal is required in order to express coreference between the actor and the oblique nominal.

- (43) *Ako nahipausa ha kalugaríngon.*
 1SG.ABS R.SPON-astonish LOC self
 na-hipausa
 'I was astonished at myself.'

- (44) *Nakatalwas gad ako hit' nga akon tigdaay nga*
 na-ka-talwas
 R.SPON-ABL-overcome really 1SG.ABS DEMO1 LK 1SG.GEN sudden LK
pag-emcee pero adi la gihap an kaawod ha ákon
 INF-MC however DEMO2 just also ABS VRBLZR-shy LOC 3SG.OBL
kalugaríngon nga bisan ako nga ungod nga waraynon
 self LK although 1SG.ABS LK true LK Waray-NOM.PERSON
banyaga nga dila an nahigaraan.
 na-higara-an
 stranger LK tongue ABS R.SPON-accustom-APPL
 'I was able to pull off my sudden emceeing, though the embarrassment'

⁴This example is from the Northern Samar variety of Waray. This is evident by the use of *san* as the genitive case particle, in place of *han* as used in Leyte. Also, this lexical item, *mao*, is characteristic of Calbayog City and Northern Samar. The form in Leyte is *ámo* or, *asya*.

Thomas E. Payne & Voltaire Q. Oyzon

with myself still lit necessary, since ngers, that even though I am a true Waray, I am used to a foreign tongue.'

Once again, the use of *kalugaríngon* in example (45) is technically nothe actor and the coreferential NP are 1st person inclusive. However, in this case it intensifies the seriousness, or challenging connotations of the rhetorical question that follows.

- (45) *Igpakiana ta ini ha áton mga*
 i-g-pakiana
 APPL2-DEL-ask 1PLINC.ERG DEMO1.ABS LOC 1PLINC.GEN PL
kalugaríngon: ginpoprotektahan ta ba an
 <in>g-RED1-protekta-an
 self <TR.R>DEL-IMPERF-protect-APPL1 1PLINC.ERG QP ABS
aton kalibúngan?
 ka-libong-an
 1PLINC.GEN NOM-surroundings-LOC.NOM
 'Let us ask this of ourselves: Are we protecting our environment?'

Long distance coreference In example (46) *kalugaríngon* occurs in a nominalized (or "headless relative") clause, inside an adverbial clause following the subordinating conjunction *kay* 'because'. Its antecedent occurs in the main clause, *grabe nga mga tawo*. However, the ergative argument of the nominalized clause is "zero" (indicated by parenthetical "they" in the English translation) under coreference with the absolute of the main clause. In this case, *kalugaríngon* is necessary to express coreferentiality. Without *kalugaríngon*, the sentence would imply that extreme people consider them (some other group) to be gods.

- (46) *Grabe nga mga tawo makaharadlok kay (an) mga*
 ma-ka<Vr>hadlok
 extreme LK PL person STV-VBLZR-ASSOC-afraid because ABS PL
kalugaríngon an ginkikilala na nga diyos.
 g<in>RED1-kilala
 self ABS DEL<TR.R>IMPERF-recognize COMPL LK God.
 'Extreme people are frightening because (they) are ones who consider themselves as God.'⁵

⁵The original of this sentence omits the absolute marker. However, this kind of omission of the absolute noun-marker is common in spoken discourse, and speakers agree that it should be added at this point.

3 Reflexive constructions in Waray

11 Conclusion

In summary, we find that reflexive constructions in Waray are expressed mostly via an analytic strategy involving the reflexive nominal *kalugaríngon*, ‘self’. For certain “grooming” activities, actor-undergoer coreference may be expressed in a simple intransitive construction, but this is not common. We call *kalugaríngon* a nominal (or noun) rather than a pronoun because it has almost all properties of ordinary full nouns: it follows a prenominal case marker/determiner, and its person and number are expressed via free possessive pronouns. Also, it may be marked for plurality and modified in the same way nouns can. Pronouns, on the other hand, vary morphologically for case and person/number, and may not take “adpronominal” modifiers. The only respect in which *kalugaríngon* departs from prototypical nounhood is that it may not easily express the semantic role of actor, e.g., the Waray equivalents of “*Herself saw Mary”, and “*Himself sat down” are as ungrammatical as these English strings. This fact is the basis for one of the “role related subject properties” discussed by Schachter (1977) for Tagalog.

Kalugaríngon may occur in any case, except ergative, as mentioned above. It may also reflect antecedents in any case, including obliques and genitives. The function of *kalugaríngon* in a genitive role almost always intensifies, rather than simply codes a coreference relation. Antecedents in main clauses may also be reflected by *kalugaríngon* in subsequent complement, relative or adverbial clauses, but again, such usages are usually intensive, rather than simply reflexive.

Despite this high degree of flexibility, we find the use of *kalugaríngon* to be proportionally less common in our corpus than are English reflexive pronouns in the British National Corpus. We speculate that this pattern may be due to one or both of two factors: 1. *Kalugaríngon* is a rather cumbersome, often awkward locution. It has not developed a “streamlined” grammaticalized form as one often finds for reflexive constructions in the world’s languages. 2. Since Waray traditional culture is very communal and cooperative, self-action is somewhat socially stigmatized. It is often a mark of ostracism and/or disdain for someone to do something “by oneself”, “to oneself,” or “for oneself.” Future research may reveal additional insights in this direction.

Formatting conventions and abbreviations

Data in this paper are presented in an interlinear format. The top line is the official Waray orthography, as described in NolascoEtAl2012, revision currently under consideration by the Department of Education). A second line provides

Thomas E. Payne & Voltaire Q. Oyzon

morphological analyses when helpful for the point illustrated by the example. A third line gives the morpheme-by-morpheme glosses. Finally, the last line gives a free English translation.

In the current official orthography, syllable prominence (either word stress, vowel length, or both) is not indicated when it is predictable. When it is unpredictable given the context, an acute accent indicates syllable prominence. Briefly, if the final syllable is prominent, no accent is needed. If there is a "heavy" syllable (CVC, or CV:) anywhere in the word other than the last syllable, the prominence predictably moves to the left, and so is not indicated. All other prominent syllables in indigenous Waray words are indicated with an acute accent. In Spanish and English loan words, stress is not indicated at all. Syllable prominence alone may distinguish lexical items. In addition, many grammatical categories are expressed or accompanied by changes in syllable prominence patterns. The glottal stop is indicated in one of four ways. 1) Sequences of vowel graphemes always involve an intervening glottal stop, e.g., *tiil* [ti'ʔil], 'foot'. 2) Following a consonant, the glottal stop is indicated with a hyphen, e.g. *magáanak* [mag'ʔa?anak] 'will give birth' 3) At the end of a word in a prominent syllable, it is indicated with a circumflex over the final vowel, e.g., *kitâ* [ki'ta?] 'to see'. 4) At the end of a word in a non-prominent syllable, it is indicated with a grave accent over the final vowel, e.g., *sikò* ['siko?] 'elbow'. In such cases the penultimate syllable is predictably prominent. Unfortunately, most published material in Waray does not employ diacritics at all.

In this paper, morphological analyses are expressed in the following ways. Prefixes are followed by a hyphen, e.g., *g-*, *pa-*; suffixes are preceded by a hyphen, e.g., *-an*, *-i*: Infixes are surrounded by hyphens when cited in the text, e.g., *-in-*, *-um-*, but are surrounded by angled brackets when occurring in morphological analyses of cited data, e.g., *<in>*, *<um>*.

Abbreviations employed in Waray examples are the following. Note that default features are omitted simply to save space. For example, the determiner *an* is glossed simply as ABS 'absolutive', though technically it should be ABS.DEF.NONP 'absolutive, definite/identifiable, non-personal name.' It contrasts with *it*, glossed ABS.INDEF 'absolutive, indefinite/non-identifiable, non-personal name' and *hi* glossed ABS.P 'absolutive, personal name'.

3 Reflexive constructions in Waray

1EXCL	first person plural exclusive	ERG	ergative case
1SG	first person singular	EXIST	existential phrase (<i>may adâ</i>)
2SG	second person, singular	GEN	genitive case
3SG	third person, singular	IMPERF	imperfective
3PL	third person, plural	INDEF	indefinite/non- identifiable
ABS	absolutive case		
APPL1	applicative 1 (locative or recipient applicative, <i>-an</i>)	INF	infinitive
APPL2	applicative 2 (benefactive or transferred item applicative, <i>i-</i>)	INTR	intransitive
		IR	irrealis mood
		LK	linker
CAUS	causative	LOC	locative
CTRL	controlled mood	NEG	negative
COMPL	completive particle	NOM	nominalizer
DEF	definite/identifiable	OBL	oblique
DEL	deliberate mood	P	personal name
DEMO1	demonstrative pronoun/adjective, near speaker and hearer.	PL	plural
		PLC	pluraction
		QP	question particle
		R	realis mood
DEMO2	demonstrative pronoun/adjective, near hearer, away from speaker.	RED1	partial (# CV-) reduplication
		RED1	full root reduplication
DIST	distributive (e.g., DIST.PLC ‘distributive pluraction’)	SG	singular
		SPON	spontaneous mood
		STV	stative
		TR	transitive
		VBLZR	verbalizer

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Thomas E. Payne & Voltaire Q. Oyzon

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Part II

Australia

Chapter 4

The reflexive voice construction in Anindilyakwa

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This chapter describes the reflexive voice in Anindilyakwa, a polysynthetic language of Northern Australia. In this language, up to two arguments of a verb are identified by means of pronominal prefixes on the verb. Reflexive voice in Anindilyakwa is marked by a verbal suffix that occurs on transitive verbs and reduces the valency of the verb by one. The suffix signals that the agent subject is co-referential with the referent that previously occurred as the transitive object pronominal prefix. This is mostly a patient referent, but it can also be a beneficiary introduced by the benefactive applicative, or the recipient referent of an inherently ditransitive verb. Although the language has free pronouns, there are no reflexive pronouns in Anindilyakwa; the sole reflexivizer is the verbal suffix.

1 Introduction

Anindilyakwa (pronounced [ənintiʎakʷa] in the language itself) is a non-Pama-Nyungan language spoken by over 1,400 people (MarmionEtAl2014) living on Groote Eylandt and Bickerton Island in the Gulf of Carpentaria, Northern Territory, Australia (see Figure 4.1). It is one of the very few remaining Australian languages that is still acquired by children and is thus spoken by all generations. Nonetheless, despite the efforts of the community and linguists, the language is, as are all of Australia's indigenous languages, endangered due to the pressure of English. Anindilyakwa was once thought to be "perhaps the most difficult of all Australian languages, with a very complex grammar" (Dixon 1980: 84), and classified as a language isolate by O'Grady, Voegelin, et al. (1966); O'Grady, Wurm,



Marie-Elaine van Egmond

et al. (1966), and Evans (2005: 250). However, the language has recently been demonstrated to be closely related to Wubuy, its nearest geographical neighbour spoken on the mainland and is thus to be subsumed under the Gunwinyguan family (van Egmond 2012, van Egmond & Baker 2021; see Figure 4.1). The previously presumed isolate status of Anindilyakwa may be due to: (i) its unusual phonological inventory, which departs from both the typical Australian pattern (including e.g. the phoneme /ə/), and from the typical Gunwinyguan pattern (due to e.g. the lamino-dental /l/ and lamino-palatal /ʎ/ phonemes, written *lh* and *ly*, respectively), (ii) its few recognizable verbal roots and inflections (Baker 2004, fn 25), and (iii) its idiosyncratic lexicon (Capell 1942: 376; Worsley 1954: 20; Heath 1981; Yallop 1982: 40). But despite its complexities, van Egmond (2012) shows that Anindilyakwa grammar is also fairly regular, and patterns much like the Gunwinyguan family of languages on the mainland to its west.

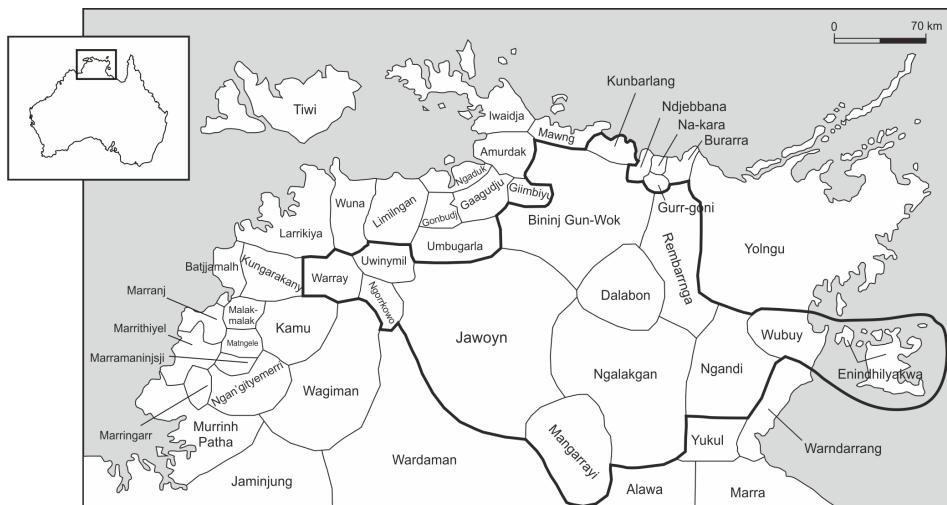


Figure 4.1: Anindilyakwa and the Gunwinyguan family Harvey 2003: 204; Alpher et al. 2003; Evans 2017; van Egmond 2012; van Egmond & Baker 2021)

Like the other Gunwinyguan languages, Anindilyakwa is richly polysynthetic, exhibiting extensive cross-referencing of subject and object arguments on the verb by means of pronominal prefixes, noun incorporation, and a variety of valency-changing affixes, including the reflexive suffix that is the topic of this chapter. All nominals and verbs are obligatorily inflected for person, number and gender for humans, or one of five noun classes for non-humans.

The sole reflexivizer in the language is a verbal reflexive voice marker, which is a suffix that is added to the verb stem. There are no reflexive pronouns in

4 The reflexive voice construction in Anindilyakwa

Anindilyakwa. The reflexive suffix changes the argument structure of the verb: since the agent subject is now co-referential with the patient argument in object function, the verb becomes morphologically intransitive, and both agent and patient are represented by the same pronominal prefix on the verb. The reflexive suffix *-jungwV-* is related to the reciprocal suffix *-yi-*, which occurs in the same position and which also reduces the valency of the verb. Compare the transitive verb kill' (literally make die') in (1a) with the intransitive reflexive (1b) and reciprocal (1c) verbs:

- (1) a. *nə-ma-jungwa-ju-wa*
3SG.M-VEG-die-CAUS-PST
 he killed it (e.g. animal of VEG noun class, such as *mangma* VEG.crab')'
- b. *nə-jungwa-ja-jungu-na*
3SG.M-die-CAUS-REFL-PST
 he killed himself'
- c. *na-jungwa-jee-yi-na*
3PL-die-CAUS-RECP-PST
 they killed each other'

In (1a), the verb has a subject prefix *nə-* and an object prefix *ma-* representing the agent (he') and the patient (an animal of vegetable (VEG) noun class, such as a crab), respectively. The reflexive verb in (1b), on the other hand, is intransitive and the pronominal prefix *nə-* represents both agent and patient, which are co-referential. Similarly, the verb in (1c) is also intransitive whilst specifying that the subject and object are co-referential, with the added reciprocal meaning of two or more agents each engaging in the same action (i.e. to verb each other').

After a brief overview of the principal typological features of the language (§2.1), nominals (§2.2), verbs (§2.3), the reflexive voice construction is described in detail in §3, followed by its potential historical source in §4, and a brief summary of the reflexive voice construction in §5

2 Typological features

2.1 Introduction

The principal morphosyntactic typological features of Anindilyakwa are:

- As expected for a polysynthetic language, a single verb can express much of what is accomplished by the syntax in other languages - expression of arguments, causativization, reflexivization, reciprocity, and subordination

Marie-Elaine van Egmond

- Arguments of the verb can be additionally expressed by optional free pronouns, demonstratives, or full nominals
- Up to two arguments are prefixed to the verb (§2.3), and nominals are classified for one of five noun classes (non-humans) or one of three genders (humans) (§2.2)
- Four distinct series of pronominal prefixes on verbs encode an equal number of moods
- Case-marking is primarily exploited as a strategy for roles such as locative, ablative, allative, instrumental, and to indicate relations between nominals. Anindilyakwa makes little use of nominal morphology to encode information about core syntactic functions; determination of subject (intransitive and transitive) and object functions is done by the pronominal prefixes on the verb
- Most nominal case suffixes can also be used as complementizing cases on a verb in a subordinate clause to express temporal, causal and other relationships with the main clause (see examples in (7) below)
- A number of derivational affixes can alter the argument structure of the verb: the benefactive applicative prefix *mən-* turns a beneficiary participant into an object that is prefixed to the verb, and the reciprocal and causative suffixes change the valency of the verb (§2.3.3), as does the reflexive suffix (§3)
- Body part and generic nominals can be incorporated into verbs and adjectives, leaving the valency of the verb unaffected; the incorporable syntactic functions are restricted to the absolute pattern (e.g. example (2b) below)
- Verb stems can be complex, historically consisting of an uninflecting plus an inflecting element, the latter determining the conjugational class of the stem
- Since the arguments of the verb are identified by the pronominal prefixes on the verb, word order is syntactically free, and pragmatically determined
- All words end in [a], and the vowel [u] is not contrastive but generated by adjacent [+round] consonants. The first [u] in the reflexive suffix *-jungwV-*, for instance, is formed by assimilation of an underlying high vowel to the

4 The reflexive voice construction in Anindilyakwa

following labio-velar [ŋʷ]. The second vowel is realised as [a] when word-final (-*jungwa*), but when followed by another suffix, this vowel absorbs the rounding of the preceding [ŋʷ] and is realised as [u] (e.g. -*jungu-na*).

The following examples illustrate some of the above features: the pronominal prefixes on verbs and noun classes on nominals in (2a–c), noun incorporation in (2b) and derivational affixes in (2c). All examples in this chapter come from van Egmond (2012) unless indicated otherwise.

- (2) a. *ngayuwa yiba-rrəngkə-na-ma* *nungkuwa adhalyəmə-manja*
 1SG.PRO IRR.1SG/2SG-see-NPST-1.FOC 2SG.PRO NEUT.river-LOC
arnungkwaya
 tomorrow
 ‘I will see you at the river tomorrow’
- b. *nanga-lyang-barra arəngkə-manja akinə-mərra*
 FEM/FEM-head-hit.PST NEUT.head-LOC NEUT.that-INSTR
dhukururrku-manja
 FEM.Brolga-LOC
 ‘she [Emu(FEM)] hit Brolga on the head with that [stick(NEUT)]’
 (Leeding 1989: 310)
- c. *kərrenə-mənə-muku+lharri-ju-wa merra*
 3M/2PL-BENE-fluid+fall-CAUS-PST VEG.blood
 ‘he shed his blood for you’

As is common in Australian languages (e.g. Dixon 1980), two major word classes can be identified in Anindilyakwa along the traditional lines of the affixational potential of the individual lexemes: nominals (§2.2) and verbs (§2.3). These two classes are differentiated by taking distinct sets of inflectional and derivational affixes.

2.2 Nominals, noun classes and genders

All nominals apart from loanwords are obligatorily inflected for person, number and gender (humans), or noun class (non-humans). Noun class systems are very common in the non-Pama-Nyungan languages of Australia. They are grammaticalized agreement systems, where class may be overtly marked on the noun, on articles and modifiers within the noun phrase, and on the predicate (e.g. Dixon 1986; Sands 1995; Aikhenvald 2000). The most typical Australian system has four noun classes, which can be broadly labelled as masculine, feminine, vegetable,

Marie-Elaine van Egmond

and neuter or residual (e.g. [Sands 1995](#): 258; [Evans 2003](#): 182). Anindilyakwa has five noun classes that classify non-humans and three genders that classify humans and domesticated animals, as outlined in Table 4.1–Table 4.2. The pronominal prefixes (1st and 2nd person) are identical on nominals and intransitive verbs, whereas the gender and noun class prefixes (3rd person) differ. The table also lists the free pronouns for completeness.

Table 4.1: Anindilyakwa free pronouns and prefixes on nominals and intransitive verbs – humans and domesticated animals

	gloss	nominals	intransitive verbs	free pronouns
pronominal prefixes	1PL	<i>nəng-</i>	<i>nəng-</i>	<i>ngayuwa</i>
	1FDU	<i>yirrəng-</i>	<i>yirrəng-</i>	<i>yirruwa</i>
	1MDU	<i>yin-</i>	<i>yin-</i>	<i>yinuwa</i>
	12	<i>y-</i>	<i>y-</i>	<i>yakuwa</i>
	12PL	<i>ngarr-</i>	<i>ngarr-</i>	<i>ngakurruwa</i>
	2	<i>nəngk-</i>	<i>nəngk-</i>	<i>nəngkuwa</i>
	2PL	<i>kərr-</i>	<i>kərr-</i>	<i>nəngkurruwa</i>
	2FDU	<i>kərrəng-</i>	<i>kərrəng-</i>	<i>nəngkərrənguwa</i>
	2MDU	<i>kən-</i>	<i>kən-</i>	<i>nəngkə(r)nuwa</i>
genders	3F	<i>dh-</i>	<i>ying-</i>	<i>ngalhuwa</i>
	3M	<i>n-</i>	<i>n-</i>	<i>enuwa</i>
	3PL	<i>wurr-</i>	<i>na- ~ nuw-</i>	<i>abərruwa</i>
	3FDU	<i>wurrəng-</i>	<i>narrəng-</i>	<i>abərrənguwa</i>
	3MDU	<i>wun-</i>	<i>nen-</i>	<i>abə(r)nuwa</i>

One way in which Anindilyakwa stands out from all other Gunwinyguan (and, indeed, non-Pama-Nyungan) languages is that the class prefixes on nouns are completely lexicalized and tightly bound to the noun root.¹ The class prefixes on adjectives, on the other hand, are variable, as illustrated in (3) for *arəma* big², as are the gender prefixes for humans (4):

¹In other Gunwinyguan languages, noun class prefixes may be omitted (as indicated below by the '-' sign), but in Anindilyakwa they are tightly bound to the noun root (as indicated by the '+' sign): Anindilyakwa Wubuy Ngandi seagrass (VEG) *ma+wurrəra ama-wurruri* ma-wurruri ticks, fleas (COLL) *wurr+amərnda waa-murndik a-murndik* NEUT-louse'hawk (MASC) *jì+nakarrka jii-nikarrka a-jikarrka* (NEUT)

4 The reflexive voice construction in Anindilyakwa

Table 4.2: Anindilyakwa free pronouns and prefixes on nominals and intransitive verbs – non-humans

gloss		nominals	intransitive verbs	free pronouns	pro-
noun classes	animate	MASC	<i>y-</i>	<i>n-</i>	<i>(yi)ngalhuwa</i>
		FEM	<i>dh-</i>	<i>ying-</i>	<i>ngalhuwa</i>
		COLL	<i>wurr-</i>	<i>na- ~ nuw-</i>	<i>abərruwa</i>
	inanimate	VEG	<i>m(a)-</i>	<i>nəm-</i>	<i>(mə)ngalhuwa</i>
		NEUT	<i>a- ~ e-</i>	<i>na- ~ nuw-</i>	<i>(a)ngalhuwa</i>

- (3) a. *y-arəma yaraja*
MASC-big MASC.goanna
big goanna'
- b. *wurr-arəma wurrendhindha*
COLL-big COLL.rat
big rat'
- c. *m-arəma memərrerra*
VEG-big VEG.flathead
big flathead'
- (4) a. *nə-balanda*
3M-white.person
male non-Aborigine'
- b. *dhə-balanda*
3F-white.person
female non-Aborigine'
- c. *wurrə-balanda*
3PL-white.person
non-Aborigines'

Besides their ability to be used derivationally on nouns, as in (4), where biological sex of the referent is determined by the prefix, gender prefixes differ from noun class prefixes in that they are used on loanwords, as in the Macassan loan *balanda* above (which ultimately derives from *Hollander*). Loanwords with non-human reference do not take noun class prefixes, such as the English loans *jukwa*

Marie-Elaine van Egmond

sugar' and *bajungkula* bicycle', and the earlier Macassan loans *jurra* paper, book' (< *surat*) and *libaliba* canoe' (< *lepa-lepa*). Their noun class membership becomes apparent through agreement:

- (5) a. *m-arəma dəraka*
 VEG-big truck(VEG)
 big truck'
 b. *koton nəngə-nга-rrəngka-mа*
 cotton(FEM) 1SG-FEM-see.PST-1.FOC
 narra-nга-lhungkuwabi-ju-wa-mа
 3PL-FEM-grow-CAUS-PST-1.FOC
 I saw cotton that they were growing'

2.3 The verb

The verb is morphologically the most complex word class in Anindilyakwa. A single verb can express what may take a whole sentence in a language like English. Because of its internal complexity, much of what is accomplished by the syntax in other languages is carried out within the verb - expression of arguments, causativization, reflexivization, reciprocity and subordination. The complex templatic structure of the verbal word, where affix order is stipulated in the form of arbitrary position classes, is presented in Table 4.3.² The verbal template has a finite number of slots with a fixed order, and no embedding possibilities.

The only obligatory slots in this template are the pronominal prefixes in slots [-6] to [-4], the stem in [0] and the tense/aspect inflectional suffixes in [+3]. Note that the stem itself may be morphologically complex, and historically include compounded nominals (e.g. *-muku+lharri-* [fluid+fall] to shed' in (2c) above). Although they are given separate positions in the template, the valency-changing causative suffix in [(+1)] and reflexive and reciprocal suffixes in [(+2)] contribute to the formation of the verb stem.

2.3.1 Main features of each slot

This section briefly summarizes the main features of each slot of the verbal template, in order to understand the basic morphosyntax of the language, which will be necessary in our discussion of the reflexive construction of the language.

²A template is a flat structure where affixes are ordered with “no apparent connection to syntactic, semantic or even phonological representation” (Inkelas 1993: 560, cited in Nordlinger 2010). Templatic systems are not uncommon in the Australian context, especially for the head-marking polysynthetic languages of the north (Nordlinger 2010)

4 The reflexive voice construction in Anindilyakwa

Table 4.3: Anindilyakwa verbal template (with optional elements in parentheses)

(+5)	Case
(+4)	-ma ~ -mərra
(+3)	Tense + Aspect
(+2)	Reflexive, reciprocal
(+1)	Causative
0	Stem
-1	Body part / generic
-2	Benefactive
-3	Quantifier
-4	Object
-5	Subject
-6	Mood

The obligatory PRONOMINAL PREFIXES zone, in slots [-6] to [-4], contains up to two prefixes that represent the arguments of the verb, plus an indication of mood, as part of a complex paradigm. This zone includes the first and second person pronominal prefixes, and third person gender prefixes for humans, and noun class markers for non-humans. Transitive prefix complexes with human referents may be portmanteau forms, which is why the three slots are merged as a fusion zone in Table 4.2.

There are four distinct intransitive and four distinct transitive series of prefixes: (i) realis, (ii) irrealis, (iii) imperative, and (iv) hortative. As is characteristic of the non-Pama-Nyungan languages (Verstraete 2005), the prefixes are combined with the tense/aspect suffixes (slot [+3]) to mark a variety of modal meanings. The Anindilyakwa system of eight series of (positive polarity) prefixes is unusually high: many non-Pama-Nyungan languages have a basic realis/irrealis distinction in the prefixes, but they do not differentiate between imperative or hortative mood, whereas some Gunwinyguan languages do not distinguish mood in the prefixes at all (e.g. Bininj Gun-wok, Ngalakgan, Ngandi), but employ suffixes instead.

The QUANTIFIER slot [(-3)] contains the quantifiers *mərnda-* and *wurra-* 'many', which also occur on nominals.

Marie-Elaine van Egmond

The BENEFACTIVE slot [(-2)] contains just one morpheme: the benefactive applicative *mən-*, which introduces a beneficiary argument to the verb, which then knocks the theme argument out of object position. Compare the following examples, which are both transitive, but with a different argument structure: in (6a), the theme argument in object function represented by the pronominal prefix on the verb is a neuter class item (i.e., *akungwa NEUT.water*'), whereas in (6b) the object is the beneficiary introduced by the benefactive applicative:

- (6) a. *n-akarrngə-na akungwa*
3M>NEUT-get-NPST NEUT.water
he is getting water'
- b. *ngənə-mən-akarrngə-na akungwa*
3M>1SG-BENE-get-NPST NEUT.water
he is getting water for me'

In (6b), the theme *akungwa* 'water' is no longer represented on the verb but only occurs outside of the verb.

The BODY PART / GENERIC slot [(-1)] is filled by a nominal root drawn from a set of about 80 forms, which are either body parts or generics that classify an external specific noun. An example was given in (2b) above.

As is typical of the Gunwinyguan languages (Alpher et al. 2003), the STEM slot [0] may be simple or complex. Simple stems consist of a verb root to which the inflection for tense and aspect may be added directly (e.g. *-kwa-* 'give', *-lhəka-* 'go'). Complex verb stems, on the other hand, are synchronically frozen combinations of an uninflecting element followed by an element that takes the inflections (e.g. *-yeng+bi-* 'speak', consisting of the nominal root *yeng-* 'voice' and the inflecting element *+bi- ?*). Verb stems can furthermore be formed from nominals by the productive inchoative and factitive suffixes (see §2.3.2 below).

The CAUSATIVE slot [(+1)] contains the causative suffix *-ji-*, which derives transitive verbs from intransitive verbs. For example, *-jungwa-ji-* 'to kill' is derived from *-jungwV-* 'to die' in (7) below. See §2.3.3

The REFLEXIVE / RECIPROCAL slot [(+2)] contains the reflexive suffix *-jungwV-* and the reciprocal suffix *-yi-*. These mutually exclusive suffixes derive intransitive verbs from transitive verbs, as was illustrated in (1) above and will be discussed in more detail in §2.3.3 and §3, respectively.

The obligatory TENSE+ASPECT slot [+3] contains the tense and aspect inflections, which combine with the pronominal prefixes to express various modal meanings. There are six main conjugational classes, organised around the verb root or the inflecting element of the complex verb stem. The tense/aspect suffixes

4 The reflexive voice construction in *Anindilyakwa*

distinguish past (PST) and non-past (NPST) tense, together with neutral aspect or a subtype of perfective aspect.

The very common *-ma* ~ *-mərra* suffix in slot [(+4)] occurs independently of tense and aspect, and is analysed by van Egmond (2012: 225–236) as a first person focalisation marker' (1. FOC), indicating that the speaker expresses his or her perception of an event or state of affairs.

The CASE slot [(+5)] contains case suffixes, which can be used on a verb in a subordinate clause to relate it to the main clause (as they can in many other, mainly Pama-Nyungan, Australian languages). Such cases are called complementizing cases in the literature (Dench & Evans 1988), and can be divided into two basic types: C-complementizer case, where members of the subordinate clause are case-marked in agreement with a coreferential NP in the main clause, as in (7a), and T-complementizer case on members of the subordinate clause to express temporal, causal and other relationships with the main clause, as in (7b). The subordinate clause appears in square brackets.

- (7) a. *Arakbawiya warnə-mamalya nuw-akbardha-ŋə-ma*
 long.time.ago 3PL.M-people 3PL-be.afraid-PST-1.FOC
y-akina-lhangwa [kənə-ngekbəraka-mə-lhangwa edhərra
 MASC-that-DAT IRR. MASC>
emindha-manja].
 NEUT-make.PST-1. FOC-DAT NEUT.hole NEUT.nose-LOC
 A long time ago people were afraid of them [*yangungwa* MASC.eel']
 making a hole in their noses.'
- b. *[kənu-warde-na-manja], nungkw-a ja kənu-warde-na*
 IRR.3M>2SG-hit-NPST-LOC 2SG.PRO-CofR IRR.2sg>3M-hit-NPST
 if he hits you, you can hit him back'

In (7a), the dative suffix on the verb in the relative clause agrees with the oblique object of the verb in the main clause (afraid of x-DAT). The LOC case on the verb in (7b) signals that the subordinate clause has a conditional meaning.

2.3.2 Verbalizing suffixes

New verbs can be created from nominals by the very productive inchoative *-dhə-* and factitive *-ka-* ~ *-kwa* derivational suffixes.

Marie-Elaine van Egmond

2.3.2.1 Inchoative *-dhə* INCH

This suffix turns a noun or an adjective into an intransitive verb, which means to become [X]'. Some examples are listed in (8), which also include the inchoative suffix added to recent loanwords.

- (8) a. *-arəma* big' *-arəmə-dhə-* to become big'
- b. *awinyamba* NEUT.anger' *-awinyamba-dhə-* to become angry'
- c. *kərrəndəna* leprosy' (< Eng *quarantine*) *-kərrəndəna-dhə-* to quarantine'
- d. *bungkawa* boss, ruler' (< Mac *pungawa*) *-bungkawa-dhə-* to become ruler'

The following are some sentence examples.

- (9) a. *Wurr-adhədhiyara karrə-rrəngkə-na-manja akina*
3PL-young.girl IRR.3pl> NEUT-see-NPST-LOC
karrə-m-abuwarrkə-na-ma abərra-lhangwa
NEUT.that IRR.3PL-VEG-COVER-NPST-1.FOC
mingeemina mena kəm-arəmə-dhə-mə=baba.
3PL.PRO-POSS VEG.breast because IRR.

VEG-big-INCH.NPST-1.FOC=REAS

If young girls see them [*engeemina* NEUT.legless lizard'], they cover their breasts because they will get bigger.'

- b. *yirrə-ma-ngamba-ju-wa-ma nəmə-mərrkbalya-dhə-nə-ma ambaka*
1PL-VEG-bathe-CAUS-PST-1.FOC VEG-soft-INCH-PST-1.FOC later
we soaked them [*mənhəŋga* VEG.burrawang'] in water, and later they became soft'

As these examples show, a denominal verb behaves like any other verb in Anindilyakwa in taking full person/number/gender/mood and tense/aspect affixation.

2.3.2.2 Factitive *-ka ~ kwa* (factive)

The factitive converts a noun or adjective into a transitive verb meaning to make something [X]', as illustrated in the following dictionary entries.

- (10) a. *-dharrba* short' *-dharrbu-kwa-* shorten'

4 The reflexive voice construction in Anindilyakwa

- b. *-abiyakarbiya* three' *-abiyakarbiya-ka-* divide into three'
- c. *awinyamba* NEUT.anger' *-awinyamba-ka-* to make angry'
- d. *alhəkəra* NEUT.house' *-lhəkəra-ka-* erect, raise, build'

The following are some textual examples of the factitive suffix.

- (11) a. *Nenə-ma-ŋə-ma* *yərda* *biya*
 3PL>MASC-take-PST-1.FOC MASC.supplejack and
 nen-abiyarbuwa-ka-ma *y-akina*.
 3pl>MASC-four-FACT.PST-1.FOC MASC-that
 They took the supplejack cane and split it into four'
 b. *a-mərndak-akina-ma* *amarda* *narr-ardadə-ka-ma*
 NEUT-many-that-INSTR NEUT.grass 3PL>NEUT-hot-FACT.PST-1.FOC
 they heated them with leaves'

Factitive verbs can be reflexivized, as in example (20a) below.

2.3.3 Argument-changing affixes

As already mentioned, a number of derivational affixes alter the argument structure of the verb: the benefactive applicative prefix *mən-* in slot [(-2)] of the verbal template introduces non-subcategorised arguments, while the causative, reflexive and reciprocal suffixes change the valency of the verb. They are discussed here in turn, with the reflexive suffix given its individual §3

2.3.3.1 Benefactive applicative prefix (BENE)

The prefix *mən-* is an applicative that adds a beneficiary or maleficiary object argument to the verb, that is, a person positively or negatively affected by the action denoted by the verb. This new beneficiary/maleficiary argument knocks out the previous patient/theme object argument, which now appears as a free nominal (as we have already seen in (6) above). Compare the following examples taken from texts, where the object prefix indexes a patient referent in the (a) examples, while an introduced beneficiary referent occurs on the verb in the (b) examples.

- (12) a. *y-akina* *yikarba* *nəng-eni-ngayindhū-ma*
 MASC-that MASC.woomera 1SG-MASC-want.PST-1.FOC
 I want that woomera'

Marie-Elaine van Egmond

- b. *Akina awilyaba ngaya ngarra-mən-ngayindhe-na-ma.*
NEUT.that NEUT.one 1SG.PRO 1SG>2SG-BENE-want-NPST-1.FOC
That's all I want for you.'
- (13) a. *biya na-ma-nga*
and NEUT>NEUT-take-PST
and it [mother cat] took another [kitten]'
- b. *Arakbawiya narr-a-mənə-ma-ŋə-ma*
long.time.ago 3PL>3PL-BENE-take-PST-1.FOC
wurra-mərra-mərrkbalya-lhangwa wurr-angarə-ŋgariya engengkuwa.
3PL-RDP-newborn.baby-POSS 3PL-RDP-young NEUT.spirit
A long time ago they took the spirits of newborn babies.'

In (12b), the argument introduced by the benefactive applicative is a beneficiary (you'), while in (13b) it is a maleficiary (they', i.e. newborn babies'). A beneficiary verb is a regular transitive verb which can be reflexivized, as we will see in §3 below.

2.3.3.2 Causative -*ji* (CAUS)

The most usual meaning of the causative suffix is causal, hence to make X [verb]'. The verb to which the suffix is added is normally intransitive and becomes transitive. The following are textual examples of causativized verbs.

- (14) a. *Adhənəbawiya nə-ma-beka-ju-wa m-akina dəraka*
first 3M-VEG-drink-CAUS-PST VEG-that truck(VEG)
amalyirra-mərra.
NEUT.petrol-INSTR
First he filled the truck with petrol.' (Lit: he made the truck drink')
- b. *kureya ngə-ma-ngarre-na-ma m-ibina*
have.a.try HORT.1SG-VEG-visit-NPS-1.FOC VEG-that.same
kə-ma-ŋamba-ji-ni=yadha
IRR.1SG-VEG-bathe-CAUS-NPST=PURP
let me go and see if they [*mənhənga* VEG.burrawang'] are ready for me to soak them'

A causative verb is a regular transitive verb in that it can be reflexivized (§3).

4 The reflexive voice construction in Anindilyakwa

2.3.3.3 Reciprocal *-yi* (RECP)

The reciprocal suffix *-yi-* occurs in slot [(+2)] together with the reflexive suffix discussed in the next section. The reciprocal decreases the verb's valency by one, whilst specifying that the subject and object are co-referential, plus adding the reciprocal meaning of two or more agents each engaging in the same action (i.e. 'to verb each other'). The suffix is usually added to a transitive verb, which may also include causatives. A textual example is given in (15).

- (15) *kembirra arakba na-kwee-yi-nə-ma*
then compl.ACT 3pl-give-**RECP-PST-1.FOC**
na-məŋg-barri-yi-nə-ma yimərnda
3PL-small.and.round-split-**RECP-PST-1.FOC** MASC.louse
na-kwee-yi-nə-ma arəngka-manja
3PL-give-**RECP-PST-1.FOC** NEUT.head-LOC
nuw-arrka-milyi-jee-yi-nə-ma
3PL-small.and.many-hold-CAUS-**RECP-PST-1.FOC**
then they gave lice to each other and shared them and they held each
other's heads'

The reciprocal suffix also has a collective reading, which is not uncommon cross-linguistically (see Evans 2003: 495 and references therein), and which also happens in the related languages Bininj Gun-wok (Evans 2003) and Wubuy (Heath 1984).

- (16) a. *nənə-rrəŋka wurr-ambilyuma wurrabajja*
3M>COLL-see.PST COLL-two COLL.bird
nuw-angkarree-yi-na-ma
COLL-run-**RECP-NPST-1.FOC**
he saw the two birds flying away' (Leeding 1989: 448)
b. *yirrə-ngambee-yi-na*
1PL-bathe-**RECP-PST**
we all bathed'

The reciprocal suffix can co-occur with the transitivising benefactive applicative prefix, resulting in a morphologically intransitive verb:

- (17) *Kərr-ambarrngarna arakba karna na-mən-angkarree-yi-nə-ma?*
2PL-how.many? now 2PL.this 3PL-BENE-run-**RECP-PST-1.FOC**
How many of you [Aboriginal women] have they [whitefellas] run off
with now?'

Marie-Elaine van Egmond

Here, the RECP suffix has scope over the BENE prefix. The intransitive verb -*angkarr-* ‘run’ is made transitive by the BENE (‘run off with’), which in turn is detransitivized by the RECP (‘run off all together’): [BENE-run]-RECP.

3 Reflexive *-jungwV*

3.1 Introduction

The reflexive voice marker in Anindilyakwa is the suffix *-jungwV-*, which occurs in the same slot in the verbal template as the reciprocal suffix *-yi-*. It reduces the morphological valency of the verb by one and indicates the coreference of two participants of the verb, as was illustrated in (1) above and again in (18) below. In (18a), the intransitive verb *-ngamba-* ‘bathe’ is transitivized by the causative suffix *-ja-* (‘bathe-CAUS = wash’), with the agent ‘woman’ and the patient ‘dress’ both represented on the verb by subject and object pronominal prefixes, respectively. In (18b), by contrast, only the subject is cross-referenced on the verb, as agent and patient are now co-referential.

- (18) a. *dhə-dharrəŋka yingə-ma-ngamba-ju-wa dhərija*
 3F-female 3F-VEG-bathe-CAUS-PST dress(VEG)
 the woman washed her dress’
- b. *dhə-dharrəŋka yingə-ngamba-ja-jungu-na*
 3F-female 3F-bathe-CAUS-refl-PST
 the woman washed herself’

As this example shows, there are no reflexive pronouns in the language; reflexivity is only signalled by the suffix *-jungwV-* on the verb. Identification of the arguments of the verb is done on the verb in Anindilyakwa; free pronouns are common but optional, as in (2a), (7b), (12b) above and other examples below. In (18b), the only possible reading is co-reference of agent and patient. The co-reference of the reflexive verb contrasts with the disjoint reference of the transitive verb in (19):

- (19) *dhə-dharrəŋka nanga-ngamba-ju-wa*
 3F-female 3F>3F-bathe-CAUS-PST
 the woman₁ washed her₂’

Here, the verb does not have a reflexive marker, plus its pronominal prefix represents both an agent and a patient. Therefore, there is no other reading possible

4 The reflexive voice construction in Anindilyakwa

but disjoint reference. The use of the reflexivizer is not subject to specific conditions relating to person or number: the same suffix is used for every person and number. Although the examples given so far all involve third person participants, the following textual examples involve first person plural (20a), first person singular (20b) and second person singular (20c).

- (20) a. *Yirr-akakərəma-ka-jungu-na-ma ngawa*
1PL-know.how.to-FACT-**REFL**-NPST-1.FOC cont.ACT
wurru-balanda-lhangwa a-mərndakijika adhuwaba ena-manja
3PL-non.Abst-POSS NEUT-things today NEUT.this-LOC
ayangkidharrba.
 NEUT.island
 We have learnt about white man's things on this island.'
- b. *ngalha-ja dh-akina narrang-anga-manja ena*
 FEM.PRO-EMPH FEM-that FEM>3PL-bite.PST-LOC NEUT.this
nəngə-dhaka-jungu-nu-ma
1SG-burn-**REFL**-PST-1.FOC
 when she [spider] bit them [me or you] I just burnt myself [where I got bitten by the spider]'
- c. *Kemba kə-lhəka-ja-ma nəngk-ena m-ardədarra-manja*
 then IRR.2SG-go-NPST-1.FOC 2SG-this VEG-hot-LOC
kə-karri-jungu-na-ma m-ardədarra-manja.
 IRR.2SG-roast.in.ashes-**REFL**-NPST-1.FOC VEG-hot-LOC
 Then you should go in the hot [sun(VEG)] and roast yourself in the hot [sand(VEG)].'

The suffix can equally well be used with non-human, even inanimate, participants:

- (21) a. *mema ma-mə-ki-yelhiya m-ibina nəmi-yelhiye-na-ma*
 VEG.this VEG-INALP-NZR-be.shy VEG-that VEG-be.shy-NPST-1.FOC
nəm-abuwarrka-jungu-na-ma
 VEG-hide-**REFL**-NPST-1.FOC
 the name *maməkiyelhiya* [shy crab'] means "that one that is shy" [because] it always hides itself'
- b. *m-akinee=ka dəraka ngakurra-lhangwa,*
 VEG-that=EMPH truck(VEG) 12PL.PRO-POSS

Marie-Elaine van Egmond

nəma-mənu-wardhi-jungu-na-ma
 VEG-BENE-work-REFL-NPST-1.FOC
 that truck of ours, it has to work for itself'

In (21b), the reflexive construction involves coreference of the agent not with a patient argument but with a beneficiary, which is introduced by the benefactive applicative. Without the reflexive suffix, the verb would be transitive (e.g. the truck has to work for us'), with both the subject and the beneficiary represented on the verb by pronominal prefixes. The reflexive suffix detransitivizes the verb: the truck has to work for itself. Coreference of the subject agent with semantic roles other than patient is the topic of the next section.

The reflexive suffix can also be used on nominalized verbs, which in Anindilyakwa can be used as non-finite verbs:

- (22) *Arakbawiya warnəmamalya nənə-ma-nŋə-ma*
 long.time.ago 3PL.people 3PL>MASC-take-PST-1.FOC
y-akaka-lhangwa yi-nə-m-akarrnga warni-ku-mərndi-jungwi=yadha.
 MASC-this-POSS MASC-M-INALP-teeth 3PL.M-NZR-comb-REFL=PURP
 ‘A long time ago people used to take the sawfish (*yikurrərrəndhangwa*)
 teeth to comb their hair (Lit: to comb themselves)’ (Dictionary 1993: 123)

Since in Anindilyakwa, the pronominal prefix on the verb can either encode the possessor of the body part (the whole'), or the body part itself (the choice between the two is semantically motivated: see van Egmond 2012: Chapter 7), the subject agent argument being coreferential with the object theme argument in (22) is unproblematic: the combing of hair is perceived as not just affecting the hair but the whole person.

3.2 Coreference of the subject with other semantic roles

While the reflexive construction frequently expresses coreference of the agent subject with the patient referent in object function, the subject can be co-referential with other semantic roles as well. This is only possible for participants registered on the non-reflexive verb by the object pronominal prefix, which are: (i) recipient argument of inherently ditransitive verbs, and (ii) beneficiary argument introduced by the benefactive applicative. Coreference of the subject with other semantic roles, such as (iii) possessor, and (iv) spatial referent, cannot be expressed by a reflexivized verb in Anindilyakwa. These four instances are discussed here in turn.

4 The reflexive voice construction in Anindilyakwa

3.2.1 Reflexivized ditransitive verbs: coreference of subject with recipient

For inherently ditransitive verbs, such as give', tell' and send', the recipient is represented on the verb in object function, while the theme argument occurs outside of the verb, as shown in (23). When such a ditransitive verb is reflexivized, it is business as usual: the verb becomes morphologically intransitive, with the subject agent being co-referential with the argument in object position, which now is the recipient, as in (24).

- (23) a. *nanga-kwa jurra*
 $3F>3F\text{-give.PST}$ book(NEUT)
 she gave her a book'
 - b. *yirrenə-maka-marra ena alhawudhawarra akina*
 $3M>1PL\text{-tell.}$ PST-1.FOC NEUT.this NEUT.story
 he told us this story'
 NEUT.that
- (24) a. *yingu-kwa-jungu-na jurra*
 $3F\text{-give-REFL-PST}$ book(NEUT)
 she gave herself a book'
 - b. *nə-maka-jungu-na-marra ena alhawudhawarra akina*
 $3M\text{-tell-REFL-PST-1.FOC}$ NEUT.this NEUT.story NEUT.that
 he told himself this story'

The examples in (24) are regular reflexive constructions; the only difference is that the subject is now co-referential with the recipient, rather than the patient.

3.2.2 Reflexivized benefactives: coreference of subject with beneficiary

As already mentioned in §2.3.3, the benefactive applicative introduces a beneficiary argument to the verb, which knocks the theme/patient argument out of the object prefix position, as in (25a), repeated from (13b) above. When reflexivized, the subject thus becomes co-referential with the beneficiary, as in (25b).³

- (25) a. *Akina awilyaba ngaya ngarra-mən-ngayindhe-na-ma.*
 NEUT.that NEUT.one 1SG.PRO 1SG>2SG-BENE-want-NPST-1.FOC
 That's all I want for you.'

³This example is made up by me based on my knowledge of the language and has not been tested with speakers. However, (26) and (27) are real life examples taken from texts, which support the validity of (25b).

Marie-Elaine van Egmond

- b. *Akina awilyaba ngaya nəngə-mən-n̩gayindhe-jungu-na-ma.*
 NEUT.that NEUT.one 1SG.PRO 1SG-BENE-want-REFL-NPST-1.FOC
 That's all I want for myself.'

Here are some more examples of reflexivized benefactives:

- (26) *ngarrəbukurra-lhangwa engengkuwa ngarrəbə-mənə-rəngka-jungwa*
 12TRI.PRO-POSS NEUT.life 12tri-BENE-look.after-REFL.NPST
ajungwa
 NEUT.sickness
 we three must start looking after our own lives and sicknesses'
- (27) *nungkuwa-lhangwa ngə-məni-yakuwerribika-jungu-ma nara,*
 2SG.PRO-DAT NEG-BENE-think-REFL.NPST-1.FOC NEG
wurri-yukwayuwa yakuwa-lhangwa wurra-məni-yakuwerribiki-na
 3PL-small.PL 12PL.PRO-DAT IMP.2PL>3PL-BENE-think-NPST
 don't think about yourself, think about our children'

From these examples, it appears that the reflexive overrides the benefactive applicative. In (27), for example, the intransitive verb *-yakuwerribiki* 'think' is made transitive by the benefactive marker (think of our children'), which in turn is detransitivized by the reflexive marker (think of yourself'): [BENE-think]-REFL. Regarding the ordering of semantic composition, it has not been tested with speakers whether reflexive formation can precede the benefactive and I have not found any instances in the textual data. Hence the question of how examples such as he cut himself for them' are realised, i.e. whether the object slot can be re-filled by the benefactive argument (i.e. BENE-[cut-REFL]), is an interesting topic for further research.

3.2.3 Coreference of subject with possessor

The possessor is expressed by a pronoun marked with possessive case, as in (28). The head noun is represented on the verb. When the subject and the possessor referent are the same person, number and gender, this can result in ambiguity, as in (29).

- (28) *nungkə-lhangwa yikarba nəngen-ngayindha*
 2SG.PRO-POSS MASC.woomera 1SG>MASC-want.NPST
 I want your woomera'

4 The reflexive voice construction in Anindilyakwa

- (29) *enuwə-lhangwa yikarba nena-ngayindha*
 3m.PRO-POSS MASC.woomera 3M>MASC-want.NPST
 he₁ wants his_{1/2} woomera'

Since the free pronoun *enuwa* and the subject prefix on the verb both mean third person singular masculine', they can be both coreferential and disjoint. The intended meaning must come from the context or by specifying the possessor. However, even though constructions such as (29) potentially express coreference between two clause participants (here, agent and possessor), there is no special form that signals the coreference. Therefore, I do not consider such examples to represent reflexive constructions (see Haspelmath, this volume).

3.2.4 Coreference of subject with spatial referent

A spatial referent is expressed by a nominal marked with e.g. locative case for a stative location. When the subject and the spatial referent have the same person, number, gender features, this again can result in ambiguity, as in (30).

- (30) *yingən-rrəngka yingarna dh-akina-manja*
 3F>MASC-see.PST MASC.snake 3F-that-LOC
 she₁ saw a snake next to her_{1/2}'

Since the demonstrative *dhakina* and the subject prefix on the verb both mean third person singular feminine', they can be coreferential and disjoint and the sentence is ambiguous. But again, since there is no special form that signals the coreference, such examples do not instantiate the reflexive construction.

4 Related functions and diachronic development of *-jungwV*

The reflexive suffix is homophonous to the verb *-jungwV-* to die', which belongs to the same verb class. The reflexive suffix and the die' verb can co-occur, suggesting they are not the same morpheme:

- (31) *akina akwalya na-jungwa-ja-jungu-na-ma*
 NEUT.that NEUT.fish NEUT-die-CAUS-REFL-PST-1.FOC
 the fish killed itself'

Marie-Elaine van Egmond

This could mean that the reflexive suffix is a grammaticalized form of the (intransitive) verb *-jungwV-* ‘die’ that has bleached of its semantics. However, there is another possible historical source for this suffix, which is the reflexive reconstructed for the ancestor of the Gunwinyguan languages, called proto-Gunwinyguan (Alpher et al. 2003). Most Gunwinyguan languages have a suffix that derives reflexive and/or reciprocal verbs from transitive stems. Alpher et al. (2003: 342) note that in many Gunwinyguan languages, reflexive and reciprocal meanings are covered by the same suffix, except in Wubuy, Ngandi and Waray (see Figure 4.1) (as Anindilyakwa was still presumed an isolate then, they did not include this language in their discussion). Due to the great distance between Waray on the one hand, and Wubuy and Ngandi on the other, they argue, the distinctive reflexive and reciprocal forms cannot be an innovation (p. 342–343). The contrast between the two must therefore be archaic, and they reconstruct reflexive *-yi- and reciprocal *-nji- for proto-Gunwinyguan (pgn).

The Anindilyakwa reciprocal -yi- (which synchronically has a rare alternate form -nji-) could then have derived from pgn *-nji- in the following way:

- (32) pgn reciprocal *-nji- > *-ji- (loss of nasal) > -yi- (lenition)

The reflexive suffix *-jungwV-* is more difficult to derive from pgn *-yi-. It is possible that it is segmentable into *-ji.ngwV-*, where -ji- represents a hardened *-yi-. The high vowel obtains its rounding from the rounded dorsal segment -ngwV- (recall that this is how [u] is formed in Anindilyakwa):

- (33) pgn reflexive *-yi- > *-ji- (hardening) > *-ji-ngwV- (addition of ngwV segment) > -jungwV-

Perhaps it was the verb *-jungwV-* ‘die’ that triggered the formation of the reflexive suffix.

5 Summary

As expected of a polysynthetic language, the arguments of a verb are identified on the verb, in the case of Anindilyakwa by means of pronominal prefixes. Free pronouns are common but optional. The language has a range of argument-changing affixes, one of which is the reflexive suffix. Anindilyakwa reflexive voice is marked by a verbal suffix that occurs on transitive verbs and reduces the valency of the verb by one. It is used for all persons, numbers and degrees of animacy of the participants involved. The suffix signals that the agent subject is

4 *The reflexive voice construction in Anindilyakwa*

co-referential with the referent that previously occurred as the transitive object pronominal prefix. This is mostly a patient referent, but it can also be a beneficiary introduced by the benefactive applicative, or the recipient referent of an inherently ditransitive verb.

Abbreviations

1.FOC	first person focalization marker
BENE	benefactive
CAUS	causative
CofR	change of referent
COLL	collective noun class
DAT	dative
DU	dual
EMPH	emphatic
Eng	English
f	feminine
FEM	feminine noun class
HORT	hortative
INALP	inalienable possession
INCH	inchoative
INCL	inclusive
INSTR	instrumental
IRR	irrealis
LOC	locative
m	masculine

Marie-Elaine van Egmond

Mac	Macassan language
MASC	masculine noun class
NEG	negative
NEUT	neuter noun class
NPST	non-past
NZR	nominalizer
pGN	proto-Gunwinyguan
PL plural	
POSS	possessive
PRO	pronoun
PST	past
PURP	purposive
RECP	reciprocal
RDP	reduplication
REAS	reason
REFL	reflexive
SG	singular
tri	trial
VEG	vegetable noun class

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Marie-Elaine van Egmond

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Chapter 5

The reflexive construction in Jaminjung/Ngaliwurru

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Jaminjung/Ngaliwurru, a language of the Western subgroup of the Australian Mirndi family, has a single reflexive construction which is marked by a derivational affix on the verb; there are no reflexive pronouns in the language. This paper provides an overview of the formal and functional characteristics of this construction, in a comparative perspective. Reflexive marking renders a verb morphologically and syntactically intransitive. Unlike in a number of other Australian languages, the construction does not have a general detransitivising function. Rather, it is restricted to encoding both volitional and non-volitional self-directed actions. Specific subtypes discussed here are actions affecting an inalienable part of the subject, expressed by means of an external possession construction, and certain autocausatives of position and spatial arrangement. As is common among languages of Australia with verbal reflexive marking, the reflexive construction also has a reciprocal function.

1 Introduction

This paper provides an overview of the form and functions of the reflexive construction in Jaminjung/Ngaliwurru, a language of the Western subgroup of the Australian Mirndi family (Chadwick 1997; Harvey 2008). Jaminjung and Ngaliwurru are two named varieties of a single language, i.e. they are mutually intelligible. The main differences between these are of a lexical nature; there is no difference between the two varieties as far as the reflexive construction and its uses are concerned.

Taken together, Jaminjung and Ngaliwurru are spoken today by fewer than 50 people in the areas of Katherine, Timber Creek, and Kununurra in Northern Australia. The approximate location of the area for which Jaminjung and Ngaliwurru



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Eva Schultze-Berndt

people are traditional owners is shown in Figure ???. The first language of younger people in these communities, and the language mostly used in day-to-day communication, is Kriol (also known as Roper River Kriol), an English-lexified creole language (Harris 1986; Schultze-Berndt et al. 2013).

Figure 5.1: Approximate location of Jaminjung and Ngaliwurru traditional country

The discussion of reflexives is based on fieldwork spanning more than 25 years by the author and collaborators. The resulting documentation corpus ComrieSchultzeBerndt2 includes various genres ranging from narratives, procedural texts, and fictive and actual dialogue to elicitation by translation or (verbal or visual) scenarios. References accompanying each example indicate the file name and transcript line number under which it is archived in the DoBeS Endangered Languages Archive (<http://dobel.mpi.nl/research/>; access upon request).

Jaminjung/Ngaliwurru has a single construction that meets the definition of a reflexive construction in *chapters/haspelmath* in that it has a marker with the specialised function of indicating coreference between two participants in a clause. The reflexive marker is an invariable verbal suffix; there are no reflexive pronouns in the language (for a list of free pronouns, see the Appendix). It is also used in reciprocal function, but has no additional (e.g. detransitivising) functions.

Following an introduction to the main relevant grammatical properties of Jaminjung/Ngaliwurru in §2, the formal properties of the construction are described in §3. §4 provides more detail on the semantic range of the reflexive construction, while the reciprocal function will be briefly discussed in §5. §6 provides a brief overview and illustration of cases of coreferentiality of subjects and non-objects, none of which license the reflexive construction. The main features of the reflexive/reciprocal construction are summarised and discussed in an areal and typological perspective in §7.

2 Grammatical background

In terms of its morphological type, Jaminjung/Ngaliwurru can be characterised as agglutinative to fusional. Verbs are the most complex class morphologically, since they are obligatorily marked for person and number of subjects and (for transitive verbs) objects, and for tense, aspect and modality. Verbs fall into two non-overlapping transitivity classes in terms of their paradigm of pronominal prefixes, as illustrated in (1). Morphologically intransitive inflecting verbs only have a subject index; morphologically transitive verbs mark both subject and object.

5 The reflexive construction in Jaminjung/Ngaliwurru

(1) Examples of intransitive and transitive inflecting verb forms

- a. *ga-ruma-ny*
3MIN.come-PST.PFV
'he/she/it came'
- b. *gani-wa*
3MIN>3MIN-bite.PST.PFV
'it bit him/her'

All ditransitive predicates are morphologically transitive (Schultze-Berndt 2010). Usually, the recipient rather than the theme is cross-referenced by the object prefix on the verb, but this depends on the relative animacy of recipient and theme.

Most morphologically transitive verbs have a reflexive counterpart which follows the intransitive paradigm (for details see §3). This is the only detransitivizing morpheme (in fact, the only valency-changing morpheme) in Jaminjung/Ngaliwurru.

Tense and aspect are marked by suffixation or stem suppletion; as is common cross-linguistically, an inflectional aspectual distinction (perfective vs. imperfective) is only made in the past tense. Modality is marked by prefixation (with a distinction between imperative, potential/future, and irrealis forms). The structure of inflecting verb forms, already illustrated in (1), is schematically represented in (2).

(2) Inflecting Verb Structure

(IMP/IRR-)SUBJ-OBJ.MIN-(POT-)[OBJ.AUG/UA-]root(-REFL)(-TENSE/ASPECT)

The combination of cross-referencing on the verb and (optional) case-marked noun phrases makes Jaminjung/Ngaliwurru a double-marking language in the terminology of Nichols (1986). Case marking is by phrase-level enclitics. The alignment system for core arguments is ergative-absolutive (at a morphological, not a syntactic level); however, Jaminjung/Ngaliwurru exhibits “optional” (fluid) ergativity in that the presence of case marking on agents depends on a variety of factors including person and information structure (Schultze-Berndt 2017; Schultze-Berndt & Meakins 2022). Constituent order is pragmatically conditioned and does not serve to mark grammatical roles, and noun phrases can be freely omitted if their referent can be retrieved from discourse.

Throughout this paper, the terms ‘subject’ and ‘object’ will be used in a semantic sense, as a shorthand for core participants with the macro-roles of Actor and Undergoer, respectively. Example (3) illustrates a transitive clause where the subject is represented by an ergative-marked noun phrase and the first prefix slot

Eva Schultze-Berndt

on the verb, and the object by an absolute noun phrase and the second prefix slot on the verb.

- (3) *Gumurrinji-ni=biyang bul gan-arrga gudarlg.*
 emu=ERG=SEQ emerge 3MIN>3MIN-approach.PST.PFV brolga
 'The emu then approached the brolga.' [ES96-A01-01.022]

An important characteristics of Jaminjung/Ngal iwurru – shared with a number of unrelated languages of the area – is the existence of two distinct predicative parts of speech. Verbs of the obligatorily inflecting type discussed above form a closed class with approximately 30 members (depending on the variety and speaker). They encode semantically generic events or states. In addition, there is an open class of semantically specific items restricted to predicative function but incompatible with inflectional marking, and therefore termed uninflecting verbs; other terms used in the literature are "coverb" and "preverb" (see Schultze-Berndt 2003, Schultze-Berndt 2017 and McGregor 2002 for further discussion).

Inflecting verbs can occur as simple predicates in independent clauses, or combine with one or (rarely) two uninflecting verbs. The resulting combinations meet the widely accepted definition of complex predicates as monoclausal constructions, found in a single intonation unit, where two or more predicative constituents jointly contribute to the argument structure of the clause, share at least one semantic argument, and share values for tense, aspect, modality and polarity (see e.g. Butt 1997: 108, Butt 2010). In terms of both their lexical semantics and their argument structure they form nuclear junctures, in the terminology of Role and Reference Grammar (Foley & Olson 1985).

The semantic valency or argument structure of a complex predicate, in most instances, matches the morphological transitivity of its inflecting verb, but there are exceptions (see also Schultze-Berndt 2015: 1126–1128). For example, the combination of uninflecting verb *bul* 'emerge' and inflecting verb *-ma-* 'hit', with a meaning of 'appear', is syntactically intransitive: it takes a single core argument in the absolute (unmarked) case, as illustrated in (4).

- (4) *Barangan bul gani-ma-m.*
 moon emerge 3MIN>3MIN-hit.PRS
 'The moon comes out.' (CS11-A103-01.057)

However, this syntactically monovalent status is not reflected in the morphological transitivity of the inflecting verb, which retains the transitive paradigm of pronominal indexing (with an invariable 3rd person singular, non-referential

5 The reflexive construction in Jaminjung/Ngaliwurru

object prefix). Semantically intransitive complex predicates formed with a transitive inflecting verb therefore differ from (simple or complex) reflexive predicates in their morphological transitivity (see §3).

It follows from the above that the existence of a reflexive counterpart of a given transitive complex predicate depends on its semantics and not purely on the morphological possibilities of the inflecting verb involved.

Another grammatical feature relevant for the discussion of reflexives is the grammatical treatment of inalienably possessed body parts and other part-whole relationships in Jaminjung/Ngaliwurru. As is cross-linguistically common, the preferred way of expressing the involvement of a (body) part in a state-of-affairs is to treat the whole (or possessor) as a core argument in what has been termed an external possessor construction: the possessor is indexed on the verb and optionally (and rarely) represented by a noun phrase as well, while the body part is represented as an additional noun phrase which agrees in case with the possessor expression. This is illustrated in (5) and (6) for an intransitive and a transitive verb, respectively.

- (5) *Lurr ga-rdba-ny wirlga.*
 pierce 3MIN-fall-PST.PFV foot

‘She pierced her foot.’ (lit: ‘She fell such that she got pierced, with respect to her foot.’) [ES97-n02-Jam.020]

- (6) *Jarlig wuju gulyu ba-ngu juwiya!*
 child small wash IMP-get/handle nose
 ‘Wipe the little child’s nose!’ (lit: ‘Wipe the little child (with respect to his/her) nose.’) [ES12-N01-3Lgs.008]

Inalienable relations in Jaminjung include not only body parts, but also items in the personal sphere, such as a shadow or a name (see example 24 below), but not kinship relations. What is important in the present context is that the presence of the part expression does not increase the number of arguments of the predicate; it is licensed exclusively by the presence of a semantic argument representing the ‘whole’.

3 Formal properties of the reflexive construction

In Jaminjung/Ngaliwurru, coreferentiality of subject and object is obligatorily marked by a verbal suffix *-ji* which immediately follows the verb root, as shown in the verbal structure template in (2) and illustrated in (7).

Eva Schultze-Berndt

- (7) Example of a reflexive verb form

ga-wirri-ja

3MIN-bitE.REFL.PST.PFV

'he/she/it bit himself/herself/itself'

The suffix is identical in form to the free 3rd person singular pronoun *ji*, but it is unclear whether they are etymologically related, as reflexive and other in-transitivising suffixes cognate with *-ji* are widespread in Australian languages (Dixon 2002: 321). As the template in (2) and the comparison of examples (7) and (1) shows, in the verbal template the reflexive suffix is found in a different slot from any object indexing prefix. This distinguishes Jaminjung/Ngaliwurru and its close relative Nungali from more distantly related languages within the Mirndi family such as Wambaya (Nordlinger 1998) and Jingulu (Pensalfini 2003), which mark the reflexive by means of an invariable object prefix. It thus appears that the reflexive construction of Jaminjung/Ngaliwurru is an innovation at the level of the Western Mirndi (Yirram) subgroup. Jaminjung/Ngaliwurru does not have reflexive pronouns or any other reflexive marker (see the pronoun table in the Appendix).

Reflexive marking interacts with tense/aspect marking: except for the past imperfective, the productive tense/aspect suffixes on non-reflexive verbs are not employed on reflexive verbs, and portmanteau forms are used instead, listed in Table 5.1. These portmanteau suffixes appear even on verbs that otherwise mark tense/aspect distinctions by suppletion. They are clearly described, with the same forms as in the recent corpora, in Cleverly (1968) and Bolt et al. (1971).

Table 5.1: Reflexive and tense-aspect marking

	reflexive+tense/aspect	other tense/aspect allomorphs
untensed	-ji	-
PRS	-ji	-m, -ya
PST.PFV	-ja	-∅, -ny
PST.IPFV	-ji-na	-na, -nyi

The reflexive suffix also has the function of reciprocal marking (see further §5). Since it changes the morphological transitivity of the verb, it is analysed here as a derivational affix, although the construction also corresponds to what chapters/haspelmath terms reflexive voice. It has a detransitivising effect in that it results in otherwise morphologically transitive verbs taking the intransitive

5 The reflexive construction in Jaminjung/Ngal iwurru

paradigm of person prefixes (see §2). However, rather than having a general de-transitivising function, it is semantically restricted to marking reflexive or reciprocal action (see further §4 and §5).

Syntactically, likewise, a reflexive verb is intransitive: it is not compatible with an ergative-marked argument representing the subject (although an instrumental phrase, marked with the same ergative/instrumental case marker, can be added). The morphological and syntactic contrast between the transitive verb *-angga-* and its (suppletive) reflexive version is illustrated in (8) and (9).

- (8) (*Marlayi-ni*) *gulyu=biyang gan-angga-m*
 woman=ERG/INST wash=SEQ 3MIN>3MIN-get/handle-PRS
 gugu-ni.
 water=ERG/INST
 '(The woman) is washing it with water.' [ES12-A02-02.203]
- (9) (*Ngayug*) *gulyu nga-bili-ji* *gugu-ni.*
 1MIN wash 1MIN-POT:get/handle-REFL water=ERG/INST
 'I will wash myself with water.' (Bolt et al. 1971: 53)

For a few morphologically transitive inflecting verbs, e.g. *-muwa* 'have', no reflexive/reciprocal forms are attested in the data, due to semantic incompatibility or at least implausibility. In one case, a different verb systematically substitutes for the non-attested reflexive form of a morphologically transitive verb: For reflexively or reciprocally addressed speech, the ditransitive verb *-ngarna* 'give' replaces *-junggu* 'say/do', the usual speech-framing verb (which also has a range of other uses including both syntactically transitive and intransitive ones; see Schultze-Berndt 2008). As a speech-framing verb, *-junggu* 'say/do' combines with a quotation in place of a theme object and with an oblique-marked recipient, as illustrated in (10). Since only direct objects, not obliques, are accessible to reflexive marking, *-ngarna* 'give' – which allows for the encoding of the recipient as a direct object – is used instead, as shown in (11) (for an example of its reciprocal use, see 34).

- (10) "*Ba-manggu nami=ngunyi!*" *burru-yu=ngunggu*
 IMP-hit 2MIN=ABL 3AUG>3MIN-say/do.PST.PFV=3MIN.OBL
 jarlig-ni=gun, *ngih?*
 child=ERG/INST=EMPH TAG
 "Kill it yourself!" the children said to you, didn't they?!"

Eva Schultze-Berndt

- (11) *"Wanaja=warra nga-wu-yu?" ga-ngarna-ja,
 do.what=DUBIT 1MIN>3MIN-POT-say/do 3MIN-give-REFL.PST.PFV
 ji=wung warladbari.
 3MIN=RESTR old.man*

“What am I going to do? (...)" he said to himself, (being) by himself, the old man.' (lit. ‘gave himself') (Bowerbird and Crow story, recorded by J. Bolt; partially printed in Bolt et al. 1971: 130–134; glossing by ESB)

As example (11) also shows, reflexive marking reduces the valency of a ditransitive predicate to two core arguments. Usually, as in (11), it indicates coreference between the subject and the recipient object; only in the case of a theme object which is animate or a natural force, coreference of the subject with a theme object is also attested, as in (12). This variable reference of the reflexive suffix reflects the similarly variable reference of the object prefix in the non-reflexive usage of ditransitive predicates (Schultze-Berndt 2010).

- (12) *Yurrg ga-rra-ji ngurrgban.*
 show 3MIN-put-REFL.PRS rainbow
 ‘A rainbow shows (after the rain).’

As already pointed out in 2, Jaminjung/Ngaliwurru does not have any valency-changing derivational morphology apart from the reflexive construction, nor does it exhibit voice marking. The possibility of combining the same uninflecting verb with different inflecting verbs (illustrated in 3 compared with 4) can fulfil the same functions as applicative markers, causativisers, and other valency-changing morphology in many other languages (Schultze-Berndt 2015: 1132–1145). As discussed in more detail in §4 below, the reflexive construction is restricted to encoding self-directed (autopathic) actions.

4 Function of the reflexive construction

The reflexive construction is a semantic reflexive in the terminology of Geniušienė (1987: 27): it is restricted to expressing coreference of subject and object in what Comrie (1998) calls a ‘local domain’, i.e. when they are arguments of a single predicate, and it is used to encode autopathic actions, i.e. the subject referent acting upon him-/her-/itself. No instances of partial coreferentiality are attested, i.e. cases where the subject referent is a subset of the object referent.

This section discusses the three attested (not strictly delineated) subtypes of this use of the reflexive: prototypical reflexive actions where the object is presented as fully affected by the action of the coreferential subject (§4.1), reflexive

5 The reflexive construction in Jaminjung/Ngal iwurru

actions affecting an (explicitly mentioned) part of the object (§4.2), and reflexive expressions of placement and position (§4.3); a summary of reflexive uses is provided in §4.4. For the reciprocal function of the same construction, see §5.

4.1 Full affectedness of object

The reflexive construction is used with both "extroverted" and "introverted" predicates. Typical examples are (13) to (17). These illustrate the use of the reflexive for deliberate self-directed actions, including self-grooming (14 and 15), as well as for events of accidental self-harm (16 and 17).

- (13) *Jiwuly nga-ba-ji birl-birl.*
cool 1MIN-POT:hit-REFL RDP-fan
'I will cool myself by fanning.' [ES97-A01-02.130]
- (14) *Nginyju=biya mugurn ga-yu, janyung warr-warr*
PROX=SEQ sleep 3MIN-be.PRS another RDP-scratch
ga-mili-ji=rndi.
3MIN-get/handle-REFL.PRS=EGO
'This one is sleeping, the other is scratching itself.' [CS11-a102-01.007]
- (15) *Dirrma ga-ma-ja:::, malinygalg=gug.*
paint.up 3MIN-hit-REFL.PST.PFV pretty=LIMIT
'He painted himself, until he looked beautiful.' [ES09-A02-01.016]
- (16) *Majani=biya gunbarr yanthing-muwa, jibug yanthing-ijja-ji.*
maybe=SEQ sore IRR:2MIN>3MIN-have bust IRR:2MIN-poke-REFL
'You might get a sore, you might poke yourself.' [ES97-A01-01.301]
- (17) *Nganthan=warra warn gan-ngangu,*
what=DUBIT get.hooked 3MIN>1MIN-get/handle.PST.PFV
wardba=biyang nga-mili-ja, nga-rdba-ny.
entangle=SEQ 1MIN-get/handle-REFL.PST.PFV 1MIN-fall-PST.PFV
'Something (I don't know what) hooked me, I entangled myself, and fell.'
[ES03-A01-04.201]

4.2 Reflexive actions affecting a part of the object

Self-directed actions frequently only affect an (inalienable) part of the object; the use of reflexive constructions in these instances is termed "partitive object reflexives" by Geniušienė (1987: 195–196) (see also Gaby *in press*). In Jaminjung/Ngal iwurru, the affected part is usually specified, in the form of an external possessor

Eva Schultze-Berndt

construction: an additional absolute noun phrase representing the part is licensed if the whole (possessor) is indexed as a core argument. As pointed out in §2, the presence of this additional noun phrase does not change the transitivity of the clause, i.e. it is not a syntactic object argument.

Typically, the part expression represents the body part of an animate which is impacted upon by the self-directed action, as in (18), (19), and (20), or towards which attention is directed, as in (21).

- (18) *Ngulgul=wu bana reg, juwiya waipim*
 snot=DAT IMP:2MIN>1MIN-give rag(Kriol) nose wipe:TR(Kriol)
nga-bili-ji.
 1MIN-POT:get/handle-REFL
 ‘Give me a rag for my snot, I want to wipe my nose.’ [ES99-N01-Jam.073]
- (19) *Juwiya murrb ga-mili-ji.*
 nose covered.up 3MIN-get/handle-REFL.PRS
 ‘He is covering his nose.’ [ES97-A03-01.162]
- (20) *Thed nganth-inama-ny gad na-wirri-ja*
 trip.over 2MIN>3MIN-kick/step-PST.PFV cut 2MIN-bite-REFL.PST.PFV
jarra.
 mouth
 ‘You tripped over something, and you bit yourself on the lip.’
 [ES97-A03-06.144]
- (21) *Mung ba-ngayi-ji jurruny.*
 look.out IMP-see-REFL hand
 ‘Watch your hands!’ (to avoid getting burnt) [ES15-N01-Ngar-Ngali.005]

Body parts, most prominently *burru* ‘stomach’, also represent emotions or mental states, giving rise to the use of the reflexive in combination with the external possession construction to express a self-directed emotion or mental effort, as in (22).

- (22) *Burru ngarrgina warlyang nga-rra-ja, burru jarlag*
 stomach 1MIN.POSS ahead 1MIN-put-REFL.PST.PFV stomach good
ng-agba.
 1MIN-be.PST.PFV
 ‘I had mentally prepared myself, I was calm.’ (lit. ‘I put my belly ahead, my belly was good’) (before an operation) [CS15-A014-18.012]

5 The reflexive construction in Jaminjung/Ngaliwurru

Finally, as in other Australian languages (Gaby in press), items other than body parts can be treated as inalienably possessed parts in an external possessor construction, as long as they are considered intimately associated with the whole, such as clothing, a sore (23), a shadow, or a name (24).

- (23) *Yurr burra-ma-ji-na gunbarr=gayi.*
 rub 3AUG-hit-REFL-PST.IPFV sore=also
 'They also used to rub themselves (with it) on a sore.' [ES96-A18-01.265]

- (24) *Jinij nij ga-bili-ji=yinyag.*
 name say.name 3MIN-POT:get/handle-REFL=1UA.OBL
 'She should tell us two her name.' (lit. 'She should name herself (by way of her) name to us two.') [ES08-A08-02.046]

4.3 Reflexive expressions of placement and position

The final function of the reflexive construction in Jaminjung/Ngaliwurru is to form inchoatives of placement or position. This function is labelled "autocausative" by Geniušienė (1987: 196–197), defined as "an action performed with one's body and resulting in motion or change of position". In Jaminjung/Ngaliwurru, however, only a subset of potentially autocausative meanings are expressed using the reflexive construction. It is not used at all for either translational or non-translational motion, and for most positionals, inchoatives are formed with the intransitive verb -irdba 'fall; assume a position', as illustrated in (25) (see Schultze-Berndt 2015 for further discussion).

- (25) *Ngamang nga-w-irdbj̪ motika=ni.*
 be.astride 1MIN-POT-fall car=LOC
 'I will get in the car.' [ES16-A07-06.004]

However, the reflexive of the inflecting verb *-arra* 'put; place in a position' is used in expressions of a subject simultaneously bringing about and entering a spatial arrangement (26) and for changes of position which require energy to maintain the position (27).

- (26) *Gurlbinyji=ni bad-bad ga-rra-ja.*
 paperbark=ERG/INST RDP-COVERED 3MIN-put-REFL.PST.PFV
 'He covered himself with paperbark.' [ES03-A03-01.024]

Eva Schultze-Berndt

- (27) *Diddi ga-rra-ji.*
 lean 3MIN-put-REFL.PRS
 ‘He is leaning over.’ [ES97-A03-01.219]

The uninflecting verb *jubard* ‘enclosed, shut in’ has the semantics of a positional. Consequently, with the reflexive of the verb *-arra* ‘put; place in a position’, *jubard* encodes shutting oneself away, as in (28).

- (28) *Garnmungul warnda walthub gan-antha, jubard*
 bandicoot grass inside 3MIN>3MIN-take.PRS shut.in
ga-rra-ji warnda=ni.
 3MIN-put-REFL.PRS grass=ERG/INST
 ‘The bandicoot takes grass inside (a hole) and shuts itself up with the grass.’ [ES03-N01-JAM.057]

The position entered can be restricted to a body part, which can be specified by means of an external possessor construction as already discussed in §2 and §4.2. An example is (29).

- (29) *Thandarlung ga-rra-ji jurruny.*
 straight 3MIN-put-REFL.PRS hand
 ‘She is straightening her arm.’ (lit. ‘She is putting herself straight [with respect to her] arm.’) [ES96-A08-03.304]

4.4 Function of the reflexive construction: summary

As the discussion in this section has shown, the reflexive construction in Jaminjung/Ngaliwurru, in its reflexive function, always encodes a self-directed action, including actions affecting only an inalienable part of the subject. In the case of positionals, this may not be obvious from the most idiomatic English translations, but taking into account the semantics of the generic verb *-arra* ‘put; cause to be in a position’ and the semantics of the accompanying uninflecting verbs of position, these expressions are fully covered by the description of the Jaminjung/Ngaliwurru reflexive construction as being restricted to the function of core reflexivity, with coreferentiality of an agentive subject and an affected object. In other words, it does not have a more general inchoative/anticausative function, and neither does it have any other detransitivising function such as antipassive.

Given this characterisation, it is not surprising that verbs that allow for the reflexive construction (in its reflexive rather than reciprocal function, for which see §5) are found towards the top end of a hierarchy (Wichmann 2015) generalised

5 The reflexive construction in Jaminjung/Ngaliwurru

from the reflexive valency alternations in 16 languages in the Leipzig Valency database (Hartmann et al. 2013). In this hierarchy, the Jaminjung/Ngaliwurru equivalents attested in reflexive construal are marked in boldface in (31). Meanings shown in brackets only have reflexive uses in particular contexts; for ‘GIVE’ this is the speech framing use discussed in §3; for ‘BREAK’ this is the use in expressions of ‘breaking a limb’ as illustrated in (30).

- (30) *Football-nyunga bag ga-rra-ja marnal.*
 football-ORIG break 3MIN-put-REFL.PST.PFV ankle
 ‘From (playing) football he broke his ankle.’

Some of the gaps at the top end of the hierarchy in (31), e.g. ‘HEAR’, may be accidental gaps in the data; however, ‘HIDE (oneself)’ and ‘DRESS’ are encoded with an intransitive and a (non-reflexive) transitive predicate, respectively.

- (31) **WASH, COVER, SHAVE, SHOW, CUT, SEE, HIDE, DRESS, [GIVE], TOUCH >**
LOOK AT, HEAR, [PUT], [BEAT], HUG, SMELL, TIE, THROW, HIT, KILL,
LIKE, FEAR, WIPE > KNOW, PUSH, ASK FOR, TEAR, NAME, HELP > SEARCH
FOR, THINK, TEACH, TAKE, SAY, CARRY, TELL, [BREAK], SEND > FRIGHTEN,
TALK, LOAD > BUILD, STEAL > BRING, PEEL, COOK, FOLLOW, EAT > FILL,
MEET, GRIND, SING, BURN, DIG, BE SAD, POUR, ROLL > SHOUT AT, BE DRY,
SCREAM, LAUGH, RUN, PLAY, FEEL PAIN, LEAVE, GO > JUMP, SIT, BLINK, BOIL,
BE A HUNTER > LIVE, RAIN, SINK, BE HUNGRY, DIE, FEEL COLD, CLIMB > SIT
DOWN > COUGH
 (adapted from Wichmann 2015: 169)

5 Reciprocal function

As already indicated, the Jaminjung/Ngaliwurru reflexive marker also has a reciprocal use, a cross-linguistically frequent overlap (see e.g. Nedjalkov 2007b: 17; Maslova & Nedjalkov 2013). The reciprocal interpretation of the construction requires a non-singular subject; however, a reflexive interpretation (i.e. multiple agents engaged in reflexive action) is often also possible. For example, (32) could also mean ‘the dogs are (each) biting holes in themselves’. The interpretation is usually clear from context.

- (32) *Mud-mud burru-wiri-ji wirib thanthu.*
 RDP-make.hole 3AUG-bite-REFL.PRS dog DEM
 ‘Those dogs are biting holes in each other.’ [ES97-A03-06.078]

Eva Schultze-Berndt

The reflexive/reciprocal form of the inflecting verb sec:SchultzeBernd:7-ma 'hit' with a non-singular subject is conventionally used to express 'fighting', as in (33). The equally conventionalised reflexive/reciprocal speech framing verb -ngarna 'give' is discussed in §3; its reciprocal function is illustrated in (34).

- (33) *Yangarra buny-ma-ji yirrginy=jirram, jurruny=ni.*
kangaroo 3UA-hit-REFL.PRS do.reciprocally=two lower.arm=ERG/INST
'The two kangaroos fight one another with their paws.' [ES96-A04-03]
- (34) "*Mindi-wardagarra-m ngiya gurang!*" *buny-ngarna-ja*
1+2MIN-follow-PRS PROX old.man 3UA-give-REFL.PST
babiny-majawari.
sister-DYAD
'"Let's follow this old man" the two sisters said to each other.'
[ES08-A04-02.106]

A reciprocal interpretation can be available even with predicates encoding inherently symmetrical events such as 'split up, scatter' in (35) and with other state-of-affairs that are semantically incompatible with a reflexive interpretation, such as 'look back at' in (36).

- (35) *Mirdang nyanying=biya gani-yu, larrarra*
night proper=SEQ 3MIN>3MIN-say/do.PST.PFV scatter
yirri-mili-ja, buru-buru yagbali-bina.
1AUG-get/handle-REFL.PST.PFV RDP-return place-ALL
'It really became night then, we scattered, (going) back to our places.'
[CS15-A014-17.173-175]
- (36) *Mung=jirram buny-ngayi-ja wib.*
watch=two 3UA-see-REFL.PST.PFV look.back
'The two looked back (over their shoulders) at each other.'
[ES01-A03-07.104]

The reciprocal function can optionally be made explicit by the addition of an adverb *yirrginy* 'reciprocally, in return', as shown in (33). This adverb is also compatible with predicates not marked with the reflexive/reciprocal suffix, e.g. in a bicausal reciprocal expression.

The Jaminjung reflexive/reciprocal does not have any of the additional functions cross-linguistically associated with reciprocal marking (Nedjalkov 2007a; König & Gast 2006: 9) such as collective/joint action (Nedjalkov's 'sociative'), iterativity, or distributivity.

5 *The reflexive construction in Jaminjung/Ngaliwurru*

6 Coreference of subject with non-objects

The reflexive construction cannot be used in the case of co-reference of the subject with any non-object. Such coreference is not encoded at all in Jaminjung/Ngaliwurru; rather, coreference is just one of the possible interpretations of free or enclitic pronouns. The following examples illustrate such pronouns in the functions of recipient/addressee (37), recipient/beneficiary (38), and possessor (39), with an interpretation of coreference with the subject. Outside the contexts for these specific examples, a non-coreferential interpretation is equally possible, as indicated in the translations.

- (37) "Wanaja=warra nga-wu-yu" *gani-yu*,
 do.what=DUBIT 1MIN:3MIN-POT-say/do 3MIN:3MIN-say/do.PST.PFV
 ji=wu=wung.
 3min=DAT=RESTR
 "I don't know what to do" he said to himself? (or: 'just to him')
 (Bowerbird and Crow story, recorded by J. Bolt; transcription and
 glossing by ESB)
- (38) *Majani malinygalg nganjan burri-ngami=burrug*.
 maybe pretty what 3AUG>3MIN-see.PRS=3AUG:OBL
 'Maybe they see something nice for themselves.' (or: 'for them')
 (describing the behaviour of thieves) [ES99-V01-06a.282]
- (39) *Mung gana-ma-na* *gujarding nuwina*.
 watch 3MIN>3MIN-have-PST.IPFV mother 3MIN:POSS
 'She was looking after her own mother.' (or: '... after his/her mother')
 [ES15-A03-10.030]

Cross-linguistically, intensifiers in adverbial function are frequently formally identical to reflexive pronouns (König & Siemund 2000; König et al. 2013). In Jaminjung/Ngaliwurru, which lacks a reflexive pronoun, this function is fulfilled either by an absolute pronoun followed by the restrictive enclitic =*wung* (Schultze-Berndt 2002), or by a possessive pronoun with the agentive adverbialising suffix *-man*. These are illustrated in (40) and (41), respectively. No clear examples of pronouns as adnominal intensifiers have been found.

- (40) *Bugu ji=wung* *ngilijja ga-ngga*.
 just 3MIN=RESTR cry 3MIN-go.PRS
 'Just himself (i.e. without a cause) he is crying!' [ES97-A01-05.145]

Eva Schultze-Berndt

- (41) *Ga-rdba-ny, nuwina-man.*
 3MIN-fall-PST.PFV 3MIN.POSS-ADV
 ‘He fell, by himself (by his own mistake).’ [ES96-A09-02.216]

In sum, this section has provided further evidence that the function of the Jaminjung/Ngaliwurru reflexive construction does not extend beyond encoding coreference of agent and patient (subject and object) in expressions of self-directed action, as discussed in §4.

7 Concluding discussion

The preceding sections provided an overview of the formal and functional properties of the Jaminjung/Ngaliwurru reflexive construction. Jaminjung/Ngaliwurru does not have reflexive pronouns; the reflexive is marked by an invariable derivational suffix on inflecting verbs which renders the verb morphologically and syntactically intransitive (see §3). In §4 it was shown that the construction – even in its uses with positionals and in metaphorical uses – is restricted to indicating coreference between (semantic) subjects and objects, i.e. in what Comrie (1998) calls the “most local domain”, and that it always encodes self-directed (autopathic) actions. It cannot be used for co-reference of subjects with non-objects (§6), and it does not have any general detransitivising function such as inchoative/anticausative, nor is it used in nontranslational motion expressions such as ‘turn, swivel’.

The same construction, with nonsingular subjects only, functions as a reciprocal construction (see §5). Here it is restricted to events where the same participants simultaneously fulfil the role of agents and patients, and it does not have any additional functions such as collective/joint action, iterativity, or distributivity.

It should be pointed out that the Jaminjung/Ngaliwurru reflexive/reciprocal construction, while representative of a substantial subset of the languages in the Australian linguistic area (Dixon 2002: 320–321; Gaby in press), is by no means typical of all Australian languages. First, not all Australian languages have verbal reflexive marking; invariable reflexive pronouns are also found in a number of languages, for example in the Ngumpin-Yapa group which includes Warlpiri (chapters/Laughren [this volume]), Djaru (Tsunoda 2007) and Bilinarra (Meakins & Nordlinger 2013: 235–238). In these languages, moreover, reflexive clauses are formally transitive and allow for ergative-marked agents. Second, the formal overlap between reflexive and reciprocal marking is common (found in 28 of the

5 *The reflexive construction in Jaminjung/Ngaliwurru*

55 languages surveyed by [Gaby in press](#)), but even among those languages that have verbal reflexive marking, distinct verbal affixes for reflexive and reciprocal are found; examples are Kuuk Thayorre ([Gaby 2008](#) and Gaby this volume) and Warrungu ([Tsunoda 2007](#)). Third, functional extensions beyond the core reflexive and reciprocal meanings, attested in some Australian languages, are not found in Jaminjung/Ngaliwurru. For example, the reflexive/reciprocal verbal markers in Bininj Gun-wok ([Evans 2003bgw](#)) and (more marginally) in Nyikina ([McGregor 2000](#): 114) also have a collective interpretation; other extensions of reciprocal marking found in Australian languages are pluractional, habitual, and continuative ([Gaby in press](#)). The reflexive construction has a more general detransitivising function in a number of Australian languages, e.g. an anti-passive function in Yidinj ([Dixon 2002](#): 532) and in several other Pama-Nyungan languages discussed by [Terrill \(1997\)](#) and [Janic \(2010](#): 165–167). Even in a close neighbour of Jaminjung/Ngaliwurru, Wardaman, two of the closed-class verbs in their reflexive form function as inchoative markers ([Merlan 1994](#): 208–210), and there are mediopassive verbs which exhibit the reflexive/reciprocal suffix but do not encode action on self ([Merlan 1994](#): 191). Conversely, some languages, unlike Jaminjung, use different constructions for volitional and non-volitional reflexive action ([Gaby in press](#)). Finally, some Australian languages, for example the Jarragan languages – western neighbours of the Western Mirndi languages – have a paradigm of middle verbs in addition to reflexive forms of transitive verbs (e.g. [Kofod & Palmer 2007](#): 60 for Gajirrabeng). Thus, Australian languages exhibit considerable diversity in their encoding of reflexive meanings as well as the functional range of reflexive and reciprocal constructions.

To conclude, I will address the question of whether the findings for Jaminjung/Ngaliwurru support a number of universals that have been postulated for reflexive constructions (summarised in [chapters/haspelmath](#) [this volume]; the numbering of the universals below follows Haspelmath's list). Only those universals that are applicable in this language will be considered (omitting any that only apply to reflexive pronouns, or only if the language has more than one reflexive construction, for example).

Jaminjung/Ngaliwurru confirms the universal [Universal I] that if a language has a verbal derivational/reflexive voice marker, one of its uses is for autopathic coreference (agent-patient). As the discussion in this paper has shown, this is in fact the only use of the Jaminjung/Ngaliwurru construction apart from the reciprocal use. This reflexive marker is in fact obligatory for autopathic (self-directed) action, and only co-occurs with the intransitive (subject-indexing) person paradigm. This confirms the proposed universal [Universal V] that if a lan-

Eva Schultze-Berndt

guage has non-reflexive bound object person forms, these cannot be used coreferentially with the subject.

Dixon (2012: 141) proposes the generalisation [Universal VI] that if a language has a verbal reflexive marker, it also has a verbal marker for reciprocal constructions. This is also confirmed for Jaminjung/Ngaliwurru: as we have seen, in fact the two markers are identical.

An issue which is not as straightforwardly addressed is whether Jaminjung/Ngaliwurru also confirms Universal III from Haspelmath's (this volume) list. Haspelmath's formulation of this universal is as follows (in the version in Haspelmath 2008: 48: "In all languages, the primary reflexive-marking strategy is at least as long as the primary disjoint-reference-marking strategy."

This universal is based on assumptions about a universal asymmetry in the frequency of coreference (infrequent) as opposed to disjoint reference (frequent) between subject and object. The relative frequencies of reflexive and non-reflexive transitive verbs in a subset of the Jaminjung/Ngaliwurru corpora (247 files, comprising 16149 annotation units) certainly confirms these assumptions: out of 4610 potentially transitive verbs, only 168 (3.6%) were reflexive in form; this figure includes verbs in both reflexive and reciprocal interpretations. The principle of economy therefore demands that the more frequent disjoint-reference-marking strategy should be encoded by shorter, or at least not longer, forms than the less frequent reflexive-marking strategy. A proper application of this universal to Jaminjung/Ngaliwurru would involve a comparison of the length of all disjoint-reference verb forms with that of their corresponding reflexive verb forms while also taking into account the frequency of the respective verbs, which is beyond the scope of this paper. A brief glance at some common forms (42) suggests that the reflexive verb forms are not longer, but also not shorter than the corresponding non-reflexive forms: reflexive marking involves the addition of a suffix, but removes any object-indexing prefix (see §3 for details).

- (42) Comparison of verb forms encoding disjoint reference and coreference
 (3rd person minimal / augmented)
- a. *gani-ma*
 3MIN>3MIN-hit.PST.PFV
 'he/she hit him/her'
 - b. *ganurru-ma*
 3MIN>3AUG-hit.PST.PFV
 'he/she hit them'

5 *The reflexive construction in Jaminjung/Ngaliwurru*

- c. *bururru-ma*
3AUG>3AUG-hit.PST.PFV
'they hit them'
- d. *ga-ma-ja*
3MIN-hit-REFL.PST.PFV
'he/she hit himself/herself'
- e. *burru-ma-ja*
3AUG-hit-REFL.PST.PFV
'they hit themselves (or: each other)'

If we also include the presence of argument noun phrases in the evaluation (which are however optional and often not present in coherent discourse), an expression involving both a subject and object noun phrase is obviously longer than a syntactically intransitive reflexive expression which only allows for a subject noun phrase. Thus Jaminjung/Ngaliwurru at least does not present a counter-example to the above generalisation.

Still, it is of interest to also consider the original formulation of this universal in Comrie (1998: 338), which is more straightforwardly confirmed by Jaminjung/Ngaliwurru: "Languages are likely to have special marked forms that indicate coreference within the most local domain (the predicate and its arguments), possibly extending to more expanded domains."

If the expression "special marked forms" is understood not in terms of length and thus (mechanical) economy of speech production, but rather in terms of the presence of a distinct, specialised construction that signals the unexpected state of affairs, the reflexive suffix in Jaminjung/Ngaliwurru clearly confirms this prediction. One therefore might consider whether the frequency–economy correlation cannot also be met by a conception of economy that is more subtle than mere length of forms, but rather also accounts for the processing load for a distinct construction.

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Eva Schultze-Berndt

Appendix: Jaminjung/Ngaliwurru pronouns

Table 5.2: Jaminjung/Ngaliwurru free and clitic pronouns (minimal-augmented system)

	ABS	OBL	POSS
1MIN	ngayug	ngarrgu	ngarrgina
1+2MIN	mindi	mindag	mindajgina
2MIN	nami	(ngu)nggu	ngunggina
3MIN	ji	nu	nuwina
1UA	yirrinyi	yinyag	yinyajgina
1+2UA	yurrinyi	yunyag	yunyajgina
2UA	gurrinyi	gunyag	gunyajgina
3UA	burrinyi	bunyag	bunyajgina
1AUG	yirri	yirrag	yirrajgina
1+2AUG	yurri	yurrag	yurrajgina
2AUG	gurri	gurrag	gurrajgina
3AUG	burri	burrag	burrajgina

5 The reflexive construction in Jaminjung/Ngaliwurru

Abbreviations

1, 1+2, 2, 3	1st/1st+2nd/2nd/3rd	ITER	iterative
	person	IRR	irrealis
>	subject acting on	LIMIT	limitative ('until')
	object	LOC	locative
ABL	ablative ('[moving] from')	MIN	minimal
		NEG	negative
ALL	allative	OBL	oblique pronominal
AUG	augmented	ORIG	origin, source, cause
COLL	collective 'all together'	POSS	possessor
DAT	dative	POT	potential
DEM	demonstrative (general, distance-neutral)	PROX	proximal
		PFV	perfective
		PRS	present
		PST	past
DIST	distal	RDP	reduplication
DUBIT	dubitative	REFL	reflexive / reciprocal
DYAD	kinship dyad	RESTR	restrictive ('just x, still v')
EMPH	emphatic assertion		
ERG/INST	ergative/instrumental	SEQ	sequential ('then')
EGO	speaker authority	TAG	tag
IMP	imperative	TR	transitive marker
IPFV	imperfective	UA	unit augmented

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Chapter 6

Reflexive constructions in Kuuk Thayorre

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Kuuk Thaayorre is an Aboriginal language of the west coast of Cape York Peninsula, Australia. Self-directed events may be described by a number of distinct Kuuk Thaayorre constructions, which may include one or more of the following forms: a reflexive voice suffix to the verb (-e); a reciprocal voice suffix to the verb (-rr); a reflexive pronoun, a self-intensifier pronoun; or an inherently reflexive verb. Alternatively, overt marking of reflexivity may be absent, with the self-directedness of the event left to inference. In addition to providing an overview of the various forms of reflexive marking in Kuuk Thaayorre, this chapter surveys the range of event types encoded by these forms. For example, the verbal reflexivizer often signals that multiple argument roles map to the subject argument, whether agent + patient, agent + beneficiary, agent + causer, and more. In many cases, it is only a subset (e.g. a body part) or the agent-subject that is acted upon, so the coreference of agent and patient roles is incomplete. In other cases, reflexive forms are used to signal the subject argument's heightened involvement in and/or affectedness by the event, whether or not they are agent of that event. Lastly, just as reciprocal morphology is found in the description of some reflexive events, so too is the verbal reflexivizer employed to describe some reciprocal events. This curious pattern of polyfunctionality may find its origins in the deep history of these forms; the final section of this chapter considers possible cognates and the semantic ranges of reflexive forms across the Pama-Nyungan family and the Australian continent more broadly.

1 Introduction

Kuuk Thaayorre is the language of the Thaayorre people, whose lands include the Aboriginal Shire of Pormpuraaw on the west coast of Australia's Cape York



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Alice Gaby

Peninsula (see Figure ??). It belongs to the Paman subgroup of the Pama-Nyungan language family. While some children are presently growing up as fluent speakers of Kuuk Thaayorre, the various policies promoting English through church, school and government services since colonization have had a dramatic impact upon language transmission. The number of people for whom Kuuk Thaayorre is a language of daily communication is declining, currently estimated at ~200. This chapter draws on narratives, recorded conversations and elicited data, which I compiled in collaboration with more than 30 Kuuk Thaayorre language experts between 2002 and 2008. It also draws on the rich example sentences included in Allen Hall's theses 1968; *In preparation* and a dictionary created by Hall and (Kuuk Thaayorre language expert and teacher) Tom Foote (Foote & Hall 1992). Dictionary examples were neither glossed nor translated in the original; glosses and translations are provided by the present author, and some examples modified to align with the orthography and morphological analysis adopted throughout this chapter. The transcriptions and glosses of examples from the theses of Allen Hall have been likewise modified for orthographic and/or analytical consistency.

Kuuk Thaayorre is a predominantly dependent-marking language. The core syntactic functions are signalled by the case-marking of noun phrases, and optionally by pronominal enclitics to the verb. The redundant apposition of coreferential pronouns and noun phrases is a common rhetorical device. Conversely, core arguments are freely and frequently elided; neither subject nor object need to be overtly realized in the clause. Word order is not employed to distinguish grammatical relations; subject, object and verb may occur in any order. Order within the noun phrase is more fixed, and only the final¹ constituent of an NP inflects for case. For nouns, the ergative case distinguishes transitive subjects from unmarked (absolutive) transitive objects and intransitive subjects. For pronouns, the accusative form of transitive objects is distinguished from the nominative (transitive and intransitive) subject form.

§2 begins with an overview of the Kuuk Thaayorre personal pronominal paradigm (§2.1), before detailing the forms of the reflexive pronouns (§2.2). §2.3 presents the Kuuk Thaayorre self-intensifier pronouns which, while they do not encode reflexivity as such, feature in clauses that would be translated by reflexive clauses in some other languages. The next section (§3) moves to consider verbal coding of reflexivity. Kuuk Thaayorre verbs obligatorily inflect for tense/aspect, in addition to hosting optional person-number enclitics cross-referencing the subject and/or object. Derivational morphology on the verb includes a valency-increasing (causative/ap-

¹Except where the final constituent is an adnominal demonstrative, in which case the penultimate constituent inflects for case.

6 Reflexive constructions in Kuuk Thayorre

plicative) morpheme, two associated motion morphemes, the reflexive voice suffix (§3.1), and the reciprocal voice suffix (§3.2). §4 follows with an overview of the range of event types coded by reflexive forms, including seemingly reciprocal events (§4.6). §5 considers the converse; the use of reciprocal morphology to code self-directed events. Reflexive marking can be said to be optional, inasmuch as there is no one-to-one correspondence between reflexive semantics and the verbal reflexivizer and/or reflexive pronoun. §6 concludes the chapter with a consideration of Kuuk Thaayorre reflexive constructions in the comparative context of Australian Aboriginal languages more broadly.

Alice Gaby

2 Pronouns

2.1 Personal pronouns

The Kuuk Thaayorre paradigm of personal pronouns distinguishes first/second/third person and singular/dual/plural number. Inclusive/exclusive first person pronouns are distinguished for nonsingular numbers. The nominative forms of each person/number/clusivity combination are presented in Table 6.1.

Table 6.1: Kuuk Thaayorre personal pronouns (nominative case forms)

	1st Person	2nd Person	3rd Person
Singular	ngay	nhunt	nhul
Dual	ngal (inclusive) ngali (exclusive)	nhip	pul
Plural	ngamp (inclusive) ngancn (exclusive)	nhurr	peln

Personal pronouns inflect for case, reflecting the role of the pronoun in the clause. As mentioned in §??, the same case form (nominative) is used for both intransitive and transitive subjects. This and the further four case forms are illustrated for the first person singular pronoun in Table 6.2.

Table 6.2: First person singular pronouns (all cases)

nominative	ngay
accusative	nganh
genitive	ngathn
dative	ngathun
ablative	ngathnma

2.2 Reflexive pronouns

The etymology of reflexive pronouns is evident from their formal resemblance to the corresponding possessive and nominative pronoun forms, as demonstrated in Table 6.3:

6 Reflexive constructions in Kuuk Thayorre

Table 6.3: Singular pronouns (nominative, genitive and reflexive forms)

	Reflexive	Possessive	Nominative
1SG	ngathnay ~ ngathney	ngathn	ngay
2SG	nhangknunt	nhangkn	nhunt
3SG	nhangnul	nhangn	nhul

Table 6.3 represents the full set of attested reflexive pronouns, which can be said to distinguish number only inasmuch as they require a singular interpretation. There are no nonsingular (dual or plural) reflexive pronouns; reflexive clauses with nonsingular subjects are coded as such by other means (e.g. the verbal reflexivizer, verbal reciprocalizer, a lexical reflexive verb, but not a non-reflexive object pronoun), or left to inference (see, e.g., Haspelmath, this volume). (In special cases, a singular number reflexive pronoun appears in a clause with a non-singular subject, see §5 discussion.)

Reflexive pronouns may be the sole marker of a reflexive clause (1), or they may combine with the verbal reflexivizer (or reciprocalizer, §5) to reinforce the reflexive meaning (2):

- (1) *ngay wash-m rirk-r ngathney*
 1SG(NOM) wash-TR DO-PST.PFV 1SG.REFL
 ‘I washed myself.’ [GJ25Oct2002 Elicitation]
- (2) *ngay yup ngathnay rinth-e-nha*
 1sg(NOM) soon 1SG.REFL squeeze-REFL-SBJV
 ‘I want to squeeze my [blackhead].’ (Hall In preparation: 121)

Indeed, due to the frequent repetition of noun phrases noted above, it is not unusual for the same reflexive pronoun to appear more than once in the same clause, with or without a co-occurrent verbal reflexivizer, as in (3):

- (3) *nhul nhangnul nhaanhath-e nhangnul koowmiing*
 3SG(NOM) 3SG.REFL look.at-REFL:NPST 3SG.REFL face(ABS)
 ‘he is looking at his face (in a mirror).’ (Hall In preparation: 379)

The combination of Kuuk Thaayorre’s flexible constituent order, the ambivalent transitivity of reflexive clauses (§3.1), the frequent apposition of coreferential

Alice Gaby

noun phrases, and /or argument ellipsis, makes it difficult to establish whether reflexive pronouns occupy subject or object (/oblique) position. Their formal resemblance to the nominative case personal pronouns might suggest they are apposed to the subject argument. However, this is insufficient reason to posit Kuuk Thaayorre as an exception to the strong typological tendency for reflexive pronouns to fill the object or oblique position.

2.3 Self-intensifier pronouns

Kuuk Thaayorre intensifier pronouns are formed by the reduplication of the nominative case form of the corresponding personal pronoun plus suffixation of a rhotic (either a retroflex approximant or tap/trill, depending on the pronoun). These pronouns do not encode reflexivity as such. However, events that are described by means of reflexive clauses in other languages may be described by clauses including an self-intensifier pronoun in Kuuk Thaayorre. In particular, self-intensifiers may be used to stress the lack of involvement of any external agent in ('extroverted') events that typically involve transfer of energy. For example, (4) was uttered in the description of an elicitation video stimulus that presented a piece of cloth spontaneously tearing down the middle, as if by magic (note: the translation is given in the original speaker's own words):

- (4) *mimp ith nhulnhulr thaariic-r*
 cloth(ABS) that 3SGEMPH tear-PST.PFV
 'that piece of material is tearing up itself.' [EN03Dec2002 Elicitation Cut& Break8]

While the inanimate piece of cloth does not truly act upon itself in a canonical reflexive sense, it is notable that the speaker employs a reflexive clause in her English description of the same clip.

3 Verbs

The primary means of coding reflexivity are the reflexive pronouns (introduced above; §2.2) and the verbal reflexivizer (§3.1). However, self-directed actions may be also encoded by reciprocal morphology (§3.2) and both non-reflexive and inherently reflexive verbs (§3.3).

6 Reflexive constructions in Kuuk Thayorre

3.1 Verbal reflexivizer

The Kuuk Thaayorre reflexive voice marker (or “reflexivizer”) takes the form of a derivational suffix with allophones *-e* and *-ey*. It occupies the same position in the verb as the reciprocalizer and valency-increasing morpheme, immediately following the verb root (plus verbalizer, for denominal verbs):

- (5) *yuur yak-ey-r*
 hand(ABS) cut-REFL-PST.PFV
 ‘[she] cut [her] hand.’² [EF15Dec2002 Elicitation Cut& Break18]

The reflexivizer must precede any tense/aspect/mood inflection and, where present, the associated motion suffixes. The reflexivizer and valency-increasing morpheme may combine in either order (21), but the reflexivizer and reciprocalalizer do not co-occur in the same verbal word (see Gaby & language experts 2017: 292 ff.):

- (6) *ngay ngathney mungka-n-ey-r merrethen*
 1SG(NOM) 1SG.REFL consume-v[^]-REFL-PST.PFV medicine(ABS)
 ‘I made myself swallow the medicine.’ (Hall In preparation: 392)

The effect of reflexive derivation on clausal transitivity is not straightforward. In transitive clauses, a subject NP receives ergative case-marking. Following reflexivization, this subject NP is typically in unmarked absolutive case, as in the following example:

- (7) *kuta ngith pathath-e*
 dog(ABS) that bite:RDP-REFL:NPST
 ‘that dog is biting himself.’ [AC21Aug2002 Conversation]

However, in other cases the ergative marking is retained. This is usually the case when the clause includes an overt object (as in 8) or instrument (as in 9, note that instrumental adjuncts also receive ergative case-marking in Kuuk Thaayorre).

- (8) *John-i yuur theerng-ey-r*
 John-ERG hand(ABS) hit-REFL-PST.PFV
 ‘John hit himself on the hand.’ [GJ11Jan2004 Elicitation]

²Note that the body part apposition construction, in which the body part *yuur* ‘hand’ is here apposed to the whole / possessor / subject in the same case, is analogous to the ‘external possession’ constructions of other languages. This construction is considered further in §4.3.

Alice Gaby

- (9) *John-i yuur-u theerng-ey-r*
 John-ERG hand-ERG hit-REFL-PST.PFV
 ‘he hit himself with [his own] hand.’ [GJ11Jan2004 Elicitation]]

However, it is not as simple as the presence /absence of an overt object argument determining the presence /absence of ergative marking on the subject. In examples like (10), the subject is in absolute case in spite of the presence of an absolute-case object NP, *yiin* ‘itch’.

- (10) *kuta ith yiin=p pathath-e*
 dog(ABS) that itch(ABS)=PRAG bite:RDP-REFL:NPST
 ‘that dog keeps biting itself.’ [AC21Aug2002 Conversation]

Mixed indicators of transitivity are found in reciprocal as well as reflexive clauses in Kuuk Thaayorre and many other Australian Aboriginal languages, as discussed in detail by EvansEtAl2007. ‘Optional ergativity’—i.e. the ergative marking of some intransitive subjects and/or lack of ergative marking of some transitive subjects—is also a broader feature of Kuuk Thaayorre grammar (see Gaby 2008b; 2010).

3.2 Verbal reciprocalizer

The reciprocalizer, *-rr*, occurs in the same position in the verb as the reflexivizer (§3.1). While it primarily functions to encode symmetric (“reciprocal”) events, such as (11), the verbal reciprocalizer is also found in the description of self-directed (“reflexive”) events, such as (12) and (13). (Note that (13) involved a trivalent verb, where the reciprocalizer binds the direct object, what is shown, rather than the recipient, to whom it is shown).

- (11) *Harry pul Micki-n melnkelnkarr nhaath-rr-nan*
 Harry DU(NOM) Micky-ERG tomorrow see-RCP-GO&
 ‘Harry and Micky will see each other tomorrow.’ [EF15Dec2002
 Elicitation]
- (12) *peln nhangnma koowmiing reepon-rr-nam*
 3PL(NOM) 3SGABL face(ABS) hide-RCP-P.IPFV
 ‘they were hiding their faces from him.’ (Hall In preparation: 392)
- (13) *iirra thakrwuthurr yarr meer-en-rr-nan pam pork-a*
 to.there promptly go-IMP show-RCP-GO& man big-DAT
 ‘go and report to the boss immediately.’ (Foote & Hall 1992: 333)

6 Reflexive constructions in Kuuk Thayorre

Further, a number of lexicalized, semantically reflexive verbs exhibit what appears to be a relic of the verbal reciprocalizer. Compare, for example, *wothoth* ‘wipe’ versus *wothothrr* ‘wash oneself’, or *puunm* ‘pity’ versus *puunmrr* ‘grieve’ (Foote & Hall 1992: 310). §5 describes the range of self-directed actions marked by the reciprocalizer.

3.3 Non-reflexive and inherently reflexive verbs

Introverted verbs expressing autopathic actions are typically expressed by non-reflexive clauses. For example, descriptions of dressing are never marked by either the pronominal or verbal reflexivizer, but rather by means of the verb *rok* ‘enter’. In its basic usage, this verb’s argument structure comprises an intransitive subject (encoding the theme) and dative-marked oblique argument (encoding the goal), as seen in example (14) below. In descriptions of dressing and adornment, however, the agent-theme is encoded as intransitive subject (in nominative/absolutive case) but the article of clothing/adornment is encoded as direct object (in absolute case). This verb is used even in cases such as (15), where the agent-subject does not truly ‘enter’ the glasses in the way that one enters a dress or coat:

- (14) *hall-ak ulp=okun rok-nhan*
 hall-DAT DEM:ADR.PROX=DUB enter-GO& :NPST
 ‘they might go into the hall [in a cyclone].’ [GJ03Apr2004 Conversation]
- (15) *nhul meer+kay rok-r*
 3SGNOM eye+metal(ABS) enter-PST.PFV
 ‘he put on glasses.’ [GJ18Jan2004 Elicitation]

In conservative varieties of Kuuk Thaayorre, autopathic events of washing are described by means of the non-reflexive compound verbs *koo+munth* ‘wash one’s own face’ (cf. *koow* ‘nose, upper face’, *munth* ‘sink’) and *minc+munth* ‘wash oneself’ (cf. *minc* ‘body’). Younger speakers, however, commonly employ the English loan *wash* (paired with the light verb obligatory for loan verbs) and a reflexive pronoun, as in (1) above. Kuuk Thaayorre possesses several “inherently reflexive” verbs; extroverted and introverted verb roots ending in /e/, which is likely a frozen relic of the verbal reflexivizer. For example, *koope* ‘wait’; *kongke* ‘copulate’ (Foote & Hall 1992: 218); *ngaathe* ‘feel, experience’; and *wene* ‘become’.

Alice Gaby

4 Reflexive functions

Across all its uses, the reflexive pronoun marks that the agent-subject is affected by their own actions. No such monosemous definition is available for the verbal reflexivizer, which spans a range of functions as outlined below. The reflexive pronoun appears with many of these functions, too, but always contributing the meaning that the agent is affected by their own actions. We begin in §4.1 with a consideration of the core reflexive function; indicating coreference of agent-subject and patient. We then move to consider cases of coreference between the agent-subject and three different oblique argument roles; the beneficiary/maleficiary (§??), causer (§4.2.1), and recipient (§4.2.2). §4.3 details the reflexive coding of events in which the agent-subject moves their whole body, or acts upon one body part in particular. §4.4 considers the use of reflexive marking to emphasize that the agent-subject is intensely involved in and/or affected by the action they take. §4.5 surveys the passive-like function of reflexive marking to foreground an affected patient (in the absence of any syntactic passive operation). Lastly, §4.6 demonstrates the use of reflexive morphology to encode apparently reciprocal events.

4.1 Coreference of agent-subject and patient

Under the working definition of reflexivity adopted here, the core function of reflexive marking is to indicate coreference of the two argument roles that would map to the subject and direct object of the non-reflexivized verb respectively. Thus, in example (16), the one man both touches and is touched, and in (17) the one man both pities and is pitied:

- (16) *nhul yarriy katp-ey-r, ‘iitharrkoo, kam inh!’*
 3SG(NOM) thus grasp-REFL-PST.PFV wow blood DEM:SP.PRX
 ‘he touched himself like this [and realized] ‘hey, there’s blood here!’’
 [GJ03Feb2004 Narrative DarwinTrip]
- (17) *nhangnul puunm-rr-r*
 3SG.REFL pity-RCP-PST.PFV
 ‘[he] pitied himself.’ (Foote & Hall 1992: 310)

This subject-object coreference may be coded by the verbal reflexivizer (16), reflexive pronoun (22 above), both (2 above) or some other combination of markers, such as reflexive pronoun plus verbal reciprocalizer (17).

6 Reflexive constructions in Kuuk Thayorre

4.2 Coreference of agent and an oblique role

4.2.1 Agent + beneficiary / maleficiary

As well as signalling the coreference of agent and patient arguments, the reflexive pronoun may be used to indicate that the agent-subject is also the beneficiary of their own action. This function, illustrated by example (18), is only attested for the reflexive pronoun, not the verbal suffix:

- (18) *ngay ngok mi'irr ngathaney*
 1SG(ERG) water(ACC) pick.up.PST.PFV 1SG.REFL
 'I got myself some water.' (Hall In preparation: 379)

Attribution of the converse maleficiary role to the agent-subject may likewise be indicated by the pronominal, but not verbal, reflexivizer:

- (19) *plate ulp nhangnul thiika-rr*
 plate(ACC) dem:ad.prx 3SG.REFL break-PST.PFV
 '[that kid] broke his own plate.' [GJ12Jan2004 Elicitation]

On first glance, the reflexive pronoun in (19) might be thought to mark the agent-subject as the possessor of the patient, rather than a negatively-affected maleficiary. However, the coreference of agent-subject and possessor of the patient-object is not signalled by reflexive marking where the agent is not also beneficiary or maleficiary. Such possessors are encoded by the standard possessive pronouns, as in (20):

- (20) *pamthaaw nhangn kaar nhaawr nhul?*
 friend 3SGPOS(ABS) NEG see:PST.PFV 3SG(NOM)
 'didn't he see his friends?' (Hall In preparation: 65)

4.2.2 Agent + causer

The Kuuk Thaayorre valency-increasing morpheme (glossed "V[^]") makes intransitive verb roots transitive and transitive verb roots ditransitive by adding an argument with a semantic role determined by the verb root. Where it is a causer that is introduced, the causer (now encoded as subject) may be marked as coreferential with the causee-agent by means of the verbal reflexivizer, as in (21):

- (21) *ngay ngathney mungka-n-ey-r merrethen*
 1SG(ERG) 1SG.REFL consume-V[^]-REFL-PST.PFV medicine(ACC)
 'I made myself swallow the medicine.' (Hall In preparation: 392)

Alice Gaby

4.2.3 Agent + recipient

My corpus contains no examples of the verbal reflexivizer being used to mark coreference of agent-subject and recipient, this is a function generally achieved by means of the reflexive pronoun, as seen in the following example:

- (22) *nhul nhangnul riiranmrr yik-r*
 3SG(NOM) 3SG.REFL alone say-PST.PFV
 ‘he talks [sic] to himself alone.’ (Hall In preparation: 503)

4.3 Body-part and whole body actions

Many reflexive clauses describe the agent-subject acting upon a part of their own body. There is thus only partial coreference of agent and patient arguments in examples like (23):

- (23) *pam-al ith koow katpatp-e*
 man-ERG that nose(ABS) grasp:RDP-REFL:NPST
 ‘that man is holding [his] nose.’ [FT10Feb2004 RcpPilot8]

The body part may have the role of instrument (aligning with the agent), rather than patient, as seen in examples (8)–(9) above and (24) below. As with core reflexive clauses, the partial coreference of agent and body part patient/instrument may be signalled by a range of forms (alone or in combination), including the verbal (23) and pronominal (24) reflexivizers:

- (24) *parr-an nhul yangkar wiiyth thaa+rinthi-rr*
 child-ERG 3SG(NOM) leg(ABS) sore(ABS) mouth+squeeze-PST.PFV
yuur-u nhangnul
 hand-ERG 3SG.REFL
 ‘the boy squeezed himself on the leg with his finger.’ (Hall In preparation: 379)

Events which may be framed as an agent’s reflexively acting upon their own body part in other languages are instead expressed via same-case apposition of the noun phrases representing whole and part in Kuuk Thaayorre. Thus in (25), both the whole dog (as agent) and his head part (as theme) are encoded by distinct noun phrases in the nominative case assigned to the subject of *rok* ‘enter’ (see §3.3 for further discussion of this verb). (For a detailed description of part-whole apposition in Kuuk Thaayorre, see Gaby & language experts 2017: 277 ff.):

6 Reflexive constructions in Kuuk Thayorre

- (25) *kuta nhul paant glass-ak rok-r*
 dog(NOM) 3SG(NOM) head(NOM) glass-DAT enter-PST.PFV
 ‘the dog put his head into the jar.’ (MF17Sep2002 Narrative FrogStory)

Actions affecting a body part are not always clearly distinguishable from actions affecting the whole body. For example, the subject participant of (16) above only touched one part of himself (his arm), but this body part was not explicitly mentioned. In other cases, such as (26), it is clearly, though implicitly, the agent’s whole body that is affected by their action:

- (26) *nhunt koorrkorr thaat pirk-rr ngathun*
 2SG(NOM) behind:RDP wide push-RCP:IMP 1SGDAT
 ‘move yourself along there a bit for me.’ (Hall In preparation: 446)

4.4 Intensification / affected agent

The etymological connection between self-intensifiers and reflexive pronouns has been well documented (Faltz 1985; König & Siemund 2000), though we have already seen that the Kuuk Thaayorre reflexive pronouns are distinct from the paradigm of self-intensifier pronouns (§2.2 and §2.3). The verbal reflexivizer, however, can be used with an effect of intensification. Compare, for example, (27) below with the English reflexive expression ‘to eat oneself sick’:

- (27) *nhunt thaaw+murm paath-ey-r may-im*
 2SG(NOM) mouth+sink bite-REFL-PST.PFV VEG-ABL
 ‘You really hogged into that food [i.e. ate greedily] you did.’ (Hall In preparation: 504)

4.5 Medio-passive

Unsurprisingly, given the ergative-absolutive case frame of noun-headed NPs and the free ellipsis of core arguments, Kuuk Thaayorre has no syntactic operation akin to a passive. However, the reflexive voice may be employed to foreground the affected patient in a passive-like construction (Geniušienė 1987; Kemmer 1993), as seen in examples (28)–(29):

- (28) *nhul Jesus wernka yongk-e-nham*
 3SG(NOM) Jesus(ABS) middle hang-REFL-PST.IPFV
 ‘Jesus was hanging in the middle.’ (Hall In preparation: 137)

Alice Gaby

- (29) *yangan kaal-ak kath-ey-r*
 hair(ABS) ear-DAT bind-REFL-PST.PFV
 ‘[his] hair was tied over [his] ears.’ [GJ15Oct2002 Elicitation BowPed46]

Note that the (unmarked) absolutive case form of *yangan* ‘hair’ in (29) permits two syntactic analyses. Under the first, *yangan* is the direct object representing the patient affected by the actions of some unmentioned agent (i.e. ‘[someone] tied [his] hair over [his] ears’). Under the second, *yangan* is either the intransitive subject, possibly in apposition to an elided NP representing the whole agent-subject (i.e. [he] tied [his own] hair over [his] ears’).

4.6 Reciprocal use of the reflexivizer

Where a reflexive-marked verb combines with a non-singular subject, it is not necessary that both agent and patient roles be ascribed to each participant encoded as subject, it is sufficient that just one participant is both agent and patient of the action described. Example (30), for instance, could describe a single woman painting both herself and her sister, according to the language expert consulted:

- (30) *ngali muul-thurr werk-ey-r*
 1du:excl(NOM) white.ochre-ERG rub-REFL-PST.PFV
 ‘we two painted ourselves and/or each other with white ochre.’
 [EF15Dec2002 Elicitation – modelled on Hall In preparation]

This ‘collective reflexive’ usage may be a bridging context for the use of the verbal reflexivizer to describe apparently reciprocal events. In these events, while each subject participant is both agent and patient of the action described, they are not patient of the same subevent of which they are agent. That is to say, they do not act upon themselves, but rather one another. In (31), for example, each of the two people encoded by the dual subject pronoun leans upon the other, not upon him/herself:

- (31) *pul mut-u thaayooyongk-e*
 3DU(NOM) back-DAT lean:RDP-REFL:NPST
 ‘they are leaning (on each other) back to back.’ [FT10Feb2004 Elicitation RCP12]

6 Reflexive constructions in Kuuk Thayorre

- (32) *pul runc-ey-r*
DU(NOM) impact -REFL-PST.PFV
‘they two collided with one another.’³ [FT10Feb2004 Elicitation RCP22]

Such events typically receive reflexive marking only where one or more of the following conditions are met: (i) there is close physical contact between participants, or intimate non-physical contact (such as staring into one another’s eyes); (ii) participants synchronize or closely coordinate their actions; (iii) there is a blurring of roles (it is unimportant and/or unspecified which of the subject participant(s) play the roles of agent and/or patient). For further examples and discussion see Gaby2011.

5 Self-directed actions marked by the reciprocalizer

As mentioned in §4.5, the verbal reflexivizer may appear in clauses in which an external agent is backgrounded, unimportant or absent. It is perhaps for this reason that self-directed events in which the agent-subject acts upon themselves with unexpected or heightened agency are marked by reciprocal, rather than reflexive, voice marking on the verb. For example, a woman’s breaking her foot by accidentally treading in a hole or knocking a heavy object onto it might be described by means of the verbal reflexivizer. But a woman taking her foot in her hands and deliberately breaking it is described by pairing the verbal reciprocalizer with the reflexive pronoun:

- (33) *paanth-u thamr nhangnul thiik-rr-r*
woman-ERG foot(ABS) 3SG.REFL break-RCP-PST.PFV
‘the woman broke her own feet.’ [GJ11Jan2004 Elicitation]

Similarly, a typical event of falling or lying down would be described by intransitive verb forms such as *wont* ‘fall’ or *wun* ‘lie’, but a pragmatically unusual event of throwing oneself to the ground receives reciprocal marking paired with the reflexive pronoun:

- (34) *nhunt nhangknunt thunp-rr ii-rr-kop raak-un*
2SG(NOM) 2SG.REFL throw-RCP:IMP there-towards-below ground-DAT
‘throw yourself down onto the ground!’ (Foote & Hall 1992: 360)

³The verb root *runc* denotes a broad range of events of impact, including stabbing, kicking, crushing, falling to the ground, and more.

Alice Gaby

It is possible that revealing one's own weaknesses (as in 35) is more unusual than pointing out the weaknesses of others. However, in the Bible translation work conducted by Allen Hall and Tom Foote (on which Hall's two theses and [Foote & Hall 1992](#) were based), at least, the reciprocal verb stem *kunanpunrr* is relatively high frequency, with meanings including 'testify', 'repent', 'confess', 'admit', and 'give an account of':

- (35) *ngamp yiirryirram nhanganul kunanpun-rr-nan nhangun*
 1PL:INCL(NOM) severally 3SG.REFL reveal-RCP-GO& :NPST 3SGDAT
 'We each will give an account of ourselves to Him.' ([Hall In preparation: 392](#))

It may not be possible to motivate each instance of reciprocal marking of self-directed events in terms of pragmatic unusualness, as some such verb stems (such as *kunanpunrr*) seem at least partially lexicalized.

Example (35) is interesting for another reason. It was mentioned in §2.2 that reflexive pronouns—which are exclusively singular in number—may combine with non-singular subject NPs. In (35), the plural subject pronoun (*ngamp* 'we') combines with a singular reflexive pronoun (*nhangnul* 'him/herself') to stress that each participant is both agent and patient of a single subevent. The inclusion of the reflexive pronoun is necessary not only to stress the strict, individual self-directedness of the event described, but also to differentiate the intended reflexive reading from the basic reciprocal meaning suggested by the verbal morphology.

See [Gaby 2011](#); [Gaby \(2008a\)](#) for a more detailed consideration of the relationship between the verbal reflexivizer and verbal reciprocalizer and the events they encode.

6 Kuuk Thaayorre in context

The forms and functions of reflexive marking in Kuuk Thaayorre are not unusual in the local typological context. Among Australian Aboriginal languages, it is commonplace for verbal reflexivizers to be highly polysemous, frequently including reciprocity within their semantic range ([Gaby In press](#)). It is likewise common for a reflexive pronoun to optionally combine with a verbal reflexivizer to force a strictly reflexive interpretation. These similarities are not attributable to shared inheritance, however. Though a proto-Australian "reflexive/intransitivizer suffix" with the form *-DHirri-y⁴ was proposed by [Dixon \(1980: 447\)](#), a

⁴The digraph 'DH' here represents a laminal stop at either dental or palatal place of articulation.

6 Reflexive constructions in Kuuk Thayorre

common ancestor to Australia's 250+ Indigenous languages remains elusive and controversial (see, e.g., [Harvey & Mailhammer 2017](#)). The Kuuk Thaayorre verbal reciprocralizer, *-rr*, might be a reflex of *DHirri-*y*, along with any number of synchronic reflexive and/or reciprocralizers that include the tap/trill segment (for example Arrernte *-rre*; Bāgandji *-dhirri*; Bininj Gun-Wok *-rr*; Djabugay *-nydyirri*; Jiwari *-rr*; Martuthunira *-yarri*; Panyjima *-rr*; Rembarrnga *-rroe*; Wirangu *-ri*). So too might the Kuuk Thaayorre verbal reflexivizer, *-e*, ultimately derive from the high vowel + palatal glide at the end of Dixon's reconstructed form, along with reflexive morphemes in other Australian languages which take the form of a high front vowel/glide (for example, Bunuba *-iy*; Djabugay *-yi*; Guugu Yimidhorr *-:yi*; Kunbarlang *-yi*; Ndjébbana *-yi*; Ngandi *-i ~ -yi*). In the absence of a detailed account of sound change and genealogical relatedness of the relevant languages, though, there is insufficient support for asserting the cognacy of these mono- or bi-segmental morphemes.

The etymological source of the Kuuk Thaayorre reflexive pronoun is more transparent. As outlined in §[2.2](#), these pronouns are formally related to both the nominative-form personal pronouns and the possessive pronominal paradigm. This may suggest an original bridging context in which the agent-subject encoded by the nominative-form pronoun acts upon a part or the whole of their body, encoded (at least in part) by the possessive pronoun, or in which the agent-subject is coreferential with the recipient/beneficiary/maleficiary of their action, coded as possessor. Unlike other reflexive pronouns (both in Australia and beyond), the contrast with a distinct set of self-intensifier pronouns rules out the latter as an etymological source. The Kuuk Thaayorre reflexive pronouns are also notable for their being limited to singular number, apparently linked to their strictly entailing that each agent-subject participant acts upon him/herself individually.

7 Acknowledgments

I gratefully acknowledge the collaboration of the many Kuuk Thaayorre language experts who contributed to the data cited and to my understanding of the underlying grammar analysed herein. The particular examples presented in this chapter were contributed by the following language experts, whose initials are provided in the source code beside the relevant example: Alfred Charlie; Elizabeth Foote; Myrtle Foote; Albert Jack; Gilbert Jack; Elizabeth Norman; Freddy Tyore. I am also grateful to the editors and reviewers for their helpful comments.

Alice Gaby

Abbreviations

1	first person	EMPH	emphatic
2	second person	ERG	ergative
3	third person	GO&	associated motion
ABL	ablative		verbal suffix
ABS	absolutive	IMP	imperative
ACC	accusative	INCL	inclusive of addressee
V [^]	valence	NOM	nominative
	increasing	NPST	nonpast
	suffix	P.IPFV	past imperfective
DAT	dative	PL	plural
DEM:ADR.PROX	addressee-	POS	possessive pronoun'
	proximal	P.PFV	past perfective
	adnominal	PRAG	pragmatic enclitic
	demonstrative	RCP reciprocal	
DEM:SP.PRX	speaker-	RDP	reduplicated
	proximal	RFL	reflexive
	adnominal	SG	singular
	demonstrative	TR	transitive suffix (to loan coverbs)
DU	dual		

The following abbreviations are employed in glossing example sentences:

Generic nouns (e.g. *may* 'VEG vegetable') and the light verb *rirk* 'do' are glossed in small caps.

Part III

North America

Chapter 7

Reflexive constructions in Warlpiri

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Warlpiri is an Australian language which belongs to the Ngumpin-Yapa subgroup of Pama-Nyungan. Coreference between the subject and another argument of a finite clause – object or applicative – is marked by an anaphoric clitic in the auxiliary complex substituted for the person/number and case-marking clitic that would mark features of the corresponding non-subject argument disjoint in reference with the subject. Evidence that reflexive clauses with transitive verbs maintain their transitivity includes ergative case-marking of subject NP and the association of a part NP with the non-subject role. Formally similar pseudo-transitive reflexive clauses which express a change of state in a single argument are shown to be limited to situations in which the internal state of a being is altered by some external situation beyond that being's control. The role of the anaphor within complex NPs is compared with its role within the finite clause. Within a finite clause a strict coreference relation is limited to that between the subject and the non-subject role represented by the anaphor. Strict coreference between an argument of a matrix finite clause and an argument within a non-finite clause embedded within the finite clause is limited to the phonologically null subject of the non-finite clause. Given the lack of an anaphor in non-finite clauses, strict coreference between subject and object cannot be expressed. Where coreference is possible between an NP external to a non-finite clause and a pronoun internal to it, a disjoint reading is always available.



Mary Laughren

1 Introduction

1.1 Classification, distribution and dialects of Warlpiri

Warlpiri is one of the best documented Australian languages and is also one of the few indigenous Australian languages still being acquired by children.¹ According to the 2016 Australian Census, 2,276 people indicated that they spoke Warlpiri at home.

The traditional Warlpiri heartland is in the Tanami Desert in Australia's Northern Territory (see Figure 7.1). The language most closely related to Warlpiri is Warlmanpa, which borders Warlpiri on the northeast. These two languages, Warlpiri and Warlmanpa, form the Yapa branch of the larger Ngumpin-Yapa group of languages traditionally spoken on territory extending north and west from Warlpiri and Warlmanpa land (McConville & Laughren 2004; Meakins et al. 2022). Warlpiri is the southernmost member of the Ngumpin-Yapa group of languages which belong to the large Pama-Nyungan language family spoken over most of the continent. However, along their northern border, Ngumpin languages are in direct contact with non-Pama-Nyungan languages (see EvansEd2003; Dixon 2002).

Several dialects of Warlpiri can be identified reflecting to some extent the languages of neighbouring communities. These dialects vary mainly in vocabulary, with some minor phonological and grammatical differences which do not impact on the phenomena described herein.²

Some elementary facts about Warlpiri clause structure and morphology and the role and form of NPs are presented in §1.2. The remaining sections are organised as follows: §2 sets out the pronominal system and the relationship between "free" pronouns and the markers of person and/or number in the auxiliary complex and the role of the anaphoric non-subject enclitic central to the reflexive construction in finite clauses; §3 explores a range of relationships within finite reflexive clauses, while NP-internal reflexive relationships are discussed in §4; constraints on coreference within non-finite clauses are briefly discussed in §5; some uses of formal reflexive structure in clauses with monadic predicates are touched on in §6; the Warlpiri reflexive construction is placed in a wider Australian context in §7.

¹See the bibliography of work on Warlpiri created and maintained by David Nash at <http://www.anu.edu.au/linguistics/nash/aust/wlp/wlp-lx-ref.html>.

²The language described herein is traditional Warlpiri which is quite distinct from the variety dubbed "Light Warlpiri", which has developed among younger speakers at Lajamanu O'Shannessy 2005; 2006; 2013.

7 Reflexive constructions in Warlpiri



Figure 7.1: Warlpiri and Ngumpin-Yapa languages in relation to non-Pama-Nyungan Mirndi languages (Brenda Thornley 2017).

1.2 General remarks on Warlpiri morphosyntax

1.2.1 Clause structure

Warlpiri finite and non-finite clauses are quite distinct in structure. The core constituents of a finite clause are the auxiliary and the predicate; the latter may be verbal (1a) or nominal (1b).³

- (1) a. *Nya-ngu=lu=jana.*
 see-PST=PL.S=3PL
 ‘They saw them.’⁴

³Unless otherwise indicated, the source of the Warlpiri sentences is the author’s field notes and recordings.

⁴Suffix boundaries are marked by “-” and enclitic boundaries by “=”. The subject clitic is glossed “s”, but the grammatical function of the non-subject clitic is not glossed as it may mark the person and/or number and case features of several non-subject grammatical functions (discussed in some detail in §2).

Mary Laughren

- b. *Jaja=rna=ngku.*
 grandmother=1s=2
 'I am grandmother to you.'

In verbal clauses, the auxiliary consists of one of two base morphemes: *ka* 'present indicative' only with the non-past verb form as in (3a) and (3b), and *lpa* 'imperfective' with past and unrealis verbal inflections as in (11a) and (11b). Each of these contrasts with its absence as in (1a). A "zero" base is compatible with all verbal inflections and is obligatory with a non-verbal predicate as in (1b). The tense, aspect and mood (TAM) properties of a clause are marked by the auxiliary base in conjunction with verbal inflectional suffixes, and with a complementiser to which, if present, the auxiliary encliticises, as in (5a).

Subject and non-subject enclitic pronouns attach to the auxiliary base (Hale 1973). The auxiliary complex typically follows the clause-initial phrase, which may be of any category. Where the auxiliary base is phonologically null, as in (1a) and (1b), the pronominal enclitics attach directly to the clause initial phrase.⁵

In a clause with an overt complementiser, the auxiliary complex must encliticise to the complementiser; this combination may occupy initial or second position in the clause. The choice of clause initial phrase is mainly determined by discourse factors (see Mushin & Simpson 2008; Swartz 1991), although the presence of the negative complementiser *kula* excludes the inflected verb from the clause initial position. In finite clauses with a nominal predicate, there is no auxiliary base, or complementiser, so the pronominal clitics attach to the clause initial phrase as in (1b) in which the combination of subject clitic =*rna* and dative clitic =*ngku* encliticise to the nominal kin predicate *jaja* 'mother's mother'. Clauses with a nominal predicate lack markers of tense, aspect or mood (TAM) features and have a present or aorist interpretation. To overtly express TAM values, a copula-like "stance" verb must be added which converts the clause from a nominal one to a verbal one.⁶

Non-finite clauses, like finite clauses with a nominal predicate, lack TAM markers and have no auxiliary base. They also lack enclitic pronouns, which has implications for the expression of coreference. In this respect, Warlpiri differs from

⁵Third person subjects are unmarked. The clitic =*lu* in (1a) marks a plural subject and may combine with first or second person subject clitics. The dual clitic =*pala* works the same way. While some clitics (such as =*jana* in (1a)) mark both person and number features as well as case, others only mark features of either person or number – not both. Where only person features are marked, the absence of accompanying number marking typically defaults to a singular reading. Hale (1973) provides a full account of Warlpiri person and number marking clitics.

⁶For more detail on basic clause structure in Warlpiri see Hale (1982).

7 Reflexive constructions in Warlpiri

Western Romance languages in which accusative and/or dative person and number marking clitics including an anaphoric clitic occur in both finite and non-finite clauses. Unlike a nominal, a bare infinitive verb cannot function as the main predicate of a finite clause; it must host a complementiser suffix which signals the relationship between the non-finite clause and other constituents of the matrix finite clause in which it is embedded (see Hale 1982; Laughren 2017; Nash 1986; Simpson & Bresnan 1983; Simpson 1991; *inter alia*).

1.2.2 Noun phrases

Warlpiri noun phrases are case-marked. Case is marked by a suffix (or its absence) which is obligatory on the final word of a phrase, although other words in a phrase may also be case-marked. In finite clauses, NPs whose number and person features are encoded by the subject pronominal enclitic are either marked by the ergative grammatical case suffix, e.g. *karnta-ngku* as in (2b-d), or they are unmarked, e.g. *karnta* in (3b), depending on the verb.⁷ In finite nominal clauses, the subject NP is always unmarked. Similarly, NPs whose number and/or person features are marked by the non-subject pronominal enclitic are either unmarked, e.g. *wati* ‘man’ in (2b-d) or marked with dative case, e.g. *wati-ki* in (3b).⁸ Features of Warlpiri syntax that have been widely discussed in the linguistic literature are the grammatical optionality of NPs corresponding to the predicate’s arguments, and the relative lack of constraints on word and phrase order, especially within finite clauses (e.g. Hale 1983; Jelinek 1984; Laughren 2002; Legate 2002; Mushin & Simpson 2008; Nash 1986; Simpson 1991; *inter alia*).⁹ These features are illustrated by the contrast between the (2a) and (2b-d) and between (3a) and (3b), and in other examples herein.

In the sentences in (2) and (3) the subject and object NPs refer to distinct entities.

- (2) a. *Nya-ngu=lu=jana*.
 see-PST=PL.S=3PL
 ‘They saw them.’

⁷The unmarked subject or object NP is traditionally said to be in the absolute (ABS) case. In glossing Warlpiri examples, I omit this feature since it is redundant.

⁸Legate (2002) argues that the dative-marked object of verbs like *wangka-mi* ‘speak, talk’ is a “low” applicative internal to the inner VP like the unmarked object of verbs with an ergative subject although in a different relationship to the verb. This “low” object-like applicative contrasts with the “upper” applicative generated above the inner VP but inside the higher vP. Simpson (1991) also distinguishes these grammatical functions within an LFG framework.

⁹See also Pensalfini (2004) for relevant discussion.

Mary Laughren

- b. *Karnta-ngku=lu=jana wati nya-ngu.*
woman-ERG=PL.S=3PL man see-PST
- c. *Nya-ngu=lu=jana wati karnta-ngku.*
see-PST=PL.S=3PL man woman-ERG
- d. *Wati=li=jana karnta-ngku nya-ngu.*
man=PL.S=3PL woman-ERG see-PST
'The women saw the men.'

With ditransitive verbs such as *yinyi* 'give', it is typically the animate recipient whose person and/or number features are marked by the non-subject enclitic pronoun while a co-referential NP is marked dative case as in (4a). However, where the theme argument has an animate referent, its features are marked by the enclitic non-subject pronoun, and an NP referring to it is unmarked. The recipient NP is no longer marked by dative case, but is expressed in an optional phrase headed by a semantic case, the allative, as in (4b).¹⁰ The person/number features of this allative phrase are not marked by an enclitic pronoun.

- (3) a. *Wangka-mi ka=lu=jana.*
speak-NPST PRS.IND=PL.S=3PL
'They are speaking to them.'
 - b. *Wati-ki ka=lu=jana wangka-mi karnta.*
man-DAT PRS.IND=PL.S=3PL speak-NPST woman.
'The women are speaking to the men.'
- (4) a. *Kuyu kapu=ju=lu yi-nyi ngaju-ku.*
meat FUT=1=PL.S give-NPST me-DAT
'They will give me meat.'
 - b. *Kapu=ju=lu ngaju yapakari-kirra/*yapakari-ki*
FUT=1=PL.S me
yi-nyi.
other-ALLAT/*DAT give-NPST
'They will give me up to another.' [betray] [Warlpiri Bible, Matthew 17.22]

¹⁰Suffixes such as the allative 'to, towards' which behave rather like the heads of prepositional or postpositional phrases will be referred to herein as "semantic cases". Nash (1986) classes them as "cases" which contrast with the "grammatical cases" in his ARG[ument] category. While a phrase marked by a semantic case may be further marked by a grammatical case (dative or ergative) suffix, the converse is not possible. See Simpson (1991) and Legate (2008) for detailed analyses of case in Warlpiri.

7 Reflexive constructions in Warlpiri

The non-subject enclitic pronoun also marks the person and number features of an applicative argument, such as the benefactive arguments in (5a) and (5b). If present, an NP coreferential with the non-subject clitic is also marked by dative case as exemplified by *jirrima-kari-ki* in (5a).¹¹

- (5) a. *Yinga=palangu_i jint-a-kari-rl_i yangka kuyu jirrima-kari-ki_i ngayi paji-rni.*
 COMP=DU one-other-ERG that meat two-other-DAT BEN cut-NPST.
 ‘So that the other person cuts up that meat **for the other two**.’
- b. *Kapu=rna=ngku kaji panti-rni.*
 FUT=1s=2 BEN spear-NPST
 ‘I will spear (it/him/her) **for you**.’

NPs whose number features are not marked by pronominal enclitics, i.e., which are neither subject, object or applicative arguments, are typically marked by a case suffix with a complementising function such as the purposive *ngapa-ku* in (6a), marked by dative case, or a semantic case suffix such as the allative in (6b) or elative in (6c).¹²

- (6) a. *Ngapa-ku ka=rna ya-ni.*
 water-DAT PRS.IND=1s go-NPST
 ‘I am going **for water**.’ (i.e., to get water)
- b. *Ngapa-kurra ka=rna ya-ni.*
 water-ALLAT PRS.IND=1s go-NPST
 ‘I am going **to/towards the water**.’
- c. *Ngapa-ngurlu ka=rna ya-ni.*
 water-ELAT PRS.IND=1s go-NPST
 ‘I am going **from the water**.’

Warlpiri lacks an article category but has an extensive set of determiners which may constitute an NP or combine with other nominal words in a complex NP. Determiners host the same set of case suffixes as other nominals.

¹¹Simpson (1991) dubbed this class of applicative "external object" while Legate (2002) dubbed it "higher applicative" in contrast with "lower applicatives", i.e., Simpson's "dative objects". Warlpiri has an array of adverbial preverbs such as benefactive expressed by dialect variants *kaji/ngayi* which specify how the dative-marked applicative argument's role is interpreted (see also Hale 1982 and Nash 1986).

¹²The purposive phrase in (6a) marked by the dative case suffix differs from a dative object or applicative phrase in not being construed with a non-subject auxiliary pronominal enclitic.

Mary Laughren

2 Pronouns and anaphors

2.1 Pronouns

Warlpiri has two sets of pronouns: bound pronouns (auxiliary enclitics) and free pronouns which are set out in Table 7.1 (see Hale 1973). The former are obligatory in finite clauses, while the free pronouns behave like NPs in that their presence is not obligatory, but is determined by discourse factors. While the case-marking of the bound pronouns is Nominative vs Accusative/Dative, the free pronouns follow the same case-marking pattern as that of NPs. The non-subject pronominal enclitic has the same form irrespective of whether it marks the number and/or person features of an unmarked or dative-marked NP, except for the third person singular which has a marked dative form, *-rla*, which contrasts with the phonologically null nominative and accusative, and a distinct "double dative" (DD) form. The DD form is used mainly when there is both a dative "object" and an "applicative" argument marked by the dative case suffix, or where there is one of these and an overt or implied purposive adjunct. The DD is formed by adding *=jinta* to the third person dative enclitic *=rla*, but by adding *=rla* to all other non-subject enclitics. Unlike the other enclitic pronouns, the DD encodes no specific person or number features – it merely signals an additional clausal constituent marked by dative case.¹³

As stated above, the case-marking on free pronouns is basically the same as on nouns, except for the possessor form: *-kurlangu* on determiners, nouns (and infinitives), *-nyangu* on pronouns. Exceptionally, as subject of a transitive clause, first and second person singular pronouns may be either marked ergative, or left in their unmarked form. The presence of free pronouns coreferential with corresponding bound pronouns generally marks contrastive focus, or emphasizes a topic function. Note the contrast between (7a) with no free subject pronoun coreferential with the enclitic subject pronoun *=npa* and (7b) in which the presence of the ergative marked free pronoun *nyuntulu-rlu* stresses the speaker's desire that the addressee execute the order. In (7c), spoken in one sequence, the contrastive focus on the addressee relative to the speaker is marked by the free pronoun *nyuntu* 'you' coreferential with the "object" enclitic *=ngku* in the first sentence and with the subject enclitic *=npa* in the second.

¹³In addition to the pronouns in Table 7.1, Warlpiri has a number of honorific addressee pronouns substituted for "standard" second person pronouns in particular circumstances; third person and plural forms may also be substituted for second person singular ones. These special register forms are not relevant to the subject matter herein.

7 Reflexive constructions in Warlpiri

Table 7.1: Warlpiri pronouns

			Free pro-nouns		Enclitic pronouns		
					subject	non-subject	
Person Number			NOM		ACC/DAT	DOUBLE DAT	
1	SING	<i>ngaju(lu)</i>	=rna		=ju ^a , =ji		=rla
13	DU	ngajarra	=rlajarra, =rlujarra		=jarrangku		
	PLU	nganimpa	=rna=lu		=nganpa		
12	DU	ngali(jarra)	=rli, =rlu		=ngalingki		
	PLU	ngalipa	=rlipa, =rlupa		=ngalpa		
2	SING	nyuntu(lu)	=n(pa)		=ngku, =ngki		
	DU	nyumpala, nyuntu- jarra	=n=pala	=ngku=pala, =ngki=pala			
	PLU	nyurrurla, nyuntu- patu	=nku=lu, =nki=li, =npa=lu		=nyarra		
3	DU	nyanungu- jarra	=pala		=palangu		
	PLU	nyanungu- rra	=lu, =li		=jana		
						ACC	DAT
3	SING	nyanungu	ø	ø	=rla		=jinta

^aThe distribution of 'i' and 'u' vowels in enclitic pronouns is determined by the preceding vowel: 'i' following 'i' and 'u' following 'u'. Following 'a' there is dialectal variation; in eastern Warlpiri 'a' is usually followed by 'i'; in southern and western Warlpiri 'a' is typically followed by 'u' although there is variation in the pronunciation of the 12 person subject pronouns.

Mary Laughren

- (7) a. *Kuntul-pi-nyi ka=npa yalyu-kurlu?*
cough-do-NPST PRS.IND=2s blood-with
‘Are you coughing up blood?’ [HN66-7]¹⁴
- b. *Kuntul-pu-ngka wakurturdu-rlu nyuntulu-rlu!*
cough-strike-IMP strong-ERG 2SG-ERG
‘Cough (it) up strongly **you**!’ [HN66-7]
- c. *Nyuntu-ku ka=rna=ngku nyina kurdiji-mardarnu. Nyuntu*
you.SG-DAT PRS.IND=1s=2 sit.NPST senior you.SG
ka=npa=ju nyina karli-parnta.
PRS.IND=2s=1 sit.NPST junior
‘I am senior to **you**. **You** are junior to me.’¹⁵ [HN66-7]

The third person pronoun *nyanungu*, in its singular, dual and plural forms, may constitute an NP and may refer to animate or non-animate entities. In (8a) *nyanungu* is the unmarked subject NP, its presence marking contrastive focus. This pronoun may also have a specific determiner function, as in (8b), in which it combines with *wawirri* ‘kangaroo’ to form a complex NP.¹⁶

- (8) a. *Kajika nyanungu wangka yangka jinta-kari.*
might 3SG say aforementioned one-other
‘He might say -- that other one (that is): [...]’ [HN66-7]
- b. *Nyarrpara ka=npa nya-nyi kuja nyanungu=ju wawirri?*
Where PRS.IND=2s see-NPST that 3SG=TOP kangaroo
‘Where is it that you can see **that/this/the** kangaroo (that you said
you saw).’ [HN66-7]

2.2 Anaphor and coreference

Warlpiri also has an anaphoric non-subject enclitic pronoun *=nyanu* used in both reflexive and, with dual or plural subjects, reciprocal constructions in finite clauses as shown in (9a) and (9c).¹⁷ Its referential value is always that of the

¹⁴HN59 indicates Hale fieldnotes with transcriptions of oral recordings made in fieldwork season 1959–60; HN66-7 those from 1966–67.

¹⁵*Kurdiji-mardarnu* lit. ‘shield-holder’; *karli-parnta* lit. ‘boomerang-having’.

¹⁶For an extensive discussion of reflexives and pronominal reference in Warlpiri, see Simpson (1991: §3.4), and Hale et al. (1995: §6).

¹⁷EvansEtAl2007 details properties of Warlpiri reciprocal clauses which are applicable to the reflexive clauses discussed herein.

7 Reflexive constructions in Warlpiri

subject.¹⁸ It is used with all subject enclitics with the exception of first person singular (9b) and the second person singular in imperative clauses (9d), in which the non-anaphor second person non-subject enclitic is used. In non-imperative clauses with a second person singular subject =nyanu must be used to signal coreference of an object or applicative with the subject as in (9c). The NPs in (9a) and (9d) are in parentheses to indicate their grammatical optionality.

- (9) a. *Nya-ngu=rna=lu=nyanu. (nganimpa-rlu) (*nganimpa).*
see-PST=1S=PL.S=ANAPH (13PL-ERG) (13PL)
'We saw each other/we saw ourselves.'
- b. *Nya-ngu=rna=ju/*=nyanu (ngajulu-rlu) / (ngaju(lu)).*
see-PST=1S=1/*ANAPH (1SG-ERG) / (1SG)
'I saw myself.'
- c. *Nya-ngu=npa=nyanu/*=ngku (nyuntulu-rlu) / (nyuntu(lu)).*
see-PST=2S=ANAPH/*2 (2SG-ERG) (2SG)
'You saw yourself'
- d. *Nya-ngka=ngku/*=nyanu ngapa-ngka (nyuntulu-rlu) / (nyuntu(lu)).*
see-IMP=2/*ANAPH water-LOC (2SG-ERG) (2SG)
'See/look at yourself in the water.'

Warlpiri has no subject reflexive pronoun, either free or bound, nor does it have a free reflexive pronoun akin to English pronouns with the suffix 'self', or a form to mark long-distance anaphora (cf. Giorgi 2007). The non-subject enclitic forms coreferential with the subject are set out in Table ??.

Table 7.2: Reflexive/reciprocal enclitic pronouns and anaphor

ACCUSATIVE/DATIVE		
1	=ju, =ji	Only with singular reference
2	=ngku,=ngki	Only with imperative verb and singular reference
ANAPHOR	=nyanu	Used with all other subject pronouns

¹⁸Blake (1988) reconstructs *nyanu* as Eastern Pama-Nyungan feminine dative pronoun.

Mary Laughren

Irrespective of the case frame of the verb in the clause, the identical anaphor form is used, including with unmarked third person singular subjects as in (10b) and (11b). The anaphor =nyanu in (10b) contrasts with a zero marked disjoint accusative object in (10a). A non-inflected object free pronoun (or other NP type) is grammatical in (10a) since it is referentially disjoint from the subject. In (10b) it is ungrammatical if coreferential with the subject as on the reading given.

- (10) a. *Paka-rnu wati-ngki_i (nyanungu_{*i/j})*.
hit-PST man-ERG 3
‘The man_i hit him_{*i/j}.’
- b. *Paka-rnu=nyanu_i wati-ngki_i *nyanungu_i*.
hit-PST=ANAPH man-ERG 3
‘The man_i hit himself_{i/*j}’.

In (11a) the dative enclitic =rla marks the third person singular features of the dative object which must have disjoint reference from that of the subject. In (11b), the presence of the anaphor =nyanu signals coreference of the dative object with the subject. In both sentences a dative-marked free pronoun coreferential with the non-subject enclitic pronoun is optional. In (10b) it is also coreferential with the subject.

- (11) a. *Wangka-ja=lpa=rla_{*i/j} wati_i (nyanungu_{*i/j-ku})*.
say-PST=IMPF=3DAT man 3-DAT
‘The man_i spoke to him_{*i/j}.’
- b. *Wangka-ja=lpa=nyanu wati_i (nyanungu_{i-ku})*.
say-PST=IMPF=ANAPH man 3-DAT
‘The man_i spoke to himself_{i/*j}’.

As noted above, the addition of the third person free pronoun *nyanungu* to (10b) is ungrammatical on the interpretation given. However on a disjoint reference reading between subject and object, and the anaphor =nyanu coreferential with the subject being interpreted as a dative applicative argument, (10b) would be grammatical and interpretable as ‘The man_i hit that one_{*i/j} for himself_{i/*j}’.

Unlike the verb’s object which cannot be coreferential with an unmarked free pronoun as shown in (10b), the dative object or applicative can be expressed by both the bound anaphor =nyanu (signalling coreference with the subject) and an optional dative-marked free pronoun also coreferential with the subject. However this is only possible in a clause in which the subject NP is unmarked, as in (11b). Where the subject NP is ergative-marked, coreference between subject

7 Reflexive constructions in Warlpiri

and object – whether the latter is unmarked or dative – is ungrammatical. This contrast is illustrated in (12).

In (12a) which is grammatical, the subject NP *Jakamarra* is unmarked, and the dative marked pronoun *nyanungu-ku* is coreferential with the anaphor *=nyanu* which in turn is coreferential with the unmarked subject *Jakamarra*. In (12b) in which the subject is marked with ergative case, the presence of the dative pronoun *nyanungu-ku*, whether interpreted as coreferential or disjoint with the subject, renders the sentence ungrammatical.¹⁹

In (12b) the dative object argument of the verb *yi-nyi* ‘give’ cannot be expressed by a dative-marked pronoun *nyanungu-ku* interpreted as coreferential with the ergative subject *Jakamarra-rlu* via the anaphoric enclitic *=nyanu*. When the DD enclitic *=rla* is added to the auxiliary in as in (12c), the anaphor *=nyanu* must be dative and coreferential with the subject, but it can be interpreted as either a dative object (recipient of giving) or as a dative applicative (e.g., “higher” benefactive/possessive applicative). The DD enclitic *=rla* is obligatorily disjoint in reference from the subject, and can be interpreted as linked to either an object or applicative role, but not the same role as the one associated with the anaphor.

- (12) a. *Nyanungu-ku_{i/*j} ka=nyanu_{i/*j} Jakamarra_i yulka-mi.*
 3-DAT PRS.IND-ANAPH Jakamarra love-NPST
 ‘Jakamarra loves himself.’ (Hale et al. 1995: 1441 #42a)
- b. * *Jakamarra-rlu_i ka=nyanu_i nyanungu-ku_{*i/*j} kuyu yi-nyi.*
 Jakamarra-ERG PRS.IND=ANAPH 3-DAT meat give-NPST
 ‘Jakamarra is giving himself meat.’ (Hale et al. 1995: 1440, (40c))
- c. *Jakamarra-rlu_i ka=nyanu_i=rla_j nyanungu-ku_{*i/*j} kuyu*
 Jakamarra-ERG PRS.IND=ANAPH=DD 3-DAT meat
 yi-nyi.
 give-NPST
 ‘*J_i gives himself_{i/*j} meat for him_{*i/*j}.*’
 ‘*J_i gives him_{*i/*j} his_{i/*j} meat.*’
 ‘*J_i gives him_{*i/*j} meat for himself_{i/*j}.*’

The DD structure in (12c) is similar to that in (13a) in which *=nyanu* is coreferential with the dative-marked applicative argument *nyanungu-ku*, and not the dative-marked object *kuyu-ku* ‘meat’ of the verb *warri-rni* ‘look for’. As in (12c),

¹⁹See Hale et al. (1995: 1440–1441) and Simpson (1991: §6.3) for further examples and discussion of anaphora in Warlpiri.

Mary Laughren

the presence of two dative-marked NPs, the dative object and the dative applicative, is marked by the invariant DD auxiliary enclitic =rla added to the anaphoric enclitic =nyanu. In (13b) which lacks a dative applicative argument the dative object is expressed by =rla coreferential with *kuyu-ku* ‘meat’, but necessarily disjoint with the ergative subject *Jakamarra-rlu*. The free dative-marked pronoun *nyanungu-ku* in (13b) is coreferential with the dative object *kuyu-ku*, thus functioning as a determiner within the same complex dative-marked NP as *kuyu-ku*. In (13c) the presence of a dative object and a dative applicative is signalled by the DD enclitic sequence =rla=jinta, in which each element has a different referent. The semantic ambiguity of (13c) derives from which grammatical function – goal of search (dative object) or beneficiary of search (applicative) – is linked to the dative enclitic -rla which is coreferential with the human referring dative-marked NP *nyanungu-ku*, while =jinta refers to the non-animate dative-marked NP *kuyu-ku*. In (13d) in which both dative-marked NPs are coreferential with the dative enclitic =rla, the DD =jinta signals an implied purpose.

- (13) a. *Jakamarra_i-rlu ka=nyanu_{i/*j}=rla_j warri-rni kuyu_j-ku*
 J-ERG PR.S.IND=ANAPH=3DAT seek-NPST
 *nyanungu_{i/*j}-ku.*
 meat-DAT 3-DAT
 ‘Jakamarra_i is looking for his_i meat/is looking for meat for himself_i.’
 (Hale et al. 1995: 1440 #41a)
- b. *Jakamarra_i-rlu ka=rla_{*i/j} warri-rni [kuyu_j-ku*
 J-ERG PR.S.IND=3DAT seek-NPST meat-DAT
 *nyanungu_{j/*i/*k}-ku].*
 3-DAT
 ‘Jakamarra is looking for that meat.’
- c. *Jakamarra_i-rlu ka=rla_{*i/j}=jinta_{*i/*j/k} warri-rni kuyu_{*i/*j/*k}-ku*
 J-ERG PR.S.IND=3DAT=DD seek-NPST meat-DAT
 *nyanungu_{*i/j}-ku.*
 3-DAT
 ‘Jakamarra_i is looking for meat_{*i/*j} for him_{*i/j}.’
 ‘Jakamarra_i is looking for him_{*i/j} for meat_{*i/*j}.’
- d. *Jakamarra_i-rlu ka=rla_{*i/j}=jinta_{*i/*j/k} warri-rni*
 J-ERG
 *[kuyu_{*i/j}-ku nyanungu_{*i/j}-ku].*
 PR.S.IND=3DAT=DD seek-NPST meat-DAT 3-DAT
 ‘Jakamarra is looking for that meat for some purpose (e.g. to

7 Reflexive constructions in Warlpiri

cook/eat).'

Simpson (1991: 167) points out that while the third singular dative enclitic *=rla* may be added to an anaphoric clitic as a DD marker as in (13a), it is not possible to have a coreferential reading between these non-subject enclitics. Only the subject can determine the reference of an anaphor.

- (14) * *Wangka-ja=lp̥a=rna=nyanu=rla.*
 speak-PST=IMPF=1S=ANAPH=DD
 ≠ ‘I spoke to him about himself’ (Simpson 1991: 167, 137)

As will have been noted, the DD enclitic has the unique form *=rla*, except when the preceding dative enclitic is also *=rla*, as in (13c) and (13d), in which case the DD is marked by *-jinta*. The choice of which argument is represented by the first dative enclitic which encodes person and/or number features, and which by the DD enclitic is determined on the basis of grammatical function and a person feature hierarchy. This is partially exemplified by the auxiliary enclitics used with the verb *kunka-mani* ‘to get even with’ in (15). Here second person dative enclitic *=ngku* refers to the person on whom the subject plans to take revenge, while the obligatory DD enclitic *=rla* signals an understood applicative argument, i.e., because of what you did (to me/someone).

- (15) *Kapu=rna=ngku=rla kunka-ma-ni jalangu-rlu (nyuntu-ku).*
 FUT=1S=2=DD revenge-CAUS-NPST now-ERG (you-DAT)
 ‘I’ll get even with you now for it.’

In (16) in which the goal of revenge is a third person, it is expressed by the DD, while the preceding dative clitic expresses the features of the person on whose behalf revenge is taken. In (16a-c) the dative enclitic – second person in (16a), first person in (16b) and anaphoric in (16c) is coreferential with the subject thus encoding coreference between avenger and avenged.

- (16) a. *Kunka-ma-nta=ngku=rla nyuntulu-rlu wiyarrpa-rlu.*
 revenge-CAUS-IMP=2=DD you-ERG poor_thing-ERG
 ‘Take your revenge for it (on him/her/them), you poor thing.’ [HN59]
- b. *Kapu=rna=ju=rla jukurra-rlu=jala kunka-ma-ni.*
 FUT-1S=1=DD tomorrow-ERG=CFOC revenge-CAUS-NPST
 ‘I will get my revenge for it (on him/her/them) tomorrow (not now).’
- c. *Ngilyi-parnta-rlu ka=nyanu=rla kunka-ma-ni.*
 rotten_one-ERG PRS.IND=ANAPH=DD revenge-CAUS-NPST
 ‘That rotten one_i is taking her_i revenge for it (on him/her/them).’

Mary Laughren

2.3 Coreference between subject and pronoun in a phrase introduced by a semantic case

A semantic case-headed nominal expression, similar to an English prepositional phrase, acting as either a complement or an adjunct can consist of a free pronoun to which a semantic case, such as the perative *-wana* in (17a) and (17b) is added. It can be coreferential with the subject as in (17a) and (17b).²⁰

- (17) a. *Jakamarrai-rlu yirra-rnu / nya-ngu nyanungu_{i/j}-wana.*
J-ERG put-PST / see-PST 3-PERL
'Jakamarrai put/saw it near himi/j.'
- b. *Ngajulu-rlu=rna yirra-rnu / nya-ngu ngaju-wana.*
1-ERG=1S put-PST / see-PST 1-PERL
'I put/saw it near me.'

3 Other relationships within reflexive clauses

3.1 Reflexives and part-whole relations

The syntax of part-whole, including body part, constructions has been described by Hale (1981) and Laughren (1992) *inter alia*. In what Hale (1981: 338) called the “favorite mode of expression” of part-whole relations, the “whole” is linked to a primary syntactic function such as subject and object while the “part” is expressed by an NP assigned the same case as the whole, but not included in the NP referring to the whole. The “part” NP acts like a secondary predicate which specifies the relevant “part” of the “whole”.

In (18a) a third person singular subject acts on a third person singular object. Subject and object are referentially disjoint, hence the absence of auxiliary pronominal enclitic. The ergative-marked NP *kurd़u-n̩gku* ‘child’ is associated with the subject, while the unmarked NP *ngati* ‘mother’ is associated with the object function. The ergative case on the NP *rdaka-n̩gku* ‘hand/finger’ identifies it as the relevant part of the child as the ‘poker’ while the unmarked NP *milpa* ‘eye’ is the relevant part of the mother, the ‘poked’.

In (18b) the object is coreferential with the subject, indicated by the anaphoric enclitic *-nyanu* (and the unacceptability of an object NP), so that the same ‘child’ is both the ‘poker’ and the ‘poked’. However the different parts of the child involved in the “poking” event referred to by (18b) play different roles; as in (18a)

²⁰ A similar example with postposition *-jangardu* is cited in Simpson (1991: 169 #140).

7 Reflexive constructions in Warlpiri

they are aligned with the different thematic roles. Both (18a) and (18b) are transitive, but semantically vague in that they allow an interpretation in which the poking action is either intentional or not intentional.

- (18) a. *Kurdu-ŋku ka ngati panti-rni milpa rdaka-ŋku.*
 child-ERG PRS.IND mother poke-NPST eye hand-ERG
 ‘The child pokes mother in the eye with his finger.’
- b. *Kurdu-ŋku ka=nyanu rdaka-ŋku panti-rni milpa.*
 child-ERG PRS.IND=ANAPH hand-ERG poke-NPST eye
 ‘The child pokes himself in the eye.’

The sentences (18a) and (18b) in which intentionality on the part of the referent of the subject can be inferred contrast with those in (19). In (19a) the pointed object which makes contact with the hand of the child is referred to by the ergative-marked subject NP *jiri-ŋgki* ‘prickle/thorn’, while in (19b) it is a an illness whose symptoms include the production of quantities of nasal mucous (also called *mirnta*) that is expressed as the subject which affects the child expressed as the object.²¹

- (19) a. *Jiri-ŋgki kurdu pantu-rnu rdaka.*
 prickle-ERG child poked-PST hand
 ‘A prickle got stuck into the child’s hand.’ (Lit. A prickle stabbed/pierced the child hand)
- b. *Mirnta=rlu kurdu paka-rnu.*
 flu=ERG child hit-PST
 ‘The child was struck by flu.’ (Lit. Flu/nasal mucous struck the child.)

What is common to the sentences in (18) and (19) is that the “patient”, i.e., the entity/individual that is affected by the action, is expressed as the syntactic object, while the ergative-marked subject causes the occurrence of the event referred to, whether deliberately or not.

3.1.1 Reflexive clauses with change of state verbs

Verbs which express a change of state in a patient without denoting a cause or agent thematic role are typically formed in Warlpiri by complex verbs consisting of a preverbal predicate which combines with an intransitive “change” verb.

²¹The verb *pantirni* denotes contact between a pointed entity and the surface of some entity which may be pierced (cf. English *jab*, *pierce*, *stab*, *stick into*) or not (cf. English *poke*).

Mary Laughren

Sentences featuring the Warlpiri equivalent of the prototypical English “change of state” verb *break* are given in (20). *Rdilyki* ‘broken’ belongs to a set of “stage” predicates which refer to the result of a change of state and which combine with an intransitive inflecting verb such as *ya-* ‘go’ to create an inchoative verbal predicate.

The inflected verb *ya-nu* ‘go-PST’ in (20a), which in this context denotes a simple change of state undergone by the subject’s referent, differs in form and meaning from the inflected transitive verb *pu-ngu* ‘strike-PST’ in (20b) which implies an action carried out by an agent which produces a change of state in a patient. In (20a) the patient role is borne by the unmarked subject NP *kurd़u*.²² The agent in (20b) is expressed by the ergative-marked subject NP *wati-ŋki*, while the patient object NP *kurd़u* is unmarked. The affected body part *waku* ‘arm’ is also unmarked in both (20a) and (20b). In the stative sentence in (20c) *rdilyki* occurs as a nominal predicate external to the verb *nguna* ‘lie’. This contrasts with its use in (20a) and (20b) in which it is in a tighter preverbal relation with the inflecting verb.

- (20) a. *Waku rdilyki-ya-nu kurd़u.*
arm broken-go-PST child
'The child_i broke his_{i/*j} arm.' (Lit. the child broke arm(wise))
- b. *Waku rdilyki-pu-ngu kurd़u wati-ŋki punku-ŋku.*
arm broken-strike-PST child man-ERG bad-ERG
'The nasty man broke the child's arm.' (Lit. the bad man broke the child arm(wise))
- c. *Kurlarda yali ka nguna rdilyki.*
spear that PRS.IND lie.NPST broken
'That spear is lying broken.'

In contrast with (20a), the reflexive sentence in (21) implies that the child’s action of hitting himself (with a stick) caused his own arm to break.

- (21) *Waku=nyanu kurd़u-ŋku rdilyki-pu-ngu (watiya-rlu).*
arm=ANAPH child-ERG broken-strike-PST (stick-ERG)
'The child hit and broke his (own) arm (with a stick).'

²²It is possible to add a dative-marked phrase to (20a) to refer to an entity which may be inferred to have “caused” the situation referred to, but this is not relevant to the argument set out here (see Simpson (1991: 386–388)).(i) *Waku=rla marlaja rdilyki-ya-nu kurd़u watiya-ku/wati-ki. arm=3DAT because_of broken-go-PST child stick-DAT/man-DAT*

‘The child broke his arm because of the stick/man...’

7 Reflexive constructions in Warlpiri

In this respect Warlpiri differs from Romance languages in which the reflexive sentence, as exemplified by the French sentence in (22a), does not necessarily imply an agent, but is interpretable as an inchoative sentence featuring a patient subject and body part complement, equivalent in meaning – but not in form – to the Warlpiri sentence in (20a).²³

- (22) a. *L' enfant s'est cassé le bras.*
 the child REFL-is broken the arm
 ‘The child broke his arm.’
- b. *Elle lui a cassé le bras.*
 she 3SG.DAT has broken the arm
 ‘She broke his arm.’

Another difference between Romance languages and Warlpiri is that in the former it is the dative non-subject clitic pronoun, exemplified in (22b) by *lui* (as opposed to accusative *le* or *la*) that refers to the whole while the affected part is referred to by the object NP as *le bras* in (22a) and (22b), whereas in Warlpiri, it is the affected whole which is the object in a transitive clause, signalled by the absence of an enclitic object pronoun for a third person singular in (20a) and (23a). The dative enclitic third person singular pronoun =rla in (23b) cannot be associated with the affected whole.

- (23) a. *Rdilyki-paka-rnu waku.*
 broken-hit-PST arm
 ‘She hit and broke his arm.’
- b. * *Rdilyki-paka-rnu=rla waku.* ≠ ‘She hit and broke his arm.’
 broken-hit-PST=3DAT arm.

3.2 Reflexive clauses with change of location verbs

The location complement of “change of location” verbs is expressed by a phrase headed by a semantic case such as the locative, allative, elative, or perative. When the location is part of some whole as in (24), there are two possible modes

²³Change of state verbs such as *casser* ‘break’ are prototypical unaccusative verbs (Perlmutter 1978) in which the patient argument is first linked to the object function and then raised to the subject position (Burzio 1986, Levin & Rappaport Hovav 1995). This construction, sometimes referred to as reflexive passive, differs from a reflexive construction in which distinct agent and patient roles are linked to a subject and object function associated with the same referent as in the Warlpiri sentence in (21).

Mary Laughren

of expression. One is to place both the whole and the part in separate phrases headed by an identical semantic case as in (24a), the other is to express the “whole” as a dative object marked by a dative auxiliary enclitic while the “part” is independently expressed in a semantic case headed phrase, as in (24b).

- (24) a. *Nama ka langa-kurra yuka-mi kurdu-kurra.*
 ant PRS.IND ear-ALLAT enter-NPST child-ALLAT
 ‘The ant is entering the child’s ear.’ (Lit. ant into ear enters into child)
 (Hale 1981: 341 #24)
- b. *Nama ka rla_i langa-kurra yuka-mi kurdu_i-ku.*
 ant PRS.IND=3DAT ear-ALLAT enter-NPST child-DAT
 ‘The ant is entering the child’s ear.’ (Lit. ant to him into ear enters to
 child) (Hale 1981: 341 #24’)

Where referential identity between the subject and the location is intended, only the dative object strategy of (24b) can force a reflexive interpretation, as shown in (25a). The free third person pronoun *nyanungu* in (25b) may be interpreted as coreferential with the subject or not.

- (25) a. *Wati-ngki=nyanu kuruwarri kuju-rnu rdukurduku-rla.*
 man-ERG=ANAPH design throw-PST chest-LOC
 ‘The man_i painted a design on his_{i/j} chest.’
- b. *Wati-ngki kuruwarri kuju-rnu nyanungu-rla rdukurduku-rla.*
 man-ERG design throw-PST 3-LOC chest-LOC
 ‘The man_i painted a design on his_{i/j} chest.’

3.3 Reflexive clauses with “bodily grooming” verbs

Unlike English in which transitive verbs denoting acts of bodily grooming, especially with a human subject, may have a reflexive interpretation in the absence of an overt object NP, in Warlpiri the reflexive enclitic pronoun must be used, as with other transitive “affect by contact” verbs. The self-grooming interpretation of the reflexive clause in (26a) contrasts with the other-grooming interpretation in the non-reflexive clause in (26b).

- (26) a. *Parlju-rnu=nyanu (nyanungu-rlu).*
 wash-PST-ANAPH 3-ERG
 ‘She washed (herself).’

7 Reflexive constructions in Warlpiri

- b. *Parlju-rnu (nyanungu-rlu).*
wash-PST 3-ERG
‘She_i washed it/him/her_i*._j ≠ She washed (herself).’

When an NP referring to the affected body part is added as in (27), verbs like *parljirni* ‘wash’ behave the same as the other transitive “affect by contact” verbs seen in §3.1.1²⁴

- (27) a. *Parlju-rnu=nyanu (nyanungu-rlu) jurru.*
wash-PST-ANAPH 3-ERG head/hair
‘She_i washed her_{i/*j} hair.’
- b. *Parlju-rnu (nyanungu-rlu) jurru.*
wash-PST 3-ERG head/hair
‘She_i washed her_i* /his/its hair.’

Similarly, verbs such as *majarni* ‘stretch, straighten’ when used to express bodily self-manipulation must be used in a syntactically reflexive construction, as in (28a) and (28b). The absence of the anaphoric non-subject enclitic as in (28c) and (28d) can only be interpreted with disjoint reference between subject and object. In (28d) the arm (*waku*) that is straightened is part of the referent of the grammatical object not coreferential with the subject.

- (28) a. *Maja-rnu=nyanu (nyanungu-rlu).*
straighten-PST-ANAPH 3-ERG
‘She straightened up/stretched (herself).’
- b. *Maja-rnu=nyanu (nyanungu-rlu) waku.*
straighten-PST=ANAPH 3-ERG arm
‘She_i straightened her_{i/*j} arm.’
- c. *Maja-rnu (nyanungu-rlu).*
straighten-PST 3-ERG
‘She_i straightened him/her_i/it.’
- d. *Maja-rnu (nyanungu-rlu) waku.*
straighten-PST 3-ERG arm
‘She_i straightened her_{i/j} /his/its arm.’

²⁴Simpson (1991: 170 #142) cites a similar example with ‘shave’ taken from Hale’s 1959 fieldnotes.
Jangarnka=npa=nyanu jarntu-rnu? beard=2S=ANAPH shave-PST
‘Did you shave your beard off?’

Mary Laughren

Disjoint reference between subject and object is clear in (29a). In (29b) the presence of the anaphor =nyanu coreferential with the subject cannot be interpreted as the object of straightening, since that is the role of the NP *kurlarda* ‘spear’ (which is not a “part” of the subject’s referent, unlike *waku* in (28b)). The presence of =nyanu in (29b) expresses a relationship of alienable possession between the subject and the object (‘spear’). The presence of the DD enclitic =rla in (29c) signals a purpose for which the spear is being straightened.

- (29) a. *Maja-rnu kurlarda (nyanungu-rlu).*
straighten-PST spear 3-ERG
'She straightened the spear.'
- b. *Maja-rnu=nyanu kurlarda (nyanungu-ku).*
straighten-PST=ANAPH spear 3-DAT
'He_i straightened his_{i/*j} spear.'
- c. *Maja-rnu=nyanu=rla kurlarda (nyanungu-ku).*
straighten-PST=ANAPH=DD spear 3-DAT
'He straightened the spear for himself (for some purpose).'
- 'He_i straightened his_{i/*j} spear (for some purpose).'

Note that in (29b) and (29c) the anaphor =nyanu may be coreferent with an overt dative marked pronoun (*nyanungu-ku*), whereas in (28a) and (28b) =nyanu is substituted for an unmarked object NP and cannot be coreferential with an unmarked pronoun.

4 Reflexive relations within NP

4.1 Kin relation propositus anaphor -nyanu

Warlpiri employs three distinct syntactic constructions to express the binary relations expressed in English by the genitive construction: possessor in expressions of alienable possession (30a), whole in expressions of a part-whole relation (30b), and the propositus in kin relation expression (30c). Kin terms denote binary relations, e.g., is mother of (x,y). A person may be referred to as a function of their relationship to another/others. The term “propositus”, taken from the anthropological linguistics literature, denotes the person(s) to whom the referent of an expression like *John’s mother* is related by the named kin relation. In this example, *John* is the propositus.

7 Reflexive constructions in Warlpiri

- (30) a. Alienable possession
Jakamarra-kurlangu kurlarda.
 J-POSS spear
 'Jakamarra's spear.'
- b. Part whole
Jakamarra =nyanu yarnka-ja jurru-ku.
 J=ANAPH grab-PST head-DAT
 'Jakamarra_i grabbed hold of his_{i/*j} head.'
- c. Propositus
*[Jakamarra_i-kungati-[nyanu_{i/*j}]]-rlu purra-ja. KIN*
 J-DAT mother-ANAPH-ERG cook-PST
 'Jakamarra's mother cooked it.'

Unlike the auxiliary anaphoric enclitic pronoun *=nyanu* in (30b), the nominal suffix *-nyanu* in (30c) is hosted by a kin relation term *ngati* 'mother' with which it forms a complex nominal which may host case suffixes, as exemplified by the ergative suffix. The syntactic scope of the ergative case extends to the entire NP which includes the dative-marked propositus *Jakamarra-ku* which is coreferential with the anaphoric suffix *-nyanu*. In the absence of a propositus phrase such as *Jakamarra-ku* in (30c), *-nyanu* may be contextually bound and interpreted as 'his/her/its/their mother' or it may have an arbitrary interpretation as in 'the mother' implying 'the mother of someone'.

The anaphoric suffix *-nyanu* contrasts with the special addressee propositus suffix *-puraji* in (31a-c).²⁵ As shown in (31b) and (31c), the second person kin propositus suffix *-puraji* may be coreferential with the second person enclitic pronoun and with the free pronoun that is also coreferential with the enclitic pronoun.

- (31) a. *Ngati-puraji.*
 mother-YOUR.KIN
 'Your mother'
- b. *Ngati-puraji-rli=ngki nya-ngu (nyuntu).*
 mother-YOUR.KIN-ERG=2 see-PST (you)
 'Your mother saw you.'

²⁵There is also a speaker referring propositus suffix *-na* that is not as productive as the second person *-puraji*; it has been "absorbed" into some kin term stems.

Mary Laughren

- c. *Ngati-puraji=npa nya-ngu (nyuntulu-rlu).*
 mother-YOUR.KIN =2S see-PST (you-ERG)
 ‘You saw your mother.’

Unlike *-nyanu* which may co-occur with a dative-marked propositus NP with which it is coreferential, the pronominal suffix *-puraji* cannot. Rather a dative marked free pronoun propositus phrase is only compatible with the anaphoric propositus suffix *-nyanu* as shown by the contrast between (32a) and (32b).

- (32) a. *Nyuntu-ku ngati-nyanu.*
 you-DAT mother-ANAPH
 ‘Your mother.’
- b. * *Nyuntu-ku ngati-puraji.*
 you-DAT mother-YOUR.KIN

The alienable possessor marked by the suffix *-nyangu* on pronoun stems, *-kurlangu* on other stems as in (30a), can also mark a propositus phrase – especially in reference to descending generation kin – in which case coreference between possessive-marked free pronoun and pronominal propositus suffix is grammatical as shown in (33).²⁶

- (33) *Nyuntu-nyangu ngati-puraji.*
 you-POSS mother-YOUR.KIN
 ‘Your mother.’

4.2 Set reflexive use of anaphoric *-nyanu*

Simpson (1991: §3.4.3) describes another use of the anaphor *nyanu* within a complex nominal expression of the form N-*kari-yi-nyanu*. N-*kari* means ‘other N’, while *yi* (I gloss here as a ligative (LIG)) appears to be an old auxiliary base reserved for the expression of binary relations within a complex NP.²⁷ In (34a) the implication that the subject referent belongs to the class of *Napaljarri* women is the only interpretation compatible with the dative object. Both “giver” and “recipient” belong to this same set. In (34b) the subject referent may or may not be a *Napaljarri*; what is presupposed here is that something has been previously given to another woman who is also a *Napaljarri*.

²⁶For analysis of the syntactic contrast between the dative marked and possessive marked propositus phrase and its relationship to the kin term expression see Laughren (2016).

²⁷McConvell (1996) has documented auxiliary structures within complex NPs in Mudburra, another Ngumpin-Yapa language.

7 Reflexive constructions in Warlpiri

- (34) a. *Yi-nyi ka=rla Napaljarri-kari-yi-nyanu-ku.*
 give-NPST PRS.IND=3DAT Napaljarri-other-LIG-ANAPH-DAT
 ‘She is giving (it) to another Napaljarri (woman) like herself.’
- b. *Yi-nyi ka=rla Napaljarri-kari-ki.*
 give-NPST PRS.IND=3DAT Napaljarri-other-DAT
 ‘She is giving it to another Napaljarri.’

In Eastern Warlpiri *-nyanu* in this set reflexive construction contrasts with the use of first and second person pronominal suffixes homophonous with the auxiliary enclitic forms: first person *-ji* and second person *-ngku*. In other dialects, *-nyanu* is used irrespective of the subject’s features. In (35) the implication is that both the addressee subject and the dative phrase belong to the set of big-headed creatures. With the second person pronoun *-ngku*, vowel harmony applies so that the ligative is *yu*.

- (35) *Wilyipi-pardi-ya=rla jurru-lalykalalyka-kari-yu-**ngku**-ku.*
 out-emerge-IMP=3DAT head-big-other-LIG-2-DAT
 ‘Go out to that other big head like you/yourself!’

The set reflexive relation may also hold between non-subject NPs as in (36a). The anaphor may also be present in the subject NP as in (36b) where it forces the implication that Rocky is also dog.

- (36) a. *Kurlarda ka=rna=lu=rla limi-yirra-rni*
 spear PRS.IND=1S=PL.S=3DAT add-put-NPST.
 kurlarda-kari-yi-nyanu-ku.
 spear-other-LIG-ANAPH-DAT
 ‘We put spears with other spears like themselves.’ (Simpson 1991: 184 #158)
- b. *Maliki-kari-yi-nyanu-rlu nya-ngu Rocky.*
 dog-other-LIG=ANAPH-ERG see-PST R
 ‘Another dog like him_i saw Rocky_i.’ (Simpson 1991: 184 #159a)

5 Coreference relations in non-finite clauses

As there is no auxiliary in non-finite clauses it is not possible to express coreference between subject and non-subject (object, applicative) by means of the auxiliary anaphor *=nyanu*. In most non-finite clauses the understood subject is

Mary Laughren

phonologically null and coreferential with the subject or object (or some other constituent) of the matrix finite clause. A pronoun in the non-finite clause has disjoint reference with the understood or “controlled” subject of the non-finite clause containing it, as the following examples in (37) taken from Simpson (1991) demonstrate.²⁸

- (37) a. *Ngarrka-ŋku ka kurdu_j ngarri-rni*
 man-ERG PRS.IND child tell-NPST
 *nyanungu*_j-ku ngapa yi-nja-ku*
 3-DAT water give-INF-DAT
 ‘man tells the child to give him (=man/other; ≠child) water.’
 (Simpson 1991:178 #150a)
- b. *Marlu-ŋku ka Jakamarra_j nya-nyi*
 kangaroo-ERG PRS.IND J see-NPST
 *nyanungu*_j-ku wurru-ka-nja-kurra*
 3-DAT creep-move-INF-OBJCOMP
 ‘kangaroo sees Jakamarra sneaking up on it/him (≠Jakamarra).’
 (Simpson 1991: 178 #150b)

As expected, where the subject of the matrix finite clause such as *wati-ŋki* in (38) is coreferential with the understood subject of an embedded non-finite clause, the pronominal object within the non-finite clause cannot be interpreted as coreferential with the matrix subject.

- (38) *Wati_i-ŋki_i ka=lu yunpa-rni*
 man-ERG PRS.IND=PL.S sing-NPST
 *nyanungu-rra*_i paka-rninja-karra-rlu.*
 3-PL hit-INF-SUBCOMP-ERG
 ‘The men_i are singing while striking them*_i.’

To express interclausal coreference relations as in (39), two finite clauses are required so that the anaphor is locally bound within its clause by its subject, which can be coreferential (or disjoint) with an NP in the accompanying clause.

- (39) *[Wati-ŋki=ka=lu yunpa-rni] [kujaka=lu=nyanu panti-rni].*
 man-ERG=PRS.IND=PL.S=3PL sing-NPST COMP=PL.S=ANAPH pierce-NPST
 ‘Men_{i/j} are singing while they_i are striking themselves_i.’

²⁸The non-finite clause is set out on the second line of sentences in (37) and (38).

6 Special uses of reflexive constructions

6.1 Inherent reflexive verbs

Some Warlpiri verbs are only used in a reflexive construction and can be classed as “inherently reflexive”. One of these is *ngarrpangarrpa-ma-ni* ‘to tell lies about’ which is illustrated in (40), in which the non-subject anaphor =nyanu represents a dative applicative argument which must be coreferential with the subject. In (40b) the presence of an additional dative argument *ngipiri-ki* is also registered by the DD enclitic =rla in the auxiliary complex.

- (40) a. *Ngarrpangarrpa-ma-ni ka=nyanu kurdu-ngku*
deceit-CAUS-NPST PRS.IND=ANAPH child-ERG
kuja kuyu nga-rnu.
COMP meat eat-PST
‘The child is lying about (what he did) which was that he ate the meat.’
- b. *Ngarrpangarrpa-ma-nu=nyanu=rla ngipiri-ki yapa-ngku,*
deceit-CAUS-PST=ANAPH=DD egg-DAT person-ERG
palka=jala.
present=CFOC
‘The child lied about the eggs – (they are) actually here.’

6.2 Reflexive construction in inchoative monadic clause

The reflexive constructions discussed in §2.2 all involve two arguments with distinct thematic roles, one associated with the subject and the other with the object or applicative function, but with both linked to a single referent. Here I will briefly discuss monadic reflexive constructions in which a single thematic role is expressed by the subject in a clause that is formally reflexive. In Warlpiri these constructions are mainly confined to expressions of change in the internal state of a being (typically human) over which the undergoer has no control. Such a thematic role would be expected to be assigned to the object function. The obligatory non-subject enclitic coreferential with the subject would seem to represent this alignment of thematic role and grammatical function. These constructions are used with agent-patient verbs whose NP subject is marked ergative. In (41a) the enclitic anaphor =nyanu signals coreference with the ergative marked NP subject *yapa-ngku* whose plural number features are marked by the subject enclitic pronoun =lu. The ergative-marked *jarda-ngku* functions as an instrumental

Mary Laughren

phrase, specifying the nature of the affect. An alternative construction expressing a similar meaning is shown in (41b) in which *jarda-ngku* is the subject which brings about a change of state in the object *yapa* whose number features are specified by the third person plural non-subject enclitic =*jana* (cf. (19a) and (19b)). The intransitive (41c) differs from both (41a) and (41b) in being stative – not denoting a *change of state*.²⁹

- (41) a. Inchoative

Pirdi-pu-ngu=lu=nyanu yapa-ngku jarda-ngku.
kill-strike-PST=PL.S=ANAPH person-ERG sleep-ERG
'The people fell asleep.' (Lit. The people did themselves in with sleep.)

- b. Causative

Jarda-ngku=jana yapa pu-ngu.
sleep-ERG=3PL person strike-PST
'The people were overcome by sleep. /The people became sleepy.' (Lit. sleep struck them.)

- c. Stative

Jarda ka=lu nguna.
sleep PRS.IND=PL.S lie.NPST
'They are sleeping/asleep.'

The use of monadic reflexive constructions to express externally caused changes of a person's internal state is also a feature of a special respect register used by initiated men, as shown in (42a) which contrasts with the "standard" register sentence in (42b).

- (42) a. *Kati-ka=rra=ngku lipakarra-rlu=lku!*

press_on-IMP-AWAY=2 sleep-ERG=now
'Go off to sleep now.' (Lit. press down on yourself with sleep now)
[HN59]

- b. *Jarda=lku nguna-ka=rra!*

sleep=now lie-IMP=Away
'Go off to sleep now.'

It is especially emotional states that are expressed by a monadic reflexive construction in Warlpiri. These typically involve the figurative use of a body part

²⁹The inchoative versus stative distinction exemplified by (41a) and (41c) is analogous to the distinction made in French in which the inchoative reflexive *s'endormir* 'to fall asleep' contrasts with stative *dormir* 'to sleep'.

7 Reflexive constructions in Warlpiri

in conjunction with a transitive agent-patient “affect by contact” verb. In both (43a) and (43b) the relevant affected body part NP *miyalu* ‘belly/stomach’ and the subject of which it is the relevant “part” are marked by ergative case, in the case-matching structure discussed in §3.1. The inchoative “reflexive” sentences in (43a) and (43b) contrast with the stative sentence in (43c) in which the intransitive verb *nyina* acts as a copula linking the predicate *miyalu maju/warlu* with the first person subject, and allowing the specification of tense and mood features in the auxiliary complex.

- (43) a. *Ngaju ka=rna=ju miyalu-rlu yarlki-rni.*
 I PRS.IND=1S=1 belly-ERG bite-NPST
 ‘I’m getting really angry.’ (Lit. I am biting myself belly(-wise).)
- b. *Miyalu-rlu ka=nyanu pi-nyi Jungarrayi-rlı miyi-ngirli.*
 belly-ERG PRS.IND=ANAPH strike-NPST J-ERG food-ELAT
 ‘Jungarrayi is getting angry over the food.’ (Lit. Jungarrayi is striking himself belly(wise) on account of the food.)
- c. *Ngaju ka=rna nyina miyalu maju/warlu.*
 I PRS.IND=1S sit belly bad/hot
 ‘I am upset/angry.’ (Lit. I am sitting stomach bad/hot)

This aspectual contrast in the domain of emotion verbs, in which the formally reflexive construction signals an inchoative aspect, as opposed to the non-reflexive stative is also found in French: *elle s'est fachée* ‘she got angry’ versus *elle est fachée* ‘she is angry’. A similar contrast is between the reflexive inchoative *Cécile s'énerve* ‘Cécile is getting/gets irritated’ and the causative *Cécile énerve Karine* ‘Cécile irritates Karine’ (Maïa Ponsonnet, personal communication). Where Warlpiri differs from French (and many other languages including Australian ones) is in the restricted domain in which a formal reflexive construction (sometimes referred to as a pseudo-reflexive) signals an externally caused change of state. As noted in §3.1.1, the inchoative versus causative contrast involving change of state predicates such as ‘break’ is expressed in Warlpiri by the use of different inflecting verbs (intransitive vs transitive) rather than the contrast between a formal reflexive construction and a non-reflexive transitive one.³⁰

³⁰Typical of Australian languages, Warlpiri also has more generalised inchoative and causative inflecting verbs which combine with a predicative nominal, e.g., *walyka-jarri* ‘become cool’, *walyka-mani* ‘make cool’).

Mary Laughren

7 Wider perspective

Warlpiri reflexive constructions within the domain of a tensed clause are marked by a non-subject enclitic pronoun having either identical person features with the subject enclitic or by an anaphor which has no person or number features and which may be an exponent of either accusative or dative case. This type of reflexive (and reciprocal) construction is characteristic of Ngumpin-Yapa languages. In fact *=nyanu* is used in all Ngumpin-Yapa to express coreference and seems to be an innovation which distinguishes this group (McConvell & Laughren 2004). In some, such as Walmajarri, it replaces all person object enclitic pronouns including first person singular.

This type of reflexive construction is found more widely among Australian languages but it is not the only type of reflexive structure or even the most common. Many Pama-Nyungan languages express a reflexive relation by means of verbal morphology which has a detransitivizing function. In fact the Arandic languages spoken to the immediate east of Warlpiri country are of this type. In many languages of eastern Australia the same morphology is also associated with an anti-passive construction. Some languages spoken along the southern part of the Gulf of Carpentaria such as Yanyula, Garrwa and Waanyi have distinct reflexive pronoun forms which replace both the nominative subject and coreferential accusative object. Like other pronouns they distinguish person and number.³¹

³¹See the cross-linguistic account of Australian data, including Warlpiri, from the perspective of reciprocal clauses in Evans *et al.* 2007.

8 Abbreviations:

1	first person	IMPF	imperfective
12	first and second person	INC	inceptive
13	first and third person	IND	indicative
2	second person	IRR	irrealis
3	third person	LIG	ligative
ACC	accusative	LOC	locative
ALLAT	allative	NOM	nominative
ANAPH	anaphor	NPST	non-past
BEN	benefactive	OBJCOMP	object
CAUS	causative		complementiser
CFOC	contrastive	PERL	perrelative
DAT	dative	PL	plural
DD	double dative	POSS	possessive
DU	dual	PRS	present
ELAT	elative	PST	past
ERG	ergative	SUBCOMP	subject
FUT	future		complementiser
IMP	imperative		

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Mary Laughren

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7 Reflexive constructions in Warlpiri

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Chapter 8

Coreference constructions in Zenontepec Chatino

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This chapter describes reflexive and other coreference constructions in Zenontepec Chatino, an Otomanguean language of southern Mexico, based on a corpus of naturalistic language use. It is shown that the language has no specific reflexive marker or reflexive construction and that reflexivity and coreference are expressed in the same ways that non-coreference between clausal participants is expressed: coreferential coding devices occupy the multiple grammatical relations that share the coreference. While intensifiers may co-occur with and reinforce coreference for emphasis or disambiguation, they are neither necessary nor sufficient for expressing reflexivity on their own. As domains of grammar that in many languages share formal content or functional overlap with reflexives, the language's Reciprocal construction and correlate of middle voice are also briefly described; they do not overlap with reflexive expressions in Zenontepec Chatino. While most languages display a specialized construction for expressing reflexives, Zenontepec Chatino provides a clear and interesting exception to this cross-linguistic tendency

1 Introduction

In their typological survey on reflexive and reciprocal constructions in 150 languages, Heine & Miyashita (2008: 172) state that “reflexivity and reciprocity are universal concepts insofar as all languages can be expected to have some grammaticalized expression for both.” In fact, they cite only one language, the Portuguese-based Creole of São Tomé, as having “no productive means of expressing reflexivity” (*ibid.*). These findings echo those of Kemmer (1993: 24), who states that most languages have a REFLEXIVE MARKER: “a special marker to indicate that the



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Eric W. Campbell

Agent and Patient (or analogous semantic roles) in an event ordinarily involving two such roles are the same entity.” In a similar vein, for the purposes of cross-linguistic comparison, **chapters/haspelmath** defines a REFLEXIVE CONSTRUCTION as a construction that (i) is used only when (at least) two participants in a clause are coreferential and (ii) also includes some marker indicating that there is such coreference.

The present chapter explores coreference and reflexivity in Zenzontepec Chatino (czn), an Otomanguean language of Southern Mexico, which does not have any reflexive marker, nor does it display any specific construction dedicated to expressing reflexives. Although it is typologically uncommon for a language to lack a reflexive construction, it is not the case that the language has “no productive means of expressing reflexivity.” Rather, reflexivity is expressed in the language by using the same constructions that are used when there is no coreference: the typical referential coding devices (NPs, independent or dependent pronouns, anaphoric zero) are used in their canonical positions for expressing each of the coreferential roles, supported by the usual semantic and contextual factors and disambiguation strategies that help language users maintain referential coherence in discourse. A pair of examples illustrate a transitive clause with non-coreferential agent and patient (1a) and a canonical reflexive expression with coreferential agent and patient (1b);¹ in both cases, the agent is expressed by a pronoun that encliticizes to the verb, and the patient, whether a lexical NP or an enclitic pronoun, is flagged by the device *jiʔi*.

- (1) a. Non-coreferential agent and patient
ntē-naʔa+tiʔi=kāʔá=na jiʔi ya.jnii
 PROG-see+pain=also=1INCL OBJ plant
 ‘we are also making the plants suffer’ [familia 4:18]
- b. Coreferential agent and patient (reflexive)
Ntē-naʔa+tiʔi=na jiʔi=na.
 PROG-see+pain=1INCL OBJ-1INCL
 ‘We are making ourselves suffer.’ [ntelinto itza7 17:22]

After presenting some basic information about Zenzontepec Chatino and the data and methods used in this study §2, the basic syntax, grammatical relations, and referential coding devices of the language are described in §3. With those

¹The orthography used here differs from the IPA as follows: *r* = [ɾ], *ty* = [tʰ], *ly* = [l̩], *ny* = [n̩], *ch* = [ʃ], *x* = [ʃ], *y* = [j], *j* = [h], *V* = nasal vowel, *VV* = long vowel, *˘* = mid tone, *˘˘* = high tone, ‘+’ = compound boundary. Grammatical abbreviations beyond the Leipzig Glossing Rules are listed at the end of the chapter.

8 Coreference constructions in Zenzontepec Chatino

details outlined, the heart of the chapter §4 examines the language's correlate of a canonical reflexive construction, and then other expressions of coreference, both within and across clauses. From there, §5 describes Zenzontepec Chatino grammar in the domains that most often overlap with reflexive expressions in languages of the world: middle voice, the Reciprocal construction, and intensifiers. The Zenzontepec Chatino correlate of middle voice is rarely used, and, like reflexives, it has no dedicated construction. The Reciprocal construction, on the other hand, does have a dedicated marker, which is grammaticalized from the noun 'companion', and thus does not overlap with the expression of reflexives. The language's two intensifiers may be used to reinforce coreference and reflexivity but are themselves never necessary or sufficient for expressing reflexives. Some final remarks conclude the chapter in §6.

2 Language and research context

The municipality of Santa Cruz Zenzontepec is situated in the Sierra Madre del Sur mountains in the southwestern part of Oaxaca state, Mexico (Figure 8.1). The 2010 national census ([Instituto Nacional de Estadística y Geografía \(INEGI\) 2010](#)) reports a municipal population of about 18,000 residents, some 11,000 of which speak an Indigenous language (in most cases Zenzontepec Chatino), and of which about 4,000 are monolingual Indigenous language speakers. These numbers reflect a palpable and progressing language shift to Spanish. There is ongoing and significant migration out of the traditional community, and the language is also currently spoken in diaspora communities in other parts of Mexico and the United States, especially in California, where most Chatino people work in the state's large agricultural industry.

Zenzontepec Chatino is the most divergent extant language of the Chatino language group, a cluster of about 17 language varieties ([Ezéquiel Vásquez, in Boas 1913; Campbell 2013b; Cruz & Woodbury 2014: 265; Sullivant 2016](#)). Chatino is coordinate with the larger and more diversified Zapotec language group ([Mechling 1912](#)), and the two together form the Zapotecan group. Zapotecan, in turn, is a major subgroup of the Otomanguean language family ([Rensch 1976](#)), which is an ancient and diverse family spread across the Mesoamerican cultural and linguistic area ([Kirchhoff 1967\[1943\]; Campbell et al. 1986; Smith Stark 1988](#)).

The data used in this study were selected from a corpus of about 21 hours of recorded, transcribed, and translated naturalistic discourse of varied genres that has been developed collaboratively with Zenzontepec community members since 2007. Examples of language use by about a dozen men and women of varied

Eric W. Campbell

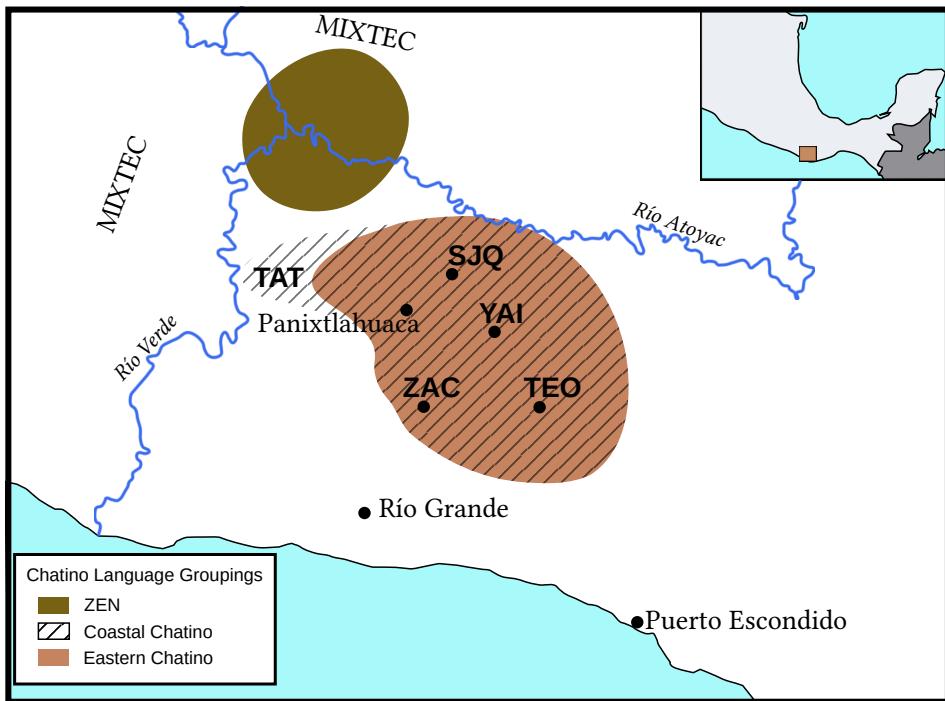


Figure 8.1: Map of the Chatino region in Oaxaca, Mexico (Zenzontepc is represented by ZEN)

ages are included in the present work, drawn from about 30 different recorded events. Each example's translation is followed by a tag in square brackets that includes keywords and time points within the source texts, most of which can be consulted and appreciated by registered users of the Endangered Language Archive (Campbell 2013a).²

3 Basic syntax and reference in Zenzontepc Chatino

This section provides a sketch of Zenzontepc Chatino basic syntax §3.1, grammatical relations §3.2, and referential coding devices §3.3, all of which must be understood in order to characterize and understand coreference and reflexivity in the language.

²The reference for the collection refers to the archival depositor, and not the owner of the copyright or intellectual property right of the material in the collection, which remain with community-member participants.

8 Coreference constructions in Zenzontepec Chatino

3.1 Basic syntax and alignment

Zenzontepec Chatino verbs obligatorily inflect for aspect-mood via complex combinations of prefixes (with some fusion) and tonal alternations (Campbell 2016; 2019). The syntax prefers head-initial structures. Basic constituent order in intransitive clauses is VS, as shown in (2), where the sole participant in the event is a lexical NP that follows the intransitive verb. An adjectival predication whose sole participant is expressed by a dependent (enclitic) pronoun is shown in (3). The enclitic attaches directly to the predicate.

(2) Intransitive verbal clause

- Nku-tiyaq tsaka má?a.*
PFV-arrive.here one lady
'A lady arrived.' [laa nka sa7ne 1:01]

(3) Adjectival predication

- Tyā? lu?u=ya.*
still alive=1INCL
'We're still alive.' [historia1 7:19]

Basic constituent order in transitive clauses is VAO. In (4) a lexical NP agent immediately follows the verb, and the patient NP follows the agent. If the patient-like participant is topical, it is preceded by the flagging device *jiʔi* (Dalrymple & Nikolaeva 2011; Campbell 2015), as shown in (5). Thus, the language displays information structure-based differential object marking.

(4) Transitive clause with non-topical patient

- Kākʷá to.niʔi=ri nka-sāʔq=kāʔá nkʷítsq=V? kii?*
near house=only PFV-CAUS.be.attached=also child=ANA fire
'Right near the house the child also set a fire.' [ntetakan7 jute7 0:24]

(5) Transitive clause with topical patient

- Nka-s-atī? tī ni? kū?wí=V? jiʔi na late?*
PFV.CAUS-TRN-get.untied TPLZ 3RSP drunk=ANA OBJ DEF cloth
chaja=V?
tortilla=ANA
'The drunk untied the tortilla cloth.' [kwini7 laja 9:23]

Dependent pronouns in S role (6) and A role (7) encliticize to the predicate, while in O role (8) they always encliticize to the object marker *jiʔi*.

Eric W. Campbell

- (6) 1sg pronoun in S role

Yākʷá nk-ul-a=q̥?

there PFV-be.born=1SG

‘I was born there.’ [antes aparatos 0:53]

- (7) 1sg pronoun in A role

jā tala k-ājá=q̥? jiʔ̥l=chú?

CONJ for.sure POT-get=1SG OBJ=3SG.F

‘because for sure I am going to get her’ [burro zopilotes 1:20]

- (8) 1sg pronoun in O role

Nka-lōo=yu jiʔ̥l=q̥?

PFV-take.out=3SG.M OBJ-1SG

‘He took me out.’ [kwini7 laja 11:46]

Dependent pronouns in S and A functions never encliticize to the marker *jiʔ̥l*, and dependent pronouns in O function never encliticize to the predicate. Thus, the language displays accusative alignment. Note that there is only one set of dependent (enclitic) pronouns, and one parallel set of independent (emphatic) pronouns in the language (see §3.3). The syntactic function of any NP is encoded by its position in the clause (or its host in the case of enclitic pronouns) as well as semantic, pragmatic, and contextual factors.

The language has flexible constituent order in discourse. For example, the clause in (9) displays OVA constituent order in a construction in which the theme is in focus.

- (9) OVA constituent order

Nkuti chojo nch-ujwi? tī kʷaa.

seed squash PROG-sell TPLZ 1INCL

‘We were selling squash seeds.’ [naten7 michen 5:36]

3.2 Grammatical relations

The examples in (6)–(8) show that Zenzontepec Chatino alignment is accusative, and the language has a Subject grammatical relation that includes arguments in S and A functions. In ditransitive constructions, the theme-like participant (T) is unflagged if non-topical (10) and flagged by *jiʔ̥l* if topical (11), while the recipient-like participant (R) is obligatorily flagged by *jiʔ̥l*, as shown in both examples. Note that the flagging device *jiʔ̥l* often reduces to *ji* or even contracts to *j-M* in natural speech.

8 Coreference constructions in Zenzontepéc Chatino

- (10) Ditransitive with non-topical theme

Nt-u-tū?ú=yu kii?j-nuwē?
 HAB-CAUS-TRN.be.inside=3SG.M fire DAT-3ANA
 ‘He put fire to that.’ [juan oso 9:32]

- (11) Ditransitive with topical theme

Tyāá tī ntyūsé j-nuwē? jiʔi nī ná k-ūtsē.
 POT.ITER.give TPLZ god OBJ-3ANA DAT.2SG now NEG POT-be.afraid.2SG
 ‘God will give that back to you, don’t be afraid.’ [historia2 21:31]

Beneficiary (and maleficiary) participants are also obligatorily flagged by *jiʔi*, regardless of their topicality (12). Thus, recipients, beneficiaries, and maleficiaries pattern together as an Indirect Object grammatical relation (obligatorily flagged by *jiʔi*, glossed as DAT), while patients and themes pattern alike as a Direct Object grammatical relation (flagged by *jiʔi* only if topical or pronominal, glossed as OBJ). The language thus displays indirective alignment in ditransitives (Malchukov et al. 2010).

- (12) Beneficiary

Liwrū k-u-jnyā=yu jiʔi kitsę.
 book POT-CAUS-move=3SG.M DAT village
 ‘He’s going to make a book for the village.’ [historia1 30:22]

Instruments (13) and comitatives (14) are preceded by the flagging device *lóʔō* ‘with’, and together form an adjunct grammatical relation: Oblique *lóʔō* (glossed as WITH).

- (13) Instrument

Nti-?nya=ū? kela j-ū? lóʔō jlyekʷā.
 HAB-clear=3PL corn.field GEN-3PL WITH hoe
 ‘They would clear their corn fields with hoes.’ [cambios 1:09]

- (14) Comitative

Nk-yánō na nkʷitsq́ kí?yū=V? lóʔō juti.
 PFV-stay DEF child male=ANA WITH father(.3)
 ‘the child stayed with his father.’ [nkwitzan ti7i 0:32]

Adnominal grammatical relations include Inalienable Possessor and Alienable Possessor. Inalienable possession is expressed by juxtaposition; the possessor NP follows the possessum NP, as shown in (15). If the Inalienable Possessor is

Eric W. Campbell

encoded by a dependent pronoun, then it encliticizes to the possessum NP. In the Alienable Possession construction, the Alienable Possessor is—similar to the Indirect Object adverbial relation—obligatorily flagged by *jiʔi* (glossed as GEN), following the possessum (16).

(15) Inalienable Possessor

- Lē? nkʷí-chaq̥ nyáʔa na séné=V?*
then PFV-arrive.here mother DEF toad=ANA
'Then the toads' mother arrived.' [kwentu sene 1:19]

(16) Alienable Possessor

- Létā tsoʔō nte-chaʔne wātā jiʔi=yu.*
very well PROG-reproduce livestock GEN-3SG.M
'His livestock are reproducing very well.' [vaquero 0:59]

Zenzontepc Chatino lacks productive voice alternations such as passives or antipassives that would rearrange argument structure, but instead displays a variety of lexicalized and not widely productive derivational valence alternations (Campbell 2015). The pair of examples in (17) illustrates an equipollent Intransitive-Causative alternation. The intransitive verb takes the intransitivizing prefix *y-* (17a), which alternates with the transitivizing prefix *t-* and the Causative prefix *u-* in the transitive causative verb (17b), but note that the Causative marker *u-* is elided by the aspect vowel in vowel hiatus in this instance. The Subject of the intransitive clause becomes the Direct Object of the Causative construction, which has an added agent.

(17) An equipollent Intransitive-Causative alternation

a. Intransitive

- Nk-y-ak̥e na liwrū=V?*
PFV-ITRN-burn DEF book=ANA
'The books were burned.' [historia1 31:05]

b. Causative

- Lūwí? nka-(u-)t-áké=ʔ? j-nā liwrū=V?*
then PFV-(CAUS-)TRN-burn=3PL OBJ-DEF book=ANA
'Then they burned the books.' [historia1 31:47]

There are only a few detransitivizing valence alternations in the language, and they apply to relatively few verbs (Campbell 2015). Thus, the language displays a strong transitivizing preference, as most simplex verb stems are monovalent,

8 Coreference constructions in Zenzontepec Chatino

and most valence alternations increase transitivity. The preference for low transitivity in the verbal lexicon is paralleled in (or the result of) patterns of language use in which events are often expressed in constructions that convey low agency, as shown in (18).

- (18) De-agentive expression

Y-aa ntsukʷā? jiʔ̄l, tsa majlyā.
PFV-go corn GEN(.3) one almud

‘They took him some corn, one almud (~4kg).’ (lit. ‘His corn went, one almud.’) [historia3 6:25]

3.3 Referential coding devices

In order to understand how coreference is expressed in Zenzontepec Chatino, it is necessary to understand how reference is established and tracked in discourse. The sequence in (19) introduces the protagonist of a narrative with the noun ‘person’ preceded by the indefinite article (the numeral ‘one’). In the following clause, the same referent is the Subject of the verb, but since it is topical and the only possible agent of the verb, it is not overtly referred to; this is anaphoric zero (Givón 1983). Zero anaphora—glossed as “(.3)”—is common in Zenzontepec Chatino discourse but is only allowed for third person referents. The Direct Object in the second clause is ‘corn’, an indefinite mass noun, and since it is non-topical it occurs with no article or flagging. The third clause is also transitive, with anaphoric zero Subject (the protagonist), and another new referent, ‘granary’, encoded as an indefinite D.O. The D.O. is introduced into the discourse in an Alienable Possession construction, in which the Alienable Possessor (the protagonist, coreferential with the Subject) is flagged by the Genitive marker *jiʔ̄l*, but is again otherwise unexpressed (anaphoric zero).

- (19) Introducing and establishing referents in discourse

a. *Nk-ā+tāká tsaka nyatē ?ne jnyá.*

PFV-be+exist one person HAB.do work

‘There was a person that worked.’

b. *Nt-u-tūkʷā ntsukʷā?*

HAB-CAUS-be.inside(.3) corn

‘He planted corn.’

c. *Wi? niī nkʷ-isē+toq jaʔwa jiʔ̄l.*

ANA now PFV-turn+stand(.3) granary GEN(.3)

‘From there, he built his granary.’ [kwiten7 nkatzén 0:32]

Eric W. Campbell

The referring expressions in (19) provide examples of what (Givón 1983, Givón 2017: 6) considers devices that express low referential continuity (indefinite lexical NPs) and the highest referential continuity (anaphoric zero) in discourse. Intermediate on the scale from lower to higher referential continuity are definite NPs (see e.g. ‘the book’ in the examples in (17), independent (emphatic) pronouns, as in the 3rd person Anaphoric pronoun in Subject function in (20), and dependent (enclitic) pronouns like the 3rd person Feminine pronoun in (21).

- (20) Independent pronoun

Ná tsaka nta?q nka-su tī nuwəʔ.
NEG one fresh.ear.corn PFV.CAUS-come.loose TPLZ 3ANA

‘Not even one fresh ear of corn did *she* cut.’ [kwiti7yu 12:34]

- (21) Dependent pronoun

Nka-sāʔq=chūʔ chaja telā.
PFV.CAUS-be.attached=3SG.F tortilla night

‘She made tortillas at night.’ [historia3 6:31]

Table 8.1 presents the full paradigm of independent pronouns in the language. The first and second person forms have unique roots, with a distinction between singular and plural, and a clusivity distinction in the first person plural. Third person independent pronouns consist of elements which mostly resemble the dependent pronouns fused with demonstratives (Proximal, Distal, or Anaphoric), as appropriate for the context. For example, in (20) the subject is expressed with a form consisting of the general subordinator *nu* and the Anaphoric demonstrative *wi?*.

Table 8.2 presents the dependent pronouns of the language, which also display the clusivity distinction, as well as additional third person singular distinctions (Non-specific and Respectful). As mentioned earlier, the language has only these two parallel sets of pronouns, independent and dependent, which can serve the function of any grammatical relation in the language. The syntactic functions are expressed not by different forms for Subject, Object, etc., but solely by position (or host), along with semantic and contextual factors.

With the preceding sketch of Zenzontepec Chatino basic syntax, grammatical relations, and referential coding devices now provided, the patterns of expressing coreference in the language are presented next.

8 Coreference constructions in Zenzontepec Chatino

Table 8.1: Zenzontepec Chatino independent pronouns

		SG	PL
1	EXCL	<i>nāá?</i>	(ya)kʷaa
	INCL		<i>naa</i>
2		<i>nu?u</i>	<i>kʷa?q</i>
3	NEUT	<i>nu-</i>	
		DEM	
M		<i>yu-</i>	<i>uʔ?-</i>
		DEM	DEM
F		<i>chū?</i> -	
		DEM	

Table 8.2: Zenzontepec Chatino dependent pronouns

		SG	PL
1	EXCL	<i>=q?</i>	<i>=ya</i>
	INCL	--	<i>=na</i> ~
			<i>=q</i>
2	TONE		<i>=wq</i>
3	NSPC	<i>=u?</i>	<i>=u?</i>
F		<i>=chū?</i>	
RSP		<i>=ni?</i>	

4 Reflexives and other coreference constructions

4.1 Canonical reflexive constructions

As outlined in the preceding discussion, Zenzontepec Chatino does not have distinct pronouns for different syntactic functions: the same set of pronouns (dependent pronouns and their corresponding independent pronouns) serves all syntactic functions. Coreference within a clause is expressed by simply using the same pronoun (or another referential coding device for the same referent) in the appropriate positions for the multiple syntactic functions with shared reference. For example, a “canonical reflexive” construction, in which the Subject is coreferential with the Direct Object (Kulikov 2013: 268), contains the coreferential coding devices in the Subject and D.O. positions and is otherwise formally equivalent

Eric W. Campbell

to a canonical transitive clause without Subject and D.O. coreference. That is, there is no reflexive marker. The examples in (22) illustrate canonical reflexive expressions for first person Inclusive, third person Masculine, and second person singular referents.

(22) Canonical reflexives

- a. First person inclusive

Ntē-naʔa+tiʔi=na j-nā.

PROG-see+pain=1INCL OBJ-1INCL

‘We are punishing ourselves.’ [ntelinto itza7 17:22]

- b. Third person masculine (singular)

Nteʔ-ne+kaya=yu j-yū.

PROG-do+coward=3SG.M OBJ-3SG.M

‘He is making himself a coward.’ [ntelinto itza7 15:00]

- c. Second person singular

Tōtī? jiʔj.

POT.take.care.of.2SG OBJ.2SG

‘Take care of yourself!’ [muchacha ixtayutla 1:48]

The example in (23) illustrates a canonical reflexive expression coordinated with an intransitive clause with coreferential Subject. The referent is encoded by the Masculine (singular) dependent pronoun as Subject and D.O. of the transitive clause (A and O roles) as well as Subject of the intransitive clause (S role).

(23) Canonical reflexive and coreferential Subject in coordinate clause

Lēʔ.nu nka-jnyā=yu j-yū lēʔ nchaa=yu.

then PFV-make=3SG.M OBJ-3SG.M then PROG.go=3SG.M

‘Then he made himself (dressed himself up fancy), and he went.’ [un rico 4:02]

Reflexive expressions like (22b) and (23) that have coreferential third person referents (Masculine in these cases) may raise the question of how reflexive expressions would be disambiguated from similar transitive expressions with non-coreferential participants of the same type. While discourse context is usually sufficient for the intended meaning to be understood, if there is potential referential ambiguity, speakers can employ an independent demonstrative pronoun, for emphasis, thereby cuing the non-coreference (2). As an alternative to signalling non-coreference this way, another disambiguation strategy is to reinforce coreference by using intensifiers (see §5.3).

8 Coreference constructions in Zenzontepéc Chatino

- (24) Non-coreferential Subject and Direct Object

y-akwiʔ=yu j-nuwəʔ?
PFV-speak=3SG.M OBJ-3.ANA

'he_i spoke to him_j (that less topical aforementioned one)' [ku7wi lo jo7o
9:59]
*'he spoke to himself'

The examples in (25) display reflexive expressions involving complex verbal predication. The first can be analyzed either as a single complex verbal predicate meaning 'make one(self) Spanish' (i.e. non-Indigenous) or as a transitive verb with something like a resultative secondary predicate meaning 'Spanish'. The second example contains a verbal lexeme meaning 'cure' or 'heal' consisting of a light verb 'do' and the non-compounded nominal element *kʷítí* 'medicine'. The second example can also be analyzed as an indirect reflexive (see §4.2.1).

- (25) Reflexive complex verbal predication

- a. Resultative-like

Tatiyá tī úʔwq tsáʔ.jlyā nka-jnyā=ūʔ? j-ūʔ?
all TPLZ 3PL.DIST Spanish PFV.CAUS-move=3PL OBJ-3PL
'All of them turned (made themselves) Spanish.' [historia1 34:14]

- b. Complex verbal lexeme

nu.jā ?ne=kāʔá=q kʷítí j-nā
but HAB.do=also=1INCL medicine OBJ/DAT-1INCL
'but we also cure ourselves' [historia1 21:33]

In all of the canonical reflexive examples presented so far, the coreferential arguments are coded with the same type of device: dependent pronouns. While this is the most common structure found in reflexive expressions in discourse, combinations of other types of referential device are also possible. For example, in the first clause in (26), the referent is encoded with a topicalized independent pronoun in Subject function and anaphoric zero in Direct Object function.³

- (26) Reflexive with independent pronoun and anaphoric zero

Nkʷ-i-jnyā+kíʔyū tī nuwəʔjī
PFV-ITER-make+man TPLZ 3ANA OBJ.(3)
'He made himself manly (put on fancy manly clothes),'

³The second clause is similar, with topicalized independent pronoun as Subject and anaphoric zero as inalienable possessor.

Eric W. Campbell

nkʷ-i-tyúkʷa+kiyaʔ tī nuwəʔ sapatū tsoʔō.
 PFV-ITER-put+foot TPLZ 3ANA shoe good(3)
 ‘and he put on his good shoes.’ [cuento DSF 6:59]

In performative ritual speech, notions that would typically be expressed in an intransitive clause, like the prohibitive in (27), can be creatively cast in a causative reflexive expression in order to emphasize the agency and responsibility of the referent, as illustrated twice in the passage in (28).

- (27) Intransitive prohibitive

Ná kutsə=wq.
 NEG POT-be.afraid=2PL
 ‘Don’t be afraid!’ [kela ke kwiten7 3:10]

- (28) Causative prohibitives expressing canonical reflexives

- a. *K-aka=wq chujlyāʔ.jyná.*
 POT-be=2PL authority
 ‘You all will be community authorities.’
- b. *Ná k-e+k-utse=wq jiʔl=wq.*
 NEG POT-CAUS-POT-be.afraid=2PL OBJ=2PL
 ‘Don’t be afraid!’ (lit. don’t frighten yourselves!).
- c. *Ná k-e+k-ulaʔ=wq jiʔl=wq.*
 NEG POT-CAUS-POT-be.cold=2PL OBJ=2PL
 ‘Don’t be threatened!’ (lit. don’t make yourselves cold!).’ [ntelinto itza7 3:10]

Some verbs whose semantics are inherently reflexive, such as ‘bathe oneself’ and ‘dress oneself’ are not expressed as canonical reflexives and can be considered to be merely lexically reflexive, as illustrated in (29). Note that the NP ‘his old clothes’ is coded as an adjunct Locative NP and not a Direct Object.

- (29) Lexical reflexives

Y-ata=yu tsoʔō lēʔ nkʷ-i-tyuʔu=yu sate?
 PFV-bathe=3SG.M well then PFV-ITER-be.inside=3SG.M clothes
la-wíl=yu.
 ADJZ-get.cleaned=3SG.M
 ‘He bathed (himself) well and then got (himself) dressed in his clean clothes.’ [santaru tikela 6:50]

8 Coreference constructions in Zenzontepec Chatino

4.2 Other coreference constructions

The preceding discussion focused on canonical reflexive constructions in which there is coreference between the Subject and the Direct Object within a clause (and some cases of coreference across coordinated or sequential clauses). It was shown that Zenzontepec Chatino has no construction particular to reflexives that mark them as such. Instead, the basic transitive construction is used, with the coreferential coding devices occurring in their typical positions. The same is true for other types of coreference beyond direct reflexives. The following sections discuss coreference in various non-direct reflexive constructions (§4.2.1) and coreference across matrix and embedded clauses (§4.2.2).

4.2.1 Non-direct reflexive expressions

The example in (30) illustrates something like an indirect reflexive (Kemmer 1993: 74) in which both the Subject and a recipient-like participant are coreferential.⁴

- (30) Indirect reflexive

Nchakʷeʔēʔ jnyá jyáʔ.
Nch-akʷiʔ=q? *jnyá jiʔi=qa?*
 PROG-speak=1SG work DAT=1SG
 'I am directing myself.' [vaquero 5:09]

The example in (31) shows an alternation between a direct reflexive, with a 2SG Subject and D.O., and a parallel expression with coreference between the same Subject and an Oblique *lōʔō* comitative. As usual, all of the 2SG pronominal inflection is conveyed by tonal alternation.

- (31) Subject-comitative coreference

- a. *Nkā-lintō* *jiʔi* *nakʷe*.
 PFV.CAUS-go.to.waste.2SG OBJ.2SG say.3
 'You wasted yourself, he said.'
- b. *Nkā-lintō* *jy=q?* *lōʔō*.
 PFV.CAUS-go.to.waste.2SG OBJ=1SG with.2SG
 'You wasted me with you.' [ku7wi lojo7o 17:17]

⁴An alternative analysis of this example is as a monotransitive clause with transitive verb of the schema [-speak] SUBJ [work] OBJ.

Eric W. Campbell

The example in (32) shows coreference of the Subject with an Alienable Possessor of the D.O. and Alienable Possessor of an instrumental Oblique *lóʔō* in the same clause. The example in (33) shows coreference of the Subject with Inalienable Possessors of two coordinated comitative Obliques.

- (32) Coreference of Subject and Alienable Possessors of D.O. and Oblique

Lō laa n-tāá tī nāáʔ j-nā ītsáʔ ntē jy-áʔ lóʔō nu.tii jy-áʔ.
like.so be HAB-give TPLZ 1SG OBJ-DEF WORD PROX GEN-1SG WITH thought GEN-1SG

‘Like so, I tell this story of mine with my thoughts.’ [familia 10:46]

- (33) Coreference of Subject and Inalienable Possessors of Obliques

Ta nkā-naʔa=ūʔ titsqé lóʔō jni?=ūʔ lóʔō lyoʔo=ūʔ.
already PFV-see=3PL badly WITH offspring=3PL WITH spouse=3PL
‘They have already seen the bad with their children and with their spouses.’ [familia 12:26]

The next set of examples illustrate coreference of an Inalienable Possessor of the Subject with a D.O. (34) and with an Indirect Object (35).

- (34) Coreference of Inalienable Possessor and D.O.

Laa? nkā-naʔa+tikáʔā tī nyáʔa=yu j-yū.
like.so PFV-see+cherished TPLZ mother=3SG.M OBJ-3SG.M
‘His mother took care of him like that.’ [santa maria2 14:41]

- (35) Coreference of Inalienable Possessor and I.O.

Ntyūsé n-tyōtí? nakʷe lyoʔo=yu j-yū.
god HAB-know(.3) say spouse=3SG.M DAT-3SG.M
‘God knows’, his wife said to him.’ [choo kwe7en 0:50]

4.2.2 Coreference in embedded contexts

Similar to intra-clausal coreference expressions, coreference between main and embedded clauses is achieved by simply using the appropriate referential coding device in the appropriate syntactic positions in each clause. For example, in (36) the Subject of the matrix clause is coreferential with the Subject of the purpose adverbial clause in the first line of the passage. In the second line of the passage, the Alienable Possessor of the questioned Subject is coreferential with the Subject of the following relative clause.

8 Coreference constructions in Zenzontepec Chatino

- (36) a. Coreference in embedded adverbial clause and relative clause

Tyūkʷá=q [k-ako=q chaja lóʔō tī nūwáq].

POT.sit=1INCL POT-eat=1INCL tortilla WITH TPLZ 3DIST

'Let's sit down to eat with him.'

b. *Tukʷi tāká jiʔ̣i=q [k-ako=q lóʔō].*

what exist GEN=1INCL POT-eat=1INCL WITH(3)

'What do we have that we can eat with him?' [cuento DSF 7:27]

Example (37) contains a relative construction in which the head ('good medicine') is the relative clause Subject and matrix clause D.O. The Alienable Possessor of the Alienable Possessor (a possession chain) of the relative clause Subject is coreferential with the matrix clause Subject.

- (37) Coreference of Subject with Alienable Possessor in a relative clause

Nte-lāstí=nā kʷítī tsoʔō [nu nk-yuʔu ji nyatē kusū? PROG-abandon=1INCL medicine good SBD PFV-be.inside GEN person elder jiʔ̣i=nā.

GEN=1INCL

'We are abandoning the good medicine that our ancestors had.' [familia 11:05]

The Subject of the matrix clause in (38) is coreferential with the Inalienable Possessor of the Subject in the preposed Object complement clause.

- (38) Coreference in matrix and complement clause

Titsé laa ntoo=chú? nkʷ-ii=chú?

badly be face=3SG.F PFV-feel=3SG.F

'She felt that her face was very bad.' [bruja barbona 4:23]

A more complex example is illustrated in (39). The matrix clause verb with Subject enclitic occurs in final position. The Object complement is a nominal predication construction. A light-headed relative clause is the nominal predicate and it is juxtaposed with a headless relative clause that functions as its Subject. The Subject of the matrix clause verb 'want' is coreferential with both the Subject of the relative clause in the nominal predicate and the beneficiary in the relative clause that is the Subject of the nominal predication.

- (39) Coreference in multiple embeddings

[[Tatiyá nu k-aku=q?] [nu tyúʔu jy-q?]] nch-ātī?=q?

all SBD POT-eat=1SG SBD POT.go.out(3) DAT-1SG PROG-want=1SG

'I want *what I harvest* to be *all that I eat*.' [kuna7a kusu7 5:44]

Eric W. Campbell

The preceding examples illustrate that speakers of Zenzontepec Chatino use complex constructions in which multiple clausal embeddings may occur, and coreference is tracked through these structures the same way that coreference is expressed intra-clausally: coreferential coding devices occur in the relevant positions in the same way non-coreferential coding devices would.

5 Middles, reciprocals, and intensifiers

Cross-linguistically, reflexive markers show tendencies to overlap with the markers for middle voice (Kemmer 1993), reciprocal expressions (Maslova 2008; Heine & Miyashita 2008), and what are referred to as intensifiers (König & Siemund 2000). In Zenzontepec Chatino, none of these constructions share a marker with reflexive expressions because reflexives have no dedicated marker in the first place.

5.1 Middle voice

The correlate of a middle voice construction in Zenzontepec Chatino at least shares with reflexive expressions the fact that it is an UNCODED valency pattern (Haspelmath & Hartmann 2015: 65), that is, there is no specific marker on the verb, or any marker at all, that indicates that the construction is a middle voice one. Like most of the valence alternations in the language (Campbell 2015), it is highly unproductive, only occurring with a few verbs: the verbs of ingestion, like ‘eat’ (40) and ‘drink’ (41).

- (40) Middle with ‘eat’

jā nu.ntē tsoʔō ntaku
CONJ 3PROX good HAB-eat.(3)
'this (fruit) is tasty' (lit. 'this (fruit) eats well') [familia 12:58]

- (41) Middle with ‘drink’

- a. *Nt-u-nuʔu jiʔi na lúkʷi=V?*
HAB-CAUS-get.ruined.(3) OBJ DEF mezcal=ANA
'It (water with no sweetness) ruins the mezcal.'
- b. *Lē? yoō? nti-ʔyó tiʔi chini.*
then disgusting HAB-drink.(3) flavor smoke
'Then it (the mezcal) drinks disgustingly with a smoke flavor.' [lukwi proceso 6:18]

8 Coreference constructions in Zenzontepec Chatino

5.2 The Reciprocal construction

Unlike reflexives, the Reciprocal construction in Zenzontepec Chatino has a distinct marker. In the Reciprocal construction, the form *tyá?ā* ‘companion, relative’ is encliticized to the verb base, and there is no longer a grammatical Direct Object, that is, the clause becomes syntactically intransitive. A basic transitive clause with the verb ‘kill’ is shown in (42), followed by a Reciprocal construction involving the same verb.

(42) Reciprocal alternation

a. Basic transitive clause

Nt-ujwi tī kʷaa j-nuwē? lō?ō kētq.

HAB-kill TPLZ 1INCL OBJ-3ANA WITH rifle

‘We would kill those (macaws) with rifles.’ [animales desaparecidos 0:46]

b. Reciprocal construction

Nku-tyejnā nt-ujwi=tyá?ā tī ú?wi?

PFV-begin HAB-kill=RECP TPLZ 3PL.ANA

‘They started to kill each other.’ [maldicion 1:10]

The form *tyá?ā* whence the Reciprocal marker has grammaticalized is an inalienably possessed noun, meaning ‘companion’, ‘family’, or ‘sibling’, a cross-linguistically relatively common source for reciprocal markers (Heine & Miyashita 2008: 178). The example in (43) shows the form as a noun in a comitative noun phrase, and the example in (44) shows the noun in Direct Object function, a bridging context in which the clause can be interpreted either with disjoint reference of the D.O. and Subject or with reciprocal reference.

(43) The form *tyá?ā* ‘companion’ as a noun

Ná kʷēyá? xī ntetākq̄?=na lō?ō kʷiti? lō?ō tyá?ā=na.

NEG measure SBD PROG-suffer=1INCL WITH brother and companion=1INCL

‘What we are suffering with our brothers and companions is immeasurable. [ntelinto itza7 2:43]

(44) Likely bridging context of grammaticalization of Reciprocal =*tyá?ā*

Nkā-sā?q̄=ya j̄l tyá?ā=ya.

PFV.CAUS-be.attached=1EXCL OBJ companion=1EXCL

‘We take responsibility for our companions.’

‘We take responsibility for each other.’ [ntelinto itza7 22:01]

Eric W. Campbell

5.3 Intensifiers

Zenzontepec Chatino has two forms that may function as intensifiers. These are not part of the canonical reflexive construction of the language §4.1, but they may co-occur with or reinforce reflexives. The first is *lákʷi?*, an adjective-like form that can mean ‘one’s own’ (45) or ‘the same ones’ (46), as well as having an intensifier function in which a particular—either surprising or especially important—referent is indicated (47).

- (45) *lákʷi?* used to mean one’s ‘own’

Kejé tsq? lákʷi?=yu nti-níjnyá=yu nu nt-una=yu kitse.
skin back own=3SG.M HAB-use=3SG.M SBD HAB-twist=3SG.M fiber

‘He would use his own leather when he would twist maguey fiber (into twine).’ [maclovio 2:09]

- (46) *lákʷi?* used to mean ‘the same ones’

Lákʷi?=jú? ntye?e=jú? nti-ka+kú?wí=jú?.
same=3PL HAB.be.located=3PL HAB-be+drunk=3PL

‘They are the same ones that are there and get drunk.’ [ntelinto itza7 12:04]

- (47) *lákʷi?* used as an intensifier

wí ntyōtí? tī lákʷi?=ú? tula nakʷe ló?ō x-itsá?=ú?
and HAB.know TPLZ INT=3PL what say.(3) WITH POSS-word=3PL

‘and they themselves know how to say (it) with their language’
[historia3 15:30]

The passage in (48) illustrates the use of the intensifier *lákʷi?* to provide contrast and reinforce the coreference of an otherwise canonical reflexive expression.

- (48) *lákʷi?* as an intensifier reinforcing a reflexive construction

Nyá?a=yu nkā-línto j-yú
mother=3SG.M PFV.CAUS-go.to.waste(3) OBJ-3SG.M

‘So his mother killed him?...’

?a nu lákʷi?=yu nkā-línto=yu j-yú.
Q SBD INT=3SG.M PFV.CAUS-go.to.waste=3SG.M OBJ-3SG.M
...or he himself killed himself?’ [santa maria2 14:34]

The other Zenzontepec Chatino intensifier is *kʷi?ya* ‘alone’, which on its own may function as an adjective, as in the negated adjectival predication in (49) and

8 Coreference constructions in Zenzontepec Chatino

the depictive secondary predicate in (50). It may also function as an adverb encliticized to a verb, either as a manner adverb (51) or an intensifier reinforcing a reflexive expression (52).

- (49) *kʷiʔya* as adjectival predicate
 $Nāxíʔi \mathbf{k}ʷiʔya=ū? nka-?ne=ū? j̄l nkā.$
 is.not alone=3PL PFV-do=3PL OBJ.(3) PST
 'It was not alone that they did it (the work) before.' [antes aparatos 11:05]
- (50) Unbound *kʷiʔya* reinforcing a reflexive
 $Kʷiʔya=ri=q nte-líntoo=q j-nā.$
 alone=only=1INCL PROG-go.to.waste=1INCL OBJ-1INCL
 'Alone one is wasting oneself away.' [historia3 22:19]
- (51) *kʷiʔya* as adverbial enclitic on the verb
 $Nka-?ne+tsáʔq=kʷiʔya=ri t̄i ú?wi? lō.laa nte-?ne tselā.yuu.$
 PFV-do+study=alone=only TPLZ 3PL.ANA how PROG-do world
 'They just studied alone what nature was doing.' [luna siembra 2:56]
- (52) Enclitic *kʷiʔya* reinforcing a reflexive
 $Nte-?ne+lóʔo=kʷiʔya=ri=q j-nā.$
 PROG-do+WITH=INT=only=1INCL OBJ-1INCL
 'We ourselves are making ourselves suffer.' [familia 0:51]

As König & Siemund (2000: 68) point out, "intensifiers may be completely identical to reflexives, they may provide the source for the development of reflexives, and they may combine with reflexives" in different languages. In Zenzontepec Chatino, the intensifiers are not part of the expression of canonical reflexives, nor are they the source of any reflexive marker. They may, however, reinforce coreference, but that is only one of a range of functions displayed by each of the two intensifiers.

6 Conclusion

Zenzontepec Chatino presents a typologically interesting case for the cross-linguistic study of reflexives and coreference. While most languages display a reflexive construction in which the "co-referential direct object is not repeated in the sentence but is either (i) replaced by the reflexive pronoun [...] or (ii) removed from the original structure" (Kulikov 2013: 268), the Zenzontepec Chatino correlate of a

Eric W. Campbell

canonical reflexive expression employs neither of these strategies. In fact, Zenzontepec Chatino has no reflexive construction that meets the cross-linguistic comparative concept as defined by *chapters/haspelmath* in which at least two clausal participants are coreferential, and in which some grammatical marker signals that there is such coreference. In lieu of a specific reflexive construction or reflexive marker, Zenzontepec Chatino expresses reflexives and other types of intra- and inter-clausal coreference by means of the language's standard referential coding devices (NPs, independent pronouns, dependent pronouns, anaphoric zero) in the relevant grammatical relations that share the coreference. This uncommon strategy is also reported for a couple of varieties of the related Zapotec languages (Antonio Ramos 2015: 53; Lee 2003: 88). Where referential ambiguity could arise, speakers can use a demonstrative emphatic pronoun for signaling disjoint reference or an intensifier for reinforcing coreference.

While in many languages middle voice, reciprocal constructions, and intensifiers overlap with or share features with reflexive constructions, this is not the case in Zenzontepec Chatino. The language only sparsely uses a likewise uncoded middle voice alternation, and it presents a distinct and specialized Reciprocal construction with the marker *tyá?ā* 'companion', which has cognate structures and markers in related Chatino (Rasch 2002: 71) and Zapotec (Lee 1999: 91; Munro 2015) languages, as well as more distantly-related Mixtec varieties (Shields 1988: 344; Zylstra 1991: 47). Zenzontepec Chatino has two forms that function as intensifiers, among other functions, neither of which has grammaticalized into any reflexive marker, but which may be used to reinforce unexpected or important coreference relations in otherwise canonical reflexive expressions.

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*8 Coreference constructions in Zenzontepec Chatino***Abbreviations**

ADJZ	adjectivizer	NEUT	neutral gender
ANA	anaphoric demonstrative	OBJ	direct object
CAUS	causative	PFV	perfective aspect
CONJ	conjunction	PL	plural
DAT	dative	PROG	progressive aspect
DEF	definite article	PROX	proximal demonstrative
DIST	distal demonstrative	POT	potential mood
EXCL	exclusive (1PL))	Q	question particle (yes/no)
F	feminine	RSP	respectful (pronoun)
GEN	genitive	SBD	subordinator
HAB	habitual aspect	SG	singular
INCL	inclusive (1PL)	TPLZ	topicalizer
INT	intensifier	TRN	transitivizer
ITER	iterative	WITH	oblique (comitative or instrument)
ITRN	intransitivizer		
M	masculine		
NEG	negative		

Chapter 9

Reflexive constructions in Hoocák

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1 Some basics of Hoocák morphosyntax

Hoocák is an indigenous language of North America that belongs to the Mississippi Valley group of the Siouan language family. Hoocák (also called Ho-Chunk) is a highly endangered language still spoken by approximately a hundred elderly speakers in Wisconsin.

Hoocák is grammatically quite distinct from better known European languages. The verb is morphologically highly complex with a remarkable wealth of morphological positions before and after the verbal root (see further below).

From a syntactic point of view, the most remarkable property of Hoocák is the way how core arguments of the clause are coded grammatically. Arguments of the verbal predicate are filled morphologically by means of pronominal affixes. A pronominally inflected verb in principle represents a complete clause, and lexical NPs are not grammatically necessary, either with a nominal or with a pronominal head; see (1).

- (1) *wasgerá hakaráixuxšqnq*
wasge=ra Ø-ha-kara-gíxux=šqnq
dish=DEF OBJ.3SG-1E.A-POSS.REFL-break=DECL
'I broke my dish.' (White Eagle 1988: 14)

The verbal predicate at the end of the clause in (1). contains two pronominal prefixes, the third person singular object Ø- followed by the first person singular



Johannes Helmbrecht



Figure 9.1: Location of the Hoocak language among the other Siouan languages.

actor (A) prefix *ha-*. The object prefix refers to the referent of the NP *wasge=ra* ‘the dish’, the actor prefix to the speaker. The declarative enclitic =*šqnq* is not obligatory and marks the entire clause as a statement. The possessive reflexive marker *kara-* (POSS.REFL) indicates that the referent of the A argument owns the referent of the U argument.¹ The NP ‘the dish’ may be dropped without affecting the grammaticality of the clause. Note also that the syntactic function of the two arguments in (1) are exclusively marked by the pronominal affixes on the verb.

¹The terms “A argument” and “U argument” are taken from Role and Reference Grammar (cf. Van Valin Jr. & LaPolla 1997, Van Valin Jr 2013), where they are defined as macro-roles, i.e. as generalized semantic roles that subsume various different and more specific agent-like and patient-like semantic roles. I use these terms here to refer to the two different paradigms of person affixes for intransitive verbs in Hoocak and the arguments of a transitive verb that are filled by person affixes of these paradigms. The A paradigm is required for intransitive verbs that designate different kinds of actions, the U paradigm is required for verbs that designate states, properties and uncontrolled processes. In addition, I use these terms here to refer to the first argument of a transitive verb, the A argument, and the second argument of a transitive verb, the U argument, because these arguments are filled with person affixes of the respective A and U paradigms. Note that – because of valence increasing morphological processes – there may be more than one U argument in a verb, which is a particularity of Hoocak. In these cases, I distinguish the two U arguments of a verb terminologically as e.g. “patient U argument”, or “recipient U argument”, or “benefactive U argument”.

9 Reflexive constructions in Hoocąk

There is no case marking of the noun and word order would not help in this case either.

There are up to seven prefix slots of the verb that may be filled with different kinds of grammatical prefixes; see Table 9.1 for an abstract overview.

Table 9.1: Template presentation of prefixes of the Hoocąk verb (cf. Helmbrecht & Lehmann 2008)

Morphological slots	
-7	pronominal prefixes I
-6	outer applicatives (instrument and locative)
-5	outer instrumentals
-4	pronominal prefixes II (Undergoer and Actor)
-3	benefactive applicative, reflexive marker (<i>kii-/ki-</i> REFL), reciprocal marker (<i>kii-/kiki-</i> RECP), possessive reflexive marker (<i>kara-/ kV/ k-</i> poss.refl)
-2	pronominal prefixes III
-1	inner instrumentals
0	verbal root
1-n	suffixes

There are pronominal prefixes that index the core arguments S_A , S_U , A, and U of the clause (labelled pronominal prefixes I–III with slots -7/-4/-2 in Table 9.1). There are four different applicative prefixes that augment the valency of the verb stem (the outer applicatives and the benefactive applicative in Table 9.1). There are eight so-called instrumental prefixes that enrich and specialize the semantics of the verb (similarly labelled outer and inner instrumentals in Table 9.1). And there are a reflexive and a reciprocal marker, which mark the identity of the actor (A) and undergoer (U) of a transitive verb (both in the morphological slot -3 in Table 9.1).

The reflexive marker *kii-* signals that the referent of the A argument is identical with the referent of the U argument. In this case the U argument is never marked separately by a pronominal prefix. The same reflexive marker may also have a reciprocal meaning, if the A argument is plural. This holds for first and second persons as well as for third persons. In addition, it has to be stressed that A and U third person arguments always have a disjoint reference, if there is no reflexive marker. Compare the examples in (2).

Johannes Helmbrecht

- (2) a. *hajánq*
ha<Ø-Ø>já=nq
 <OBJ.3SG-SBJ.3SG>see=DECL
 'he₁ sees him₂' [DL XI: 15]
- b. *hakijánq*
ha<Ø>ki-já=nq
 <SBJ.3SG>REFL-see=DECL
 'he₁ sees himself₁'

There is no way to interpret the two arguments in (2a) as coreferential. If coreference between the two arguments is intended, the reflexivizer *kii-* REFL has to be used; see (2b). The reflexive marker *kii-* may also be interpreted with a reciprocal meaning in case that the A argument is a non-singular referent. In this function, *kii-* competes with the reduplicated form *kiki-* that always marks reciprocal meaning (see examples 6 and 7 below).

In addition, there is a possessive reflexive marker indicating a possessive relation between the A and the U argument (illustrated already in example 1 above). This form will be discussed in §5.1 below.

Some further comments on the pronominal prefixes are necessary. Although there are three morphological slots of pronominal prefixes, there are in fact only two different paradigms of pronominal affixes, one indicating the person category of the S_A argument, i.e. the intransitive subject of a verb with active semantics, and the second one indicating the person category of the S_U argument, i.e. the intransitive subject of a verb with inactive semantics. This marking pattern is lexically fixed for each intransitive verb. Compare the paradigm of personal affixes for intransitive inactive verbs such as *š'aak* 'be old' in Table 9.2 and for intransitive active verbs such as *šgáač* 'play' in

Intransitive active verbs designate controlled movements like 'come', 'go', 'arrive' 'swim' etc. and actions such as 'dance', 'get dressed', 'travel', etc. Table 9.3. Inactive intransitive verbs designate properties like 'be red', 'be big', 'be strong' etc. and uncontrolled processes such as 'float', 'boil', 'slip', etc.

Intransitive active verbs designate controlled movements like 'come', 'go', 'arrive' 'swim' etc. and actions such as 'dance', 'get dressed', 'travel', etc.

The A (transitive subject) and the U (transitive object) arguments of transitive verbs are filled by a combination of pronominal affixes from both paradigms. Hoocák is thus a head-marking language on the clause level and belongs to the so-called split-S marking type. It has to be stressed that this marking pattern – also called active/ inactive alignment type – holds only for first and second persons (speech act participants); see Figure 9.2 (cf. Hartmann 2013: 1268).

9 Reflexive constructions in Hoocąk

Table 9.2: Paradigm of the intransitive inactive verb *š'áak* ‘to be old’

1SG	<i>hj-š'ák</i>	‘I am old’
2SG	<i>nj-š'ák</i>	‘you are old’
3SG	<i>Ø-š'áak</i>	‘he is old’
1I.DU	<i>waqgá-š'ák</i>	‘you and I are old’
1I.PL	<i>waqgá-š'ák-wi</i>	‘we (incl.) are old’
1E.PL	<i>hj-š'ák-wi</i>	‘we (excl.) are old’
2PL	<i>nj-š'ák-wi</i>	‘you (all) are old’
3PL	<i>š'áak-ire</i>	‘they are old’

Table 9.3: Paradigm of an intransitive active verb

1SG	<i>ha-šgáč</i>	‘I play’
2SG	<i>ra-šgáč</i>	‘you play’
3SG	<i>Ø-šgáac</i>	‘he plays’
1I.DU	<i>hj-šgáč</i>	‘you and I play’
1I.PL	<i>hj-šgáč-wi</i>	‘we (incl.) play’
1E.PL	<i>ha-šgáč-wi</i>	‘we (excl.) play’
2PL	<i>ra-šgáč-wi</i>	‘you (all) play’
3PL	<i>šgáac-ire</i>	‘they play’

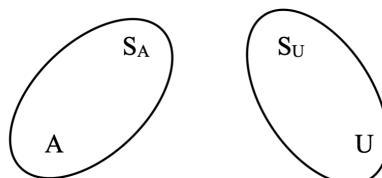


Figure 9.2: Active/ inactive alignment (for first and second persons)

Johannes Helmbrecht

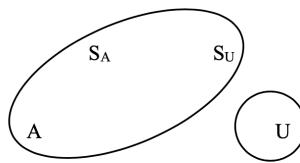


Figure 9.3: Accusative alignment (for third persons)

Third persons show accusative alignment, i.e. S_A , S_U and A are coded in all cases identically, either by the 3SG zero form \emptyset -, or the 3PL form *-ire* (see ??). The transitive object U is marked either by a zero form for 3SG, or by a special pronominal affix *wa-* (OBJ.3PL) for third person plural objects. Note that this special obj.3PL form *wa-* is used only, if the U argument is definite.

The right side of the verb root is likewise morphologically complex, but in a very different way. There are a few suffixes and a large number of enclitics that appear in a fixed order after the verb root. These bound forms designate tense, aspect, and mood categories and are generally less grammaticalized than the prefixes. One manifestation of this is that the prefixes are highly synthetic and undergo plenty of morphophonemic processes, while the suffixes and enclitics are rather agglutinating and stable with regard to their phonological form.

While verbs are easy to identify based on their morphology, nouns are problematic in this respect. There is no noun-specific morphology such as case marking, number marking or gender. Nouns can be identified by their semantics and by their structural and distributional properties, especially as heads of nominal expressions.

The order of the major clausal constituents is quite regular, exhibiting SOV order in traditional terms. The predicate is strictly clause final. Other constituents such as argument NPs, adverbials and subordinate clauses precede the predicate, but may show different orders depending on pragmatic factors (see *Helmbrecht no date*).

2 Basic uses of the reflexivizer

There are no reflexive pronouns in Hoocák (like English *himself*), and reflexive scenarios are never expressed by personal pronouns such that there are coreferential A and U personal pronouns both inflected by the corresponding cases. Hoocák has only two personal pronouns (*nee* ‘first and second person’, and ‘*ee* ‘third person’), which are not case marked, and which are used exclusively for

9 Reflexive constructions in Hoocák

emphatic reasons in specific focus constructions. Instead, Hoocák has one verbal reflexive marker *kii-*, which indicates coreference of the U with the A argument. A second and closely related meaning of the reflexivizer *kii-* is the reciprocal meaning. In addition, this reflexivizer may be reduplicated in order to express explicitly a reciprocal meaning *kiki-RECP*. The relationship between these two forms - *kii-REFL* and *kiki-RECP*- and the two meanings - reflexive and reciprocal - will be illustrated in the subsequent sections.

Reflexivization is usually seen as a detransitivizing operation, not necessarily in terms of a structural syntactic transitivity, but from the point of view of transitivity as a prototype notion (cf. Hopper & Thompson 1980). The action is less transitive, because the undergoer, who is the endpoint of the action, is the same as the actor, i.e. there is only one true independent participant. Reflexive verbs are therefore often grammatically treated as detransitivized verbs in one way or another in the languages of the world. In Hoocák, reflexivization is clearly a detransitivizing process. Formally, this is manifest by the blocking of the U pronominal affixes. Only the A argument is marked by a person prefix. A typical example of a reflexive construction is given in the following utterance from the DOBES corpus of Hoocák texts.²

- (3) *Hqakē huykišgacnikjawi.*
hqakē h̥i-ho< kii>šgac=nj=kje-wi
 NEG.IN 1INCL.A-<REFL>abuse=NEG.FIN=FUT-PL
 'Let's not abuse ourselves.' [ECO027]

The transitive verb *hošgac* 'to abuse someone' in example (6c). has an A and a U argument in its argument structure. The reflexivizer *kii-* indicates that the referent of the U argument is identical to the referent of the A argument. The latter is marked by a pronominal affix *h̥i-* (first person inclusive actor; 1incl.A) and the plural marker for first and second persons *-wi* (PL) at the end. The future marker *=kje* has to be interpreted as a hortative in this context.

²Data for this study come from a large digital corpus of Hoocák text, which were collected within the DOBES funding initiative of the Volkswagen Foundation (<http://dobes.mpi.nl>). The glossed texts and the audio and video files of the Hoocák documentation project are stored in the digital archive of the Max Planck Institute for Psycholinguistics called "The Language Archive" (<http://dobes.mpi.nl/projects/hocank>). The DOBES project "Documentation of the Hoocák Language" was led by Johannes Helmbrecht and Christian Lehmann at the University of Erfurt, Germany. The data taken from the Hoocák corpus are supplemented by data elicited by the author during various fieldtrips to Wisconsin between 1997 and 2007. Abbreviations such as ECO027 specify the text from which the example is taken (here the "Ecology speech") as well as the number of the utterance (here number "027").

Johannes Helmbrecht

In Hoocák, the reflexive prefix *kii-* can, in principle, be used with every transitive verb, if its semantics allows such a derivation, i.e. it must be possible that the action of the verb can be exerted on oneself. In most cases, the agent A argument is coreferential with the patient U argument of the transitive verb; but other coreference relations are possible (see §5 below).

The patient U argument is the first target of the reflexivizer, and this does not change, even if there are other U arguments around. These other U arguments could be introduced into the argument structure of the verb by means of an applicative marker. There are four different applicative markers in Hoocák, a superessive, an inessive, an instrumental and a benefactive applicative marker, which have in common that they open a new undergoer argument slot in the verb. These semantically different undergoer arguments can be wholly or partly coreferential with the A argument (see §5 below). This is, however, not possible with an additional instrumental U argument, certainly for semantic reasons. In this case, the coreference remains between agent (A) and patient (U); see example (4) below. It is hard to imagine a situation in which the instrument is coreferential/identical with the actor of this action.

- (4) *Mqahipahi himákicgisšqnq .*
mqahip-paahi hi-mqaq-Ø-ha-ki-cgis=šqnq
 knife-be.sharp APPL.INST-cut-3SG.U-1E.A-REFL-CUT=DECL
 ‘I cut myself with a sharp knife.’ (Hartmann 2013: ex. 216)³

Similar semantic restrictions apply for verbs that designate an action that cannot be exerted on the actor her/himself. For instance, the reflexivizer *kii-* cannot be used with the transitive verb *ru’q* ‘to carry something’ ‘to lift something’, with a reflexive meaning, because it is pragmatically not possible to lift oneself, or to carry oneself, at least when the literal sense is meant. Despite this pragmatic constraint, *ru’q* ‘to carry someone’ can be marked with *kii-* yielding a reciprocal meaning ‘each other’. This reciprocal use is only possible with a plural A argument. For instance, *kii-ru’q-ire* would mean ‘they carry each other’.

The same holds for the transitive verb *hoki’ú* ‘to imitate something/someone’. This verb cannot receive a reflexive meaning, because it is literally not possible to imitate oneself. However, this verb may receive a reciprocal meaning by adding *kii-* such that it becomes *ho-ki-ki’ú-ire* ‘they imitate each other’. Note that in this case, the single *kii-* has likewise a reciprocal meaning. The middle syllable /ki-/

³The Hoocák data collected by Iren Hartmann (2013) can all be found on the website of the Valency Pattern Leipzig project at the Max Planck Institute for Evolutionary Anthropology (<http://www.valpal.info/languages/hoocak>).

9 Reflexive constructions in Hoocák

in *hoki'ú* is part of the stem. (It may well be that it is the historically lexicalized reflexivizer *kii-*.)

As is often the case in the Hoocák lexicon, otherwise productive derivational means are frequently found in words where they are fossilized as part of the stem. This holds for the reflexive marker *kii-* too. In these cases, the addition of *kii-* results in verbs with a morpheme sequence *kiki-*, which can be interpreted as reflexive or reciprocal. For instance, in the transitive verb *hiki'ó* 'to touch something', the *kii-*-form in the middle is part of the stem and cannot be interpreted as a reflexive marker. If the *kii-* is added as in *hikikí'o*, a polysemous verb emerges. The first meaning is – as one expects – 'to touch oneself', the second meaning is the reciprocal meaning 'to touch each other', and the third meaning is 'to touch something repeatedly' (PM XI:17). Reduplication in Hoocák can be utilized to indicate iterativity, thus the addition of *kii-* may simply be interpreted as a mere reduplication of the middle syllable of the stem.

Another example of this sort is *hokit'é* 'to talk to someone'. The *kii-*-part in the middle is lexicalized and has no reflexive meaning. *Yaakit'é* would be 'I speak to someone' and not *'I speak to myself'. However, to make it reflexive, one can insert *kii- REFL* and gets *yaa-ki-kit'e* 'I speak to myself' (PM XI.10). Another verb that cannot receive a reflexive meaning with *kii- REFL* is the verb provided in (5a–b).

- (5) a. *hat'qp* 'to jump on something'
- b. *ha-ki-t'qp* 'to jump on each other'

The reflexive marker *kii-* in (5b). cannot be interpreted as 'to jump on oneself' for pragmatic reasons. Therefore it is interpreted as reciprocal, which again demonstrates the close semantic relationship between both meanings. The semantic extension from reflexive to reciprocal is conceptually easy, the polysemous encoding of reflexive and reciprocal meanings is therefore widespread among the languages of the world (see [Maslova & Nedjalkov 2013](#)).

The reciprocal usage of the *kii-*-reflexive marker sometimes competes with the reciprocal marker *kiki-RECP*, which is a reduplication of the reflexive marker *kii-*. The reciprocal marker *kiki- RECP* is used only, if the meaning of the reflexivizer *kii-* is ambiguous, and only the reciprocal meaning is intended, or if the speaker wants to particularly stress the reciprocal meaning; cf. the examples in (6) and (7).

- (6) a. *hajá* 'to see sth.'
- b. *hakijá* 'to see oneself'

Johannes Helmbrecht

- c. *haakícaanq*
ha<ha-kí>ca-nq
 see<1E.A-REFL>see\1E.A=DECL
 'I see myself (e.g. in the mirror)'
 - d. *'eejá haakíkicawiinq*
'eejá ha-<ha-kíki>ca-wi=nq
 there <1E.A-RECP>see\IE.A-PL=DECL
 'we see each other there (in the mirror)' [DL XI:15]
- (7) *hegū nqqcge hqqke pii hqqke hijkijawinj hinubahqňq*
hegū nqqcge hqqke pii hqqke <hi>ha<kii>ja-wi=nj
 that.way heart NEG.IN be.good NEG.IN <1I.A><REFL>see-PL=NEG.FIN
hi-nqüp-ahq=ra
 ORD-two-times=DEF
 'We never see each other with good hearts anymore.' [DAP107]

The transitive verb *hajá* 'to see something' may infix the reflexivizer *kii-* yielding a reflexive meaning 'to see oneself'; see the inflected example in (6c). for the first person. The reflexivizer may also receive a reciprocal meaning with this verb, if A is pluralized; see example (7). If there is some doubt, and if the reciprocal meaning is intended, the reflexivizer may be reduplicated to underline that only the reciprocal interpretation is intended; see (7d).

Transitive verbs are inflected for person by a combination of forms from the A paradigm and the U paradigm. The general morphological pattern is that the U form precedes the A form, but some exceptions apply. First, the first inclusive dual and plural A form *hi-* (1INCL.a) always precedes all other prefixes of the verb. Secondly, there is a portmanteau prefix *njj-* for the first person acting on a second person (1& 2) that does not allow a further segmentation. The general and schematic paradigm of pronominal affixes for a transitive verb form of the first and most regular conjugation is given in Table 9.4 (cf. *Helmbrecht no date*)

Table 9.4 covers all combinations of person/ number values of the A and U arguments that are in principle possible. Most of the pronominal affixes precede the verb root (V), but the plural marker *-wi* (PL) for first and second persons, and the subject third person plural marker *-ire* (sbj.3PL) follow the verb root. The white cells with a hyphen in Table 9.4 indicate that this combination of person/ number values cannot be expressed by the corresponding person affixes in Hoocák. These white cells have in common that the referent of the A argument is completely coreferential, or partially coreferent, with the referent of the U argument. Some of these "white" reflexive scenarios can be expressed with the pronominal affix

9 Reflexive constructions in Hoocák

Table 9.4: Transitive paradigm of person markers (first conjugation)

		U		
A	-	1SG	2SG	3SG
	1SG	-	nij-V	Ø-ha-V
	2SG	hj-ra-V	-	Ø-ra-V
	3SG	hj-Ø-V	nj-Ø-V	Ø-Ø-V
	1INCL.DU	-	-	hj-Ø-V
	1INCL.PL	-	-	hj-Ø-V-wi
	1EXCL.PL	-	nij-V-wi	Ø-ha-V-wi
	2PL	hj-ra-V-wi	-	Ø-ra-V-wi
	3PL	hj-V-ire	nj-V-ire	Ø-V-ire

		U				
		1INCL.DU	1INCL.PL	1EXCL.PL	2PL	3PL
A	1SG	-	-	-	nij-V-wi	wa-ha-V
	2SG	-	-	hj-ra-V-wi	-	wa-ra-V
	3SG	waqágá-Ø-V	waqágá-Ø-V-wi	hj-Ø-V-wi	nj-Ø-V-wi	wa-Ø-V
	1INCL.DU	-	-	-	-	hj-wa-V
	1INCL.PL	-	-	-	-	hj-wa-V-wi
	1EXCL.PL	-	-	-	nij-V-wi	wa-ha-V-wi
	2PL	-	-	hj-ra-V-wi	-	wa-ra-V-wi
	3PL	waqágá-V-ire	waqágá-V-ire-wi	hj-V-ire-wi	nj-V-ire-wi	wa-V-ire

of the A argument and the reflexive marker *kii-*. Others cannot be expressed at all with pronominal affixes in Hoocák. I will illustrate some of these restrictions briefly.

The transitive verb *mqacgís* ‘to cut something (with a cutting instrument like a scissor)’ consists of the bound verb root *-cgis* ‘cut something’ and the instrumental prefix *mqq-* that adds a manner/ instrument meaning to the lexical meaning of the verb root (such as ‘with a knife/ with a pair of scissors’, or the like). Note that this instrumental prefix does not provide a new argument slot to the verb root. Reflexive events such as ‘I cut myself’ or ‘you cut yourself’ etc. (see 8a and 9a.) cannot be expressed by a combination of the respective A and U pronominal affixes. Instead, the A prefix *ha-* (1e.a) has to be used plus the reflexive marker *kii-*, which indicates the coreference of A and U; see (8b). and (9b). The coreferential U argument is not marked at all.

Johannes Helmbrecht

- (8) a. * *mqa-hi-ha-cgis*
 by.cutting-1E.U-1E.A-cut
 ‘I cut myself (with a cutting instrument like a scissor)’
- b. *m̄q qkicgis*
 mqq-ha-ki-cgis
 by.cutting-1E.A-REFL-cut
 ‘I cut myself (with a cutting instrument like a scissor)’[PM XI:19]⁴
- (9) a. * *mqq-ni-ra-cgis*
 by.cutting-2U-2A-cut
 ‘you cut yourself (with a cutting instrument like a scissor)’
- b. *mqqnq kicgis*
 mqq-ra-ki-cgis
 by.cutting-2A-REFL-cut
 ‘you cut yourself (with a cutting instrument like a scissor)’

The examples in (8) and (9) represent reflexive events, in which the referent of A (first person singular/ second person singular) is fully identical to the referent of U. If A is a third person singular (zero marked Ø- 3sc), the reflexive marker indicates that A and U are coreferential. If there is no reflexive marker, we have a normal transitive construction with two zero-marked third-person arguments with different referents (see the examples 2a–b above).

Things are more complicated, if plural referents are involved. Hoocák has three different first person plural markers, first person dual inclusive (you and me; (1INCL.DU)), first person plural inclusive (we all including you; (1INCL.PL)), and first person plural exclusive (we all, but not you; (1EXCL.PL)). These A forms can be combined with the reflexive marker *kii-* with the result that the respective first person non-singular group is an A and U argument at the same time. The inclusive/ exclusive distinction is maintained. However, there is a systematic polysemy in the way that either each member of the group acts on him-/herself, or that the members of this group act on each other; a reciprocal meaning.

What is not possible to express pronominally in Hoocák is that a first person non-singular group acts on the first person singular, with or without the reflexivizer. English does not allow this scenario either (**we see myself / me in the mirror*); see [Hampe & Lehmann \(2013\)](#). The inverse situation with a first person singular acting on a first person non-singular is, however, possible in English: *I see us in the mirror*. No matter whether *us* is interpreted as an inclusive plural or

⁴Underlying /h/ in *ha-* (1e.a) and *hi-* (1e.u) always drops word internally.

9 Reflexive constructions in Hoocák

an exclusive plural, it is a kind of partial reflexive situation, which is not marked as reflexive. Hoocák cannot express this situation with its pronominal affixes and the reflexivizer. Therefore, it is marked white plus hyphen in Table 9.4. We have a similar situation with the second person singular as A argument. Hoocák does not allow a 2SG.A acting on a first person inclusive non-singular (1INCL.DU/PL.A). The English equivalent sounds odd, too: ?‘*you* (SG) *see us in the mirror* (including yourself)’. If the first plural pronoun *us* is interpreted as exclusive, it is no longer odd. Then it is no longer a reflexive construction in English and in Hoocák.

The reflexive *kii-* derivation is generally not possible with intransitive active and inactive verbs. There are no such reflexive formations as ‘something breaks by itself’ (**kiišižre*) or ‘something is cooked for oneself’ (**kiitúc*).

3 Emphatic meaning of the reflexivizer

The reflexivizer may be used to express emphasis, which is comparable to some uses of English reflexive pronouns. Compare the examples in (10) and (11) from different texts.

- (10) *hegū waicekji wa'qaježe*
 hegū wa<hi>cek=xjí wa<ha>'u-ha-jee=že
 that.way <1E.U>be.young=INTS <1E.A>do/be-1E.A-POS.VERT=QUOT
wajsisikjí wa'qaježe
 wa<hi>sisik=ník wa<ha>'u-ha-jee=že
 <1E.U>be.agile=DIM <1E.A>do/be-1E.A-POS.VERT=QUOT
yaakiregajq
 hi<ha-kii>re=gajq
 <1E.A-REFL>think=SEQ
 ‘Well, I thought, I was young and fast on foot.’ [MOV026]

The speaker in MOV026 expresses his surprise that the old man in this story ran much faster than he. The transitive verb *hiré* ‘think something’ has two arguments, the thinker as A and the content of the thinking as U argument. The reflexivizer in this example cannot indicate coreference of A and U, but rather emphasizes that the narrated reality contradicts all expectations. A more idiomatic translation in English could perhaps be ‘I really thought for myself’ using the English reflexive pronoun as a self-intensifier within a prepositional phrase as a kind of adverbial to the main verb ‘thought’. A similar usage of the reflexivizer in Hoocák is shown in (11).

Johannes Helmbrecht

- (11) *yaa nij̃ge 'eejaxji saacqxji hotočocra heg̃u (hq)ke*
yaa nij̃=šge 'eejaxji saacq=xj̃i hotočoc=ra heg̃u hake
 AFFIRM me=also about.there five=INTS look.at\1E.A=DEF that.way NEG.IN
wažq nqqkixg̃uñi
wažq nāq<ki>xg̃u=ñi
 something <REFL>understand=NEG.FIN
 ‘Yeah, me too, even when I looked at the story about five times, I couldn’t understand a thing.’ [RRT073]

The transitive verb *nqqxg̃u* ‘to hear something’, ‘to understand something’ has the first person speaker as A argument and the content of what has not been understood (‘thing’) as U argument. The reflexivizer does not indicate coreference of A and U, but emphasizes the fact that despite all the efforts the speaker did not succeed in understanding.

4 Reflexive scenarios with body parts as target

As far as I can judge from the data I have at hand, there is no systematic constructional difference between reflexive scenarios expressed by introverted or extroverted verbs. Introverted verbs demand the same reflexive construction used for extroverted verb.

However, one can find some constructional variation in reflexive scenarios that seem to be linked to different degrees of involvement of the patient argument as it is the case with parts of the body of the A argument. This constructional variation can be observed also with some introverted verbs. Reflexive scenarios with introverted verbs, i.e. verbs that designate body care (grooming) actions such as ‘to wash oneself’ or ‘to shave oneself’ (see Haspelmath2021) occur sometimes with additional morphological material in Hoocak. In addition to the reflexivizer, the verb ‘to wash oneself’ may occur with the possessive reflexive marker. The possessive reflexive marker is a verbal marker that indicates that the A argument of a transitive verb possesses the U argument; compare the examples in (12a–c).

- (12) a. *ružq* ‘to wash something’
 b. *ku-ružq* ‘to wash one’s own’
 c. *wažqtírera waakúružqanq*
wažqtíre=ra wa-ha-kú-ružq=nāq
car=DEF OBJ.3PL-1E.A-POSS.REFL-wash=DECL
 ‘I wash my cars.’ [PM (XI:8)]

9 Reflexive constructions in Hoocák

The verb *ružq* ‘to wash something’ requires the WASHER as A argument and what is WASHED as U argument. The reflexive possessive marker, which has three allomorphs (*kara-/kV-/k- POSS.REFL*) indicates that the referent of A possesses the referent of U; cf. (12b and c). The clause (12c) without this marker would simply mean ‘I wash the cars’. The possessive reflexive does not increase the valency of the verb, but indicates an additional relation between A and U and is a good indicator for transitivity. Only transitive verbs may take it.

If *ružq* ‘to wash something’ is used to express the reflexive scenario ‘to wash oneself’, the possessive reflexive marker may appear in addition to the reflexivizer. See the elicited examples in (13) and (14).

- (13) *hakikúružqanq*
ha-ki-kú-ružq=nä
 1E.A-REFL-POSS.REFL-wash=DECL

‘I wash myself.’ [PM XI:8]

- (14) *hakikikuružqwi*
ha-kiki-ku-ružq-wi
 1E.A-RECP-POSS.REFL-wash-PL
 ‘We wash each other.’ [PM XI:8]

Both constructions, the reflexive construction and the reciprocal construction, may take the possessive reflexive verbal marker. This constructional alternative, i.e. the combination of reflexivizer plus a possessive reflexive, can be found also with other semantic types of verbs. Compare the following two clauses from Hartmann’s database.

- (15) *Wa’i šjuuc yaákikurukq.*
wa’i šjuuc <hi> ha-<ha-ki-ku> rukq
 blanket be.warm <APPL.INST><1E.A-REFL-POSS.REFL>cover
 ‘I covered myself with a warm blanket.’ (Hartmann 2013:example No.8)

- (16) *Wa’i šjuuc yaa’yanqga haákitukq*
wa’i šjuuc hi<ha>’ü= anaga ha<ha- ki>tukq
 blanket be.warm <1E.A>use=and <1E.A-REFL>cover\1E.A
 ‘I covered myself with a warm blanket.’ (lit. ’I use a warm blanket, and I covered myself’) (Hartmann 2013:example No.730)

In the first clause (15), the transitive verb ‘to cover something’ takes both verbal markers, the reflexivizer and the possessive reflexive marker, and in the second (16) only the reflexivizer. Both clauses are semantically almost equivalent;

Johannes Helmbrecht

the difference may perhaps be found in the completeness of the covering, which is partial in the first and complete in the second clause. The combination of reflexivizer plus possessive reflexive may thus correlate with a partial reflexive scenario.

We also find partial reflexive scenarios involving body parts that are expressed only with the possessive reflexive marker and no reflexivizer. For instance, in order to express ‘to shave (oneself)’ in Hoocak, one has to use the transitive verb *gik’o* ‘to scrape off something’. In order to get the ‘shave’ meaning one has to modify the verb; see the following examples.

- (17) *iīhjra* *gigik’o*
 'ii-hj=ra Ø-Ø-gi-gik’o
 mouth-hair=DEF 3SG.U-3SG.A-APPL.BEN-scrape.off
 ‘he₁ shaves him₂’ (lit. ‘He₁ shaves the beard for him₂’) [PM XI:9]
- (18) *iīhjrq* *karaik’o*
 'ii-hj=rq Ø-Ø-kara-gik’o
 mouth-hair=def 3SG.U-3SG.A-POSS.REFL-scrape.off
 ‘he₁ shaved himself₁’ (lit. ‘He₁ shaves his₁, the mouth hair’)

In (17), the verb *gik’o* ‘to scrape off something’ is derived by means of a benefactive applicative *gi-APPL.BEN* that opens a benefactive U argument. Without it, the translation would simply be ‘he₁ scrapes it (beard) off’. Note that the clause in (17) is not a reflexive construction and the two third person arguments have different referents. The *iīhj* ‘beard’ remains the patient U argument of the verb *gik’o* ‘to scrape off something’.

On the other hand, example (18) is a reflexive construction, but without the reflexivizer *kii-*. Instead, the possessive reflexive marker is used. The reflexive scenario here is partial, because the U argument of *gik’o* ‘scrape off something’, the ‘mouth hair’ is a body-part of the A argument. The construction literally says that ‘A shaves his mouth hair’ rendered in English as ‘A shaves himself’. There are further examples that suggest that the degree of affectedness of the patient U in a partial reflexive scenario triggers the choice of different constructions. Compare, for example, the two clauses in (19) from our text corpus.

- (19) WL: *kirucecere* ‘*anqga nqqjurašge wakurucgisires’ā*
 BO: *hqhq*

9 Reflexive constructions in Hoocák

- a. *WL.kii-ru<ce>ce-ire* '*anqaga nqaju=ra=šge*
 REFL<RDP>pull.off.a.piece-SBJ.3PL and hair=DEF=also
 wa-ku-rucgis-ire-s'a
 OBJ.3PL-POSS.REFL-cut.with.scissors-SBJ.3PL-ITER
 ‘they cut themselves and they also cut their hair’
- b. *BO: hqhq*
 yes
 ‘yes’ [RRT068]

In the first clause, the transitive verb *rucé* ‘pull off a piece (of soft substance)’, which is reduplicated *rucecé* ‘pull off many pieces’, takes the reflexivizer *kii-*. This construction is translated by our speakers as ‘they cut themselves’ implying that the action affects the referents of the A argument completely. The second clause describes a second reflexive scenario with the same referents as A, but in this case the action affects the actors only partially; *rucgis* is like *rucece* a transitive verb of cutting; see also the examples (4), (8) and (9) with the related verb *mäqcgis* ‘to cut something (with a cutting instrument)’.

Even less affected is the patient U argument in the reflexive scenarios in the following examples. The transitive verb *horak* ‘to tell something’ is used to express the reflexive scenario ‘to talk about oneself’. In both cases, reflexivity is marked solely by the possessive reflexive marker.

- (20) *Hixqunüigregi... hižq hokarakre... hqhqo heesge haakje.*
 hi-xqunü=nj̥k=regi *hižq ho<ka>rak=re* *hqhq'o heesge*
 1E.U-be.small=DIM=SIM/LOC one <POSS.REFL>tell=IMP yes that's.why
 haa-kje
 make/CAUS\1E.A-FUT
 ‘When I was little ... tell something about **yourself!** ... yes, guess I'll do
 that.’ [HOR008]
- (21) *'Éegi hokarakšgýni žeesge hirairenq.*
 'éegi ho<ka>rak=šgý nj̥ *žeesgé hiré-ire=nq*
 then <POSS.REFL>tell(SBJ.3SG)=DUB thus think.through-SBJ.3PL=DECL
 ‘Then she told about **herself**, that’s what they thought.’ [OH1.2_024]

There are also examples in the Hoocák corpus with *horak* ‘to tell something’ in which the combination of reflexive marker plus possessive reflexive appear (ED11019); similarly for verbs of thinking (FOX027a).

Johannes Helmbrecht

The examples discussed so far suggest that the partiality of the reflexive scenarios correlates with the type of reflexive construction. However, this is only a very loose tendency. We find also clear examples in the corpus where the reflexive scenario is partial, but it is still the canonical reflexive construction that is used. Compare the utterance HOR086 in (22).

- (22) *Hegu'eeja hamiqnqkšqnq jaagu hegū higixgu nq'ikje wagī'ynq jaagu
paara hegū nqqsura hqqke nij howacip rokiguṇige.*
hegū 'eeja hamiq<ha>nqk=šqnq jaagu hegū hq-gixgu
that.way there <1E.A>sit.on(OBJ.3SG)=only what that.way 1E.U-buck.off
nqq'i-kje wa<gi>'u=ra jaagu paa=ra
try(SBJ.3SG)-FUT <APPL.BEN>do/be(SBJ.3SG)=DEF what nose=DEF
hegū nqqsu=ra hqqke nij ho-wacip
that.way head=DEF NEG.IN water APPL.INESS-dump
*roo<**kii**>gu-ni=ge*
<REFL>want(SBJ.3SG)-NEG.FIN=CAUSAL

'Then I sat on her, and she was going to try to buck me off, but she didn't want to put her nose or head in the water.' (lit., but she did not want to put herself in the water with regard to the nose and the head')[HOR086]

In HOR086, the actor is the 'horse', which is introduced in previous clauses of this text. The reflexive construction is used to express the situation that the horse did not want to put parts of its body ('nose and head') under the water. This clause has to be read literally: 'she didn't want to put herself under the water, the nose (and) the head'. The reflexive scenario is thus partial, but the canonical reflexivizer is used. From the perspective of the English translation, one would expect the possessive reflexive to mark the possession of the body parts ('nose'/ 'head').

5 Coreference of the subject with various semantic roles

5.1 Possessor

As has already been illustrated with a few examples (see 1, 12, 18, and 19 above), there is a possessive reflexive marker *kara-*/ *kV/ k-* POSS.REFL that indicates a possessive or other close relationship between the A argument and the U argument of the transitive verb. A canonical example from the text corpus would be BF1006 in (23).

9 Reflexive constructions in Hoocák

- (23) BO: *heg̡u mijkeejā mijnqakanqkšqnq wiižukra kurusgenqkšqnq*
heg̡u mijk=’eeja mijnqk-a=nqk=šqnq wiižuk=ra
 that.way lie.down=there sit(SBJ.3SG)-0=POS.NTL=DECL gun=DEF
Ø-Ø-ku-rusge=nqk=šqnq
 OBJ.3SG-SBJ.3SG-POSS.REFL-clean.up=POS.NTL=DECL
 ‘He was sitting on his cot, he was cleaning his rifle.’ [BF1006]

The transitive verb *rusgé* ‘to clean something’ has a 3SG A argument and a 3SG U argument; both are marked zero. The A argument ‘he’ is the topic of this stretch of discourse, the U argument indexes the NP ‘the rifle’, which is part of the clause. The POSS.REFL marker indicates the possessive relation between A and U. If the possessor of the U argument is not coreferent with the A argument, another construction has to be used. In Hoocák, usually the benefactive applicative *gi-APPL.BEN* is used. This form translates in English as ‘for someone’, but, in addition, the benefactive applicative systematically has a possessive meaning. Compare the following example.

- (24) *’iihj̡ra gigik’o*
’ii-hj̡=ra Ø-Ø-gi-gik’o
 mouth-hair=DEF 3SG.U-3SG.A-APPL.BEN-scrape.off
 ‘he₁ shaves him₂’ (lit. ‘He₁ shaves the beard for him₂’, or ‘He₁ shaves his₂ beard’) [PM XI:9]

The transitive verb *gik’o* ‘to scrape something off’ receives a second U argument, which is semantically a benefactive or a possessor. The actor shaves the beard for someone else, which always implies that this someone else is or may be the possessor of the beard. The beneficiary of the shaving is never coreferent with the actor (A argument), and it is this benefactive/ possessor U argument that is - in most cases - pronominally marked on the verb. The interpretation of the beneficiary as possessor is always available with intransitive inactive verbs, as well as with transitive verbs, and does not depend on the patient U argument, i.e. does not presuppose that the patient U argument is a body part (cf. Helmbrecht 2003; no date). This is demonstrated in (25).

- (25) a. *hi’é* ‘to find something’
 b. *hi-gi-’é* ‘to find something for someone’
 c. *wažqtírera hijig’eenq*

Johannes Helmbrecht

wažqtíre=ra
 car-DEF<3sg.u_{pat}-1E.U_{ben}-3SG.A-3>APPL.BEN-find=decl
hi- < Ø-hi-Ø- > gi-’e=nq

‘he found the car **for me**’/ ‘He found **my** car’ (*Helmbrecht 2003*: 29)

Here, the patient U argument ('the car') is a third person and thus zero marked. If the patient U argument were plural, the OBJ.3PL marker *wa-* would have been used. The beneficiary is licensed by the *gi-* applicative marker, and is likewise marked by a pronominal affix of undergoer paradigm. This beneficiary may always be interpreted as the possessor of the patient U argument ('the car'), no matter if the patient U argument is a body part or not.

5.2 Locational participants

The two personal pronouns in Hoocák mentioned above are used only in certain focus constructions. They never fill argument positions of verbs or prepositions. In addition, Hoocák has no real adpositions, thus, construction like ‘She₁ saw a snake **besides her₁**’ in English, where the pronominal complement of the preposition ‘besides’ is coreferent with the subject of the clause do not exist. However, locative U arguments exist, in particular, if they are added to the argument frame of the verb by means of a locative applicative. One of these applicative markers is *ha-* APPL.SUPESS, which can be translated as ‘on something’ ‘over something’ and the like. Together with the reflexivizer it is possible to mark coreference between the locative U argument and the A argument, as seen in (26)

- (26) *Kutei, nij̥ haakipaxú!*
kutei nij̥ ha-ha-kii-paaxú
 INTJ(male) water APPL.SUPESS-1E.A-REFL-pour\1E.A
 ‘Oh, I poured water over **myself**.’ (*Hartmann 2013*: example No. 31)

There is a second locative applicative *ho-* APPL.INESS that is usually translated as ‘in something’, ‘into something’. With the reflexivizer and the locative inessive applicative, partial coreference is marked with the A argument; compare (27):

- (27) *Wanqq, nqqcawara nij̥ waakipaxú*
wanqq nqqcawa=ra nij̥ ho-ha-kii-paaxú
 INTJ(female) ear=DEF water APPL.INESS-1E.A-REFL-pour\1E.A
 ‘I poured water into my ear.’ (*Hartmann 2013*: example No. 32)

Both examples have a non-reflexive meaning, if the reflexivizer is dropped.

9 Reflexive constructions in Hoocák

5.3 Benefactive/ recipient

In addition to the above-mentioned locational applicatives, Hoocák has a benefactive applicative *gi-* APPL.BEN that introduces a beneficiary or recipient U argument into the argument frame of the verb. One could expect that this applicative marker may co-occur with the reflexivizer in the same manner as the locative applicatives co-occur with the reflexivizer, thus indicating coreference of the A argument with the benefactive/ recipient U argument. Interestingly, this is not possible. I did not find a single instance of this combination in the entire Hoocák corpus (of more than 100 texts) and such a combination does not occur on Hartmann's database of examples (Hartmann 2013) either. However, there are many instances in the corpus where the reflexivizer *kii-* alone has a beneficiary reading. See the following two examples.

- (28) *Žee mq̃şų rakišuruxurukikjane*, *hijke*.
 žee mq̃şų ra-**kii**-šu-ruxuruk-i-kjane *hi<hi>ge*
 that feather 2.A-REFL-2.A-accomplish-0-FUT <1E E.U>say.to(SBJ.3SG)
 “You’ll earn **yourself** a feather,” he said to me.’ [BOF061]
- (29) *Heesge ha’ų woorák te’e hegų hakurukézixjí yaakíre*.
 heesge ha’ų woorak te’e hegų ha-kurukezi=xjí
 that’s.why 1E.A-do/make story this that.way 1E.A-hold.highly=INTS
*hi<ha-**kii**->re*
 <1E.A-REFL>think
 ‘That’s why I thought I would bring out this story.’ (Lit. ‘That’s why I did it, I bring this story, I thought it **for myself**’) [WIL134]

In both cases, the *kii-* REFL marker produces a kind of autobenefactive meaning. The U argument in both utterances is not identical with the A argument, but a kind of third participant is introduced that is the beneficiary of the action. In (27), it is the addressee of the direct speech of the grandfather of the speaker; in WIL134, it is the speaker himself, but he is not the patient U of the verb *hiré* ‘to think something’. Note that the double marking of the second person A in (27) has nothing to do with reflexivity and is just a peculiarity of the morphology of the Hoocák verb.

6 Coreference between non-subject arguments

Hoocák does not have adpositional phrases (as clausal adjuncts) containing free personal pronouns or reflexive pronouns. Thus, constructions like *He spoke with*

Johannes Helmbrecht

John₁ about himself₁, or She told us₁ about ourselves₁ do not exist. The only way to express these states of affairs in Hoocák is to split these clauses in two such that the verbal predicate is repeated: ‘He spoke with/to John, and he spoke about him’.

7 Contrast between object and nominal adpossessor

Hoocák has no possessive pronouns. Instead, Hoocák has two kinds of external possessor marking, one with the possessive reflexive marker, and one with the benefactive applicative. The possessive reflexive is used when the referent of A is, at the same time, the possessor of U (see 23 above). The benefactive applicative is used, if the possessor of U is someone else (see 24 and 25 above). Another construction that allows expressing that the possessor of U is different than A is the NP-internal possessive construction with *hani*. Contrast the two following examples.

- (30) a. *nijkják waakáragigüssqanq*
nijkják wa-ha-kára-gigüs=šqnq
 child OBJ.3PL-1EA-POSS.REFL-teach-DECL
 ‘I₁ taught my₁ children.’
- b. *nijkják k waanàní q waagígüssqanq*
nijkják wa-ha-Ø-nj’ =ra *wa-ha-gigüs=šqnq*
 child OBJ.3PL-own-SBJ.3SG-own=DEF OBJ.3PL-1E.A-teach=DECL
 ‘I₁ teach his₂ children.’ [DL XXIII:3]

The first one (31a) employs the possessive reflexive indicating that A is the possessor of U. The second one (31b) is used because the possessor of U is not A, but someone else. The construction is a kind of NP-internal possessive construction with a fully inflected transitive verb *hani* ‘to own sth.’ that is nominalized with the definite article. The NP can be translated literally as ‘child(ren)₁ (that) he owns them₁’.

8 Contrast between exact and inclusive coreference

Exact coreference between a third person A and a coreferent third person U is expressed with the reflexivizer *kii-* as in (2a) above. On the other hand, there is no easy and direct way to express inclusive coreference of the type ‘*she₁ sees herself and the others_{1+x}*’. The reason is, again, that Hoocák has no free personal

9 Reflexive constructions in Hoocák

pronouns or free reflexive pronouns that can enter into a syntactic coordination with ‘*pro and the others*’.

9 Long distance coreference

Reflexive marking (reflexivizer, reflexive possessive) is restricted to the clausal domain. There is no special construction in Hoocák indicating coreference of, for instance, subject arguments across clause boundaries, as can be found in complement clauses of the type ‘*She₁ thought that she₁ had enough money*’. However, Hoocák allows the suspension of person indexing of the S/A arguments in the complement clause, if this argument is coreferent with one of the arguments S/A/U of the matrix clause; see for instance (31) below.

- (31) *woorák te'é, hiperés nqanígi'ígé, 'eesgé wáa'únq.*
 [woorák te'é **hiperés nqq<njj-gi>'i=ge**] [*'eesgé*
 [story this know <1&2-APPL.BEN>want=CAUSAL] [thus
wa<ha>'uy=nq]
 <1E.A>be/do=DECL]
 ‘Because I wanted you to know this story, I did this.’ [CHT064b]

The embedded transitive verb *hiperes* ‘know’ is not marked for the A argument which should be a second person A argument that is at the same time the U argument of the matrix verb *nqq'i* ‘to attempt sth., to want sth.’. The verb *hiperés* ‘to know something’ of the complement clause is still a finite verb; it still inflects for the U argument (i.e. a zero affix here). This is thus a construction that signals coreference, but since it has no special form, it is not a reflexive construction.

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Johannes Helmbrecht

Abbreviations

1,2,3	first, second, third person,	IMP.POST	delayed imperative inclusive
A	actor agent	INFER	inferential
APPL.INESS	inessive	INTS	intensifier
	applicative prefix	ITER	iterative
APPL.INST	instrumental	NEG.FIN	final negator
	applicative	OBJ	object
APPL.SUPERESS	superessive	OPT	optative
	applicative prefix	PL	plural
ASSUMP	assumptive	POS.HOR	‘be (lying/ horizontal position)’
CAUSAL	causal	POS.NTL	‘be (sitting/ neutral position)’
COLL	collective marker	POS.VERT	‘be (standing/ vertical position)’
CONT	continuative		
CTV	complement taking verb	POSS.REFL	possessive reflexive
DECL	declarative	POT	potential
DEF	definite	PROP	proper name marker
DEM.DIST	demonstrative	PROX	proximal
DEM.DIST	demonstrative, distal	RECP	reciprocal
DEM.DIST	demonstrative, proximal	REFL	reflexive marker
DIM	diminutive	S _A	intransitive (actor) subject
DIST	distal	SBJ	subject
DU	dual	SEQ	sequential
DUB	dubitative	SG	singular
EMPH	emphatic	SIM	simultaneous
EXCL	exclusive	SIM/LOC	simultaneity/ locative
FOC	focus		
FREQ	frequentative	S _U	intransitive
FUT	future		(undergoer) subject
HAB	habitual	TOP	topic
HYP	hypothetical	U	undergoer patient

9 Reflexive constructions in Hoocák

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Chapter 10

Reflexive prefixes in Oneida

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Oneida expresses coreference (or coindexing) by means of two verbal prefixes: the reflexive and the semi-reflexive. Coindexing is strictly a matter of morphology; there are no reflexive nominals, and the verbal prefixes are not grammatical voice morphemes. Both prefixes have other functions as well; for example the semi-reflexive derives anticausative verbs and verbs of nontranslational motion, and the reflexive can express reciprocity.

1 Introduction

Oneida (Northern Iroquoian), a polysynthetic language of North America, expresses coreference (coindexing) within a clause morphologically by means of two prefixes to the verb stem: the **reflexive** prefix -at-/-ata- and the formally related **semi-reflexive** prefix -at-/-ate-/-at^Λ-/-an-/-al-/-a.¹ There are no reflexive nominals in Oneida. Verb forms with the reflexive and semi-reflexive prefixes are given in (1) and (2). The pronominal inflections in (1a) and (2a) mark a relation between two distinct animate arguments: first person exclusive plural acting on third person masculine singular in (1a), and first person singular acting on third person masculine singular in (2a). The pronominal inflections in (1b) and (2b) mark a single animate argument. The verb form in (1b), with the reflexive prefix, is inflected with the pronominal prefix that marks a first person exclusive plural

¹The term coindexing is used here rather than coreference, following the cogent critique of the term coreference in the context of (reflexive) pronouns in Bach & Partee (1980) and subsequent work.



Karin Michelson

argument, and the verb form in (2b), with the semi-reflexive prefix, is inflected with the pronominal prefix that marks a first person singular argument.²

(1) The reflexive prefix

- a. *wa?shakwaste-líste?*
wa?-shakwa-stelist-e?
FACT-1EX.PL>3M.SG-laugh.at-PNC
'we laughed at him'
- b. *wa?akwatateste-líste?*
wa?-yakw-atate-stelist-e?
FACT-1EX.PL.A-REFL-laugh.at-PNC
'we laughed at ourselves'

(2) The semi-reflexive prefix

- a. *wahitsi?nyuhklo-kéwe?*
wa-hi-tsi?nyuhkl-okew-e?
FACT-1SG>3M.SG-snot-wipe-PNC
'I wiped his nose'
- b. *wa?katts?nyuhklo-kéwe?*
wa?-k-at-tsi?nyuhkl-okew-e?
FACT-1SG.A-SEMIREFL-snot-wipe-PNC
'I wiped my nose'

Reflexive meaning in Oneida is expressed exclusively in the verbal morphology. However the reflexive and semi-reflexive are not grammatical voice morphemes; although they do express meanings that in other languages are associated with reflexive or middle voice, there is no evidence for an inflectional voice category in Oneida. In addition it should be noted that the functions of the reflexive and semi-reflexive prefixes are not restricted to coindexing. This is especially so for the semi-reflexive, where the outcome of affixation often has an unpredictable semantic component. Oneida does have independent personal pronouns, used primarily for emphasis and contrast, but there is no reflexive pronoun.

The next section of the paper provides a very brief overview of Oneida morphology that is relevant for understanding the interaction of the reflexive and

²In the Oneida orthography the vowel u is a high-mid back mildly rounded nasalized vowel and ʌ is a low-mid central nasalized vowel. A raised period indicates vowel length. Underlining indicates devoicing, a common phenomenon at the end of an utterance. Excerpts from [Michelson et al. \(2016\)](#) give speaker and title of the recording. Note that in the excerpts not every particle is glossed; a sequence of particles may be translated into English with a single word.

10 *Reflexive prefixes in Oneida*

semi-reflexive with verbal pronominal marking. §3 describes the functions of the reflexive, and §4 is about the semi-reflexive. §4 also compares the distribution of the various forms of the two prefixes. §5 describes how participant roles interact with coindexing, including alternative structures to coindexing for certain roles. The last section ends the paper with some final observations.

2 Background

Oneida is a Northern Iroquoian language spoken by fewer than forty speakers who learned Oneida as their first language. Historically the Oneida nation was located in upstate New York, just east of Syracuse, but in the 1800s groups moved to southwestern Ontario and to northeastern Wisconsin near Green Bay. While today the Oneida, or Onyoyote'a-ká (People of the Standing Stone), reside in all three locations, Oneida is spoken by first-language speakers only at the Oneida Nation of the Thames territory in Ontario. (Map downloaded 20-06-25 from <http://www.angelfire.com/on3/oneida/page2d.html>.)

Oneida is a polysynthetic language and like other Northern Iroquoian languages is remarkable for its complex verbal morphology, including around sixty or so bound pronominal prefixes, an intricate distribution of prepronominal prefixes that include meanings having to do with negation, locations, and quantity (to mention a few), and robust noun incorporation. Despite the proximity to the dominant English-speaking towns, Oneida has relatively few borrowings, instead using mostly conventionalized inflected verb forms as labels for new concepts. There are over 150 uninflected particles with a wide range of meanings; they can, for example, express locations, negation, quantitative and modal concepts, and link clauses in various ways. Most of the examples in this paper may be found in (Michelson & Doxtator 2002) dictionary or in the texts published in Michelson et al. (2016).

Traditionally, Northern Iroquoian is described as having three morphological parts of speech – verbs, nouns and uninflected particles, with kinship terms more recently recognized as a fourth (see Koenig & Michelson 2010). Verbs, nouns and kinship terms are obligatorily inflected with pronominal prefixes. The semantic categories distinguished by the prefixes are person (first, second, third, plus inclusive versus exclusive), number (singular, dual, plural), and gender (masculine, feminine-zoic, feminine). The feminine-zoic singular refers to some female persons, animals, and some inanimates in motion (Abbott 1984, Michelson 2015). The feminine occurs only in the singular; all nonsingular female persons are re-

Karin Michelson

ferred to with feminine-zoic prefixes.³ An indefinite (or unspecified) category is syncretic throughout the system with the feminine singular, and ‘feminine-indefinite’ is the traditional label for the feminine singular plus indefinite categories.

There are three paradigmatic classes of pronominals, and their distribution is relevant for understanding the morphology of reflexive verbs as compared with corresponding non-reflexive verbs. First, there is a class of portmanteau-like prefixes that occur with verbs that have two semantic arguments that are both animate (which includes most kinship terms). For example, the verb form in (3) is inflected with the prefix that references a first person singular proto-agent and a third person masculine singular proto-patient (the terms proto-agent and proto-patient are adopted from Dowty 1991 for semantic roles not confined to canonical agent and patient). The verb forms in (1a) and (2a) in the introduction also have prefixes that reference two animate arguments. The other two classes of pronominals, Agent and Patient, occur with verbs that have only one animate semantic argument. Verbs with Agent pronominals are exemplified in (4) and (5). The verb -ye- ‘wake up’ in (4) has one animate semantic argument, third person masculine singular, and it is inflected with the Agent prefix ha-. The verb -ket- ‘scrape, grate’ in (5) has two semantic arguments but only one animate argument, third person masculine singular; the Agent prefix ha- references this animate argument, and the inanimate argument is not referenced. When a verb has no animate arguments, the verb is inflected with the feminine-zoic singular prefix, since every verb must have a pronominal prefix. Often, the selection of Agent versus Patient paradigm may be evident from the meaning of the verb, but in many cases the semantic motivation has become obscured and the selection of Agent/Patient prefixes is considered by all Iroquoian scholars to be lexically determined by the verb. (See Koenig & Michelson 2015 for a detailed discussion about the realization of arguments in Oneida and the distribution of pronominal prefixes, including arguments for the feminine-zoic singular prefix as the default prefix.)

- (3) *wahihle-wáhte?*
 wa-hi-hlewaht-e?
 FACT-1SG>3M.SG-punish-PNC
 ‘I punished him’

³The label ‘neuter’ sometimes is used in place of feminine-zoic for some of the languages related to Oneida, such as Cayuga and Seneca which no longer distinguish reference to single female ‘zoic’ persons from inanimates.

10 *Reflexive prefixes in Oneida*

- (4) Monadic verb with one animate argument: Agent prefix

waha·yé·

wa-ha-ye?

FACT-3M.SG.A-wake.up-PNC

'he woke up'

- (5) Dyadic verb with one animate argument: Agent prefix

waha·kéte?

wa-ha-ket-e?

FACT-3M.SG.A-scrape,grate-PNC

'he scraped or grated it'

Reflexive and semi-reflexive prefixes occur between the pronominal prefix and the verb root. The verbs -nuhlyaq?k- 'hurt' in (6) and -ahseht- 'hide' in (8) have two distinct animate arguments and bear prefixes referencing both arguments – the same arguments as the verb form in (3). The form in (7), with the reflexive -atat-, is inflected with the first person singular Agent prefix referencing the single distinct animate argument. Likewise, the verb forms in (9) and (10), the latter with the semi-reflexive, have only one animate argument and both are inflected with an Agent prefix.⁴

- (6) Verb with two distinct animate arguments

wa-hi-nuhlyaq?k-e?

FACT-1SG>3M.SG-hurt-PNC

'I hurt him'

- (7) Reflexive verb with one distinct animate argument: Agent prefix

wahatatnú·lyahke?

wa-k-atat-nuhlyaq?k-e?

FACT-1SG.A-REFL-hurt-PNC

'I hurt myself'

- (8) Verb with two animate arguments

wahiya?táksehte?

wa-hi-ya?t-ahseht-e?

FACT-1SG>3SG-body-hide-PNC

'I hid him'

⁴Verbs with the reflexive prefix always occur with the Agent paradigm of pronominal prefixes. Verbs with the semi-reflexive can select the Patient paradigm. Some verbs, such as -ahseht- 'hide' in (8)-(10), require the incorporated root -ya?t- 'body' when the affected argument is animate, as is the case in (8); see Michelson & Doxtator 2002.

Karin Michelson

- (9) Verb with one animate argument: Agent prefix
waʔkáhsehte?
waʔ-k-ahseht-e?
 FACT-1SG.A-hide-PNC
 'I hid it'
- (10) Semi-reflexive verb with one distinct animate argument: Agent prefix
waʔkatáhsehte?
waʔ-k-at-ahseht-e?
 FACT-1SG.A-SEMIREFL-hide-PNC
 'I hid'

Oneida does have free-standing pronouns, but they are used only for emphasis and contrast. First and second person pronouns are uninflected particles, i.e. have a constant form: *í·* for first person, and *isé·* for second person. Third person forms are based on a stem *-ulha?*, inflected with the appropriate pronominal prefixes (from the Patient paradigm). This stem is often glossed 'self' in work on Iroquoian, but it is an intensifier and its function does not include coindexing. The excerpts in (11) and (12) are examples of how it is used.

- (11) Intensifier -ulha?
Kwáh akwekú lonulhá· lotiyáthu.
Kwáh akwekú lon-ulha? loti-yátho-u
 just all 3M.PL.P-self 3M.PL.P-plant-STV
 'They grew everything themselves.' Verland Cornelius, A Lifetime of Memories
- (12) 12 *nʌ̥ akaulhá· sʌ̥ oskanʌha waʔenhotu-kó·,*
nʌ̥ aka-ulha? sʌ̥ oskanʌha waʔ-ye-nhotukw-?
 just 3FI.P-self also quietly FACT-3FI.A-open.a.door-PNC
 'then she herself also quietly opened the door.' Norma Kennedy, The Girl With the Bandaged Fingers

The next two sections give more detail about the distribution and functions of the reflexive and semi-reflexive prefixes.

3 Reflexive prefix

The reflexive prefix *-at-*/*-ata-* functions to identify an instigator of an event as identical with the affected participant, i.e. coindexes a proto-agent and proto-patient participant. Some verbs that are attested with the reflexive are listed in

10 Reflexive prefixes in Oneida

(13). The distribution of -atat- and -atate-is phonological: -atate- occurs when the prefixation of -atat- to the verb stem would result in a non-occurring consonant cluster.

(13) Verbs with the reflexive prefix⁵

- aweʔest- ‘prick, pierce, sting’ & -atataweʔest- ‘prick oneself’
- hlen- ‘cut into, incise’ & -atathlen- ‘cut oneself’
- hloli- ‘talk about someone’ & -atathloli- ‘talk about oneself’
- itł- ‘ pity someone’ & -atatitł- ‘feel sorry for oneself’
- kaly- ‘bite someone’ & -atatkaly- ‘bite oneself’
- kuʔtslihal- ‘weigh something’ & -atatkuʔtslihal- ‘weigh oneself’
- lyo-/liyo- ‘kill’ & -atatiyo- ‘kill oneself’
- nutu- ‘put something into someone’s mouth’ & -atatnutu- ‘feed oneself’
- shnye- ‘look after someone, nurture’ & -ataleshnye- ‘look after oneself’
- stelist- ‘laugh at someone’ & -atatestelist- ‘laugh at oneself’
- wyʌnata?- ‘get something ready’ & -atarewyʌnata?- ‘get oneself ready’
- yaʔtakenha- ‘help someone out’ & -atatyāʔtakenha- ‘help oneself’
- ?nikuhlol- ‘entertain someone’ & -atateʔnikuhlol- ‘entertain or amuse oneself’
- ?nutanhak- ‘blame someone’ & -atateʔnutanhak- ‘blame oneself’
- ?skuthu- ‘burn someone’ & -atateʔskuthu- ‘burn oneself’

An additional use of the reflexive prefix is with kinship terms. The reflexive can occur with a few kinship terms to indicate a dyadic relation; an example is -atatyʌha ‘parent and child’ in the excerpt in (14a). The effect of the reflexive with kinship terms is to express a reciprocal relation. Otherwise reciprocals normally require the dualic prepronominal prefix, as discussed later on in this section. Without the reflexive, the kinship term refers to one of the members only, as in (14b).

(14) 14 The reflexive with kinship terms

- | | |
|------------------------------------|----------------------------|
| a. <i>yotinuhsóta</i> | <i>kaʔikʌ onatatyʌha</i> , |
| <i>yoti-nuhsota</i> | <i>kaʔikʌ on-atat-yʌha</i> |
| 3FZ.PL.P-have.a.home.together this | 3FZ.PL.P-REFL-parent:child |

⁵Some of these are internally complex; the composition of complex stems is given in [Michelson & Doxtator \(2002\)](#) as part of the entry for the stem. Also, stems in Oneida may require a particular prepronominal prefix; for reasons of space, throughout this paper, stems are listed without these prefixes but again this information can be retrieved by consulting [Michelson & Doxtator \(2002\)](#).

Karin Michelson

tahnú· nʌ ya?káhewe? a·kyatekhu·ní,
tahnú· nʌ ya?káhewe? aa-ky-atekhuni-?
 and then it came

'(once upon a time) this mother and daughter had a home together,
 and when it came time for the two of them to eat,' Norma Kennedy,
 The Bird

- b. Né. *kwí·* *né·n*
 Né. *kwí-né·n* *li-yʌha*
 ASSERTION 1SG>3M.SG-parent:child FACT-3M.SG.A-exit-PNC
liyʌha ...
wa-ha-yakʌ?-ne? *y-a-h-a?sl-ot-ʌ?*
 TRANSLOC-FACT-3M.SG.A-axe-stand-PNC
wahaya·kʌne?, yaha?slo·tʌ·,

'so my son, (if it seems like the weather is going to get real bad ...) he goes out, he plants an axe in the ground,' Mercy Doxtator, How to Divert a Storm

The reflexive can encode some additional meaning. For example, with certain one-place predicates that describe a physical attribute or kind of personality, the reflexive adds a component of meaning that may be rendered into English as 'think oneself so' or 'act so', as in (15a). With some verbs the reflexive adds a component that suggests effort, as with the verb 'apply oneself' in (15b). Other verbs that cannot be derived compositionally from the meaning of the non-reflexive verb are 'hire oneself out' in (15c) and 'turn oneself into (another being)' in (15d).

(15) Reflexive verbs with some additional meaning

- a. *Shayá·tat* *ka?ikʌ kʌ?* *nithoyʌha, yah kwí·*
 Shayá·tat *ka?ikʌ kʌ?* *nithoyʌha, yah kwí·*
 he is one person this young guy not really it's incredible
te?wé·ni *nihatatnikʌhtele?*
te?wé·ni *ni-h-atat-nikʌhtele-?*
 PART-3M.SG.A-REFL-be.handsome-STV
 'So there's this one young man, it's incredible the way he considers himself so good-looking.' Georgina Nicholas, The Flirt

10 Reflexive prefixes in Oneida

- b. *tsi?* *a-hutataskénha?* *a-hotiyotá·,*
tsi? *aa-hu-atat-askenha-?* *aa-hoti-yota-?*
 COMP OPT-3M.PL.A-**REFL**-fight.over-PNC OPT-3M.PL.P-work-PNC
ta-huthwatsiláshnye?,
 t-aa-hu-at-hwatsil-a-shnye-?
 DLC-OPT-3M.PL.A-**SEMIREFL**-family-JOIN-look.after-STV
 '(they told them) that they should apply themselves, they should
 work, they should look after their families,' Pearl Cornelius, Family
 and Friends
- c. *nʌ ki? ok ale? wí· wahutaténhane?* *kátsha? ok nú·*
nʌ ki? ok ale? wí· wa-hu-atate-nha?-ne? *kátsha? ok nú·*
 then again FACT-3M.PL.A-**REFL**-hire-PNC somewhere
tahuwatínhane?,
 t-a-huwati-nha?-ne?
 CISLOC-FACT-3>3M.PL-hire-PNC
 'and then again they would hire themselves out, someone would hire
 them somewhere,' Mercy Doxtator, All About Tobacco
- d. *Aulhá· né· thikʌ kóskos yotatunihátyehse?*
 Aulhá· né· thikʌ kóskos yo-atat-uni-hatye-hse?
 herself ASSERTION that pig 3FZ.SG.P-**REFL**-make-PROG-HAB
 'And it was her that would turn herself into a pig' Verland Cornelius,
 A Witch Story

Finally, reciprocal meaning is expressed with the reflexive plus a pronominal prefix with diverse functions, the dualic (duplicative) prefix *te-*. (The basic meaning of the dualic/duplicative is usually described as involving 'twoness', but its functions are quite diverse; see, for example, Lounsbury 1953.) Just like reflexive verbs, verbs that have the reciprocal structure occur with the Agent paradigm of pronominal prefixes. This is shown in the excerpt in (16), which includes two instances of the verb *-naskw-* 'steal (from)'. The last verb form in (16), without the reflexive, bears the prefix *hak-*, referencing two animate arguments, third person masculine singular and first person singular. The first verb form in (16) is a reciprocal with both reflexive and dualic prefixes; it is inflected with the first person exclusive dual Agent prefix *yaky-*.

- (16) Reciprocal verb with the reflexive and dualic prefixes
teyakyatathnaskwas,... ókhale? tho tehahyakwilotáti?
te-yaky-atat-naskw-as ókhale? tho tehahyakwilotáti?
 DLC-1EXCL.PL.A-**REFL**-steal-HAB and there he

Karin Michelson

wahakkʌhanʌsko?

wa-hak-kʌh-a-nʌsko?

is coming

‘we would steal [the blanket] from each other, ..he’d come tiptoeing and steal the blanket from me.’ Pearl Cornelius, Family and Friends

Many verbs can express both reflexive and reciprocal meaning (for example -atatyɑ?takenha- ‘help oneself’ and te- ... -atatyɑ?takenha- ‘help each other’) but some verbs can express only reciprocal meaning (for example -atatnʌskw- ‘steal from one another’, -atatlʌ?nha- ‘get to know one another, become acquainted’, and -atatkahnle- ‘look at one another’).⁶

4 Semi-reflexive prefix

The semi-reflexive prefix -at-/ate-/atʌ/-an/-al/-a- occurs widely in Oneida (the different forms are discussed at the end of this section). The semi-reflexive has a number of functions including use with verbs of grooming, deriving anti-causative verbs, and deriving verbs that involve change of position and manner of self-propulsion. These are meanings that are expressed in some languages by the middle voice. But the semi-reflexive can also change the semantic role of one of the arguments of the verb, and often the result of affixing the semi-reflexive is at least partially unpredictable. These functions are discussed in turn below.

The semi-reflexive is found with most verbs of grooming and body care, including those whose meaning involves the whole body and those that target just a part of it. Many of these verbs have an incorporated noun that denotes the affected body part. The verb form in (17a) involves adornment of the whole body while the one in (17b) is directed just at teeth. Additional grooming verbs are listed in (17c).

(17) Semi-reflexive with grooming verbs

- a. *yakotya?tahsluni*
yako-at-ya?t-a-hsluni
3FI.P-**SEMIREFL**-body-JOIN-dress,prepare[STV]
‘she is all dressed up’
- b. *yutnawilóhalehe?*
yu-at-nawil-ohale-he?
3FI.A-**SEMIREFL**-tooth-wash-HAB
‘she is brushing her teeth’

⁶There is a reflexive verb ‘see oneself’, -atatkʌ-, but it is based on a different verb, -kʌ- ‘see’.

10 *Reflexive prefixes in Oneida*

- c. -atewy Λ t- ‘fix, put away, take care of’, -atatewy Λ t- ‘make oneself presentable’ -hsluni- ‘dress someone’, -atsluni- ‘get dressed’, -kustu Λ lhy Λ k- ‘cut a beard, shave someone’, -atkustu Λ lhy Λ k- ‘shave oneself’, -nathalho- ‘comb someone’s hair’, -atnathalho- ‘comb one’s (own) hair’, -wisklalho- ‘smear with white’, -atwisklalho- ‘put face powder on’

The semi-reflexive derives anticausatives; some derived anticausative verbs are listed in (18). The verbs in (19) represent a sizeable cohort of derived stems with both the semi-reflexive prefix and an overt causative suffix -t-/ht/-?t/-st-. However, with these stems, a canonical causative meaning cannot always be discerned, and furthermore the result of affixing the semi-reflexive can be unpredictable. In other words, while the verbs in (17) are relatively transparent anticausatives, the verbs in (18) are less so.

- (18) Semi-reflexive derives anticausative verbs
- hyo Λ kt- ‘dull something, make dull’ & -athyo Λ kt- ‘become dull’
 - ka Λ tshyu- ‘undo’ & -atka Λ tshyu- ‘come undone’
 - khahsyu- ‘separate, divide, share’ & -atekhahsyu- ‘come apart, separate’
 - hwanhak- ‘tie up’ & -athwanhak- ‘get tied up’
 - lanyu- ‘rub something’ & -atlanyu- ‘rub against’
 - la Λ nekalu- ‘burst something’ & -atla Λ nekalu- ‘burst’
 - la Λ n Λ tahsyu- ‘peel something’ & -atla Λ n Λ tahsyu- ‘peel off’
 - tenih Λ - ‘shake something’ & -attenih Λ - ‘flap’
- (19) Anticausative verbs with a causative suffix and semi-reflexive prefix
- ahkatste- ‘be tough, endure’ & -atahkatsstat- ‘toughen up, make oneself tough’
 - anow Λ - ‘be a liar’ & -atanow Λ ht- ‘doubt, not believe’
 - ksa Λ taks Λ - ‘be a bad child’ & -ateksa Λ taks Λ t- ‘misbehave’
 - lakal(ehl)- ‘for a noise to sound’ & -atlakalehlast- ‘make noise’
 - lhale- ‘be ready, expecting’ & -atelhalat- ‘get (oneself) ready’
 - shnole- ‘be fast’ & -ateshnolat- ‘go fast, do quickly’
 - shw- ‘smell, get a whiff of’ & -ateshwah Λ - ‘smell something’
 - ?niskw- ‘be late’ & -atla Λ niskwaht- ‘do late, slowly, behind schedule’

The semi-reflexive verbs in (20) and (21) describe a change in posture or orientation, or have to do with motion in a particular manner. The verbs in (21) are derived from stative verbs.

- (20) Semi-reflexive derives verbs with a change in orientation or manner of motion

Karin Michelson

- awʌhlat- ‘put something over something’, -atawʌhlat- ‘spill over, go over’
- awʌlye- ‘stir something’, -atawʌlye- ‘wander, stroll’
- kalhateny- ‘turn something over’, -atkalhateny- ‘turn around’
- kalhatho- ‘turn or knock over, plow’, -atkalhatho- ‘turn or roll over’
- ketskw- ‘right something’, -atketskw- ‘right oneself, sit up’
- kwi?t- ‘move something’, -atkwi?t- ‘move over’
- ukoht- ‘penetrate, force through’, -atukoht- ‘pass by, continue on’
- ?sle-/i?sle- ‘drag something’, -ate?sle- ‘crawl’

(21) Semi-reflexive verbs derived from stative verbs

- ha?kwawelu- ‘have one’s head back with throat exposed’,
- atha?kwawelu- ‘put one’s head back’
- nʌtshotalho- ‘have one’s arm hooked through something’, -atnʌtshotalho- ‘hook one’s arm (through someone else’s)’
- utshot- ‘be kneeling’, -atutshot- ‘kneel down’
- ?noyot- ‘be stooped’, -ate?noyot- ‘stoop over (something)’

With a significant number of verbs, the semi-reflexive changes the participant role of one of the arguments of the verb in an unpredictable way, or it just derives a verb with a different and unpredictable meaning. Examples are listed in (22).

(22) The semi-reflexive derives a verb with unpredictable meaning

- ahlist- ‘forbid someone’, -atahlist- ‘put a stop to’
- hloli- ‘tell someone something’, -athloli- ‘talk about someone or something’
- hninu- ‘buy’, -at hnину- ‘sell’
- itʌht- ‘be poor’, -anitʌht- ‘plead’
- khuni- ‘prepare food, cook’, -atekhuni- ‘eat a meal’
- kweny- ‘beat at, best someone’, -atkweny- ‘win’
- liyo-/lyo- ‘beat, kill’, -atiyo- ‘fight’
- niha- ‘lend’, -at hnіha- ‘borrow’
- o?kt- ‘come to the end of, finish, end’, -ato?kt- ‘run out of’
- nyeht- ‘send something with someone’, -at nyеht- ‘send someone something’
- olishʌ- ‘be out of breath, pant’, -atolishʌ- ‘rest’
- tsyʌ?t- ‘cure someone’, -atetsyʌ?t- ‘treat someone’

10 Reflexive prefixes in Oneida

- nhāʔ- ‘hire someone, get someone to do something’, -atʌnhaʔ- ‘hire labour’
- ʔtshaʔ- ‘get beaten, stumped’, -atʌʔtshaʔ- ‘earn’

The semi-reflexive has been described by Lounsbury (1953: 74) for Oneida, Woodbury (2018: 237–243) for Onondaga, and Chafe (2015: 55–58) for Seneca. There is an additional function mentioned in these sources that is relevant here, which is to indicate ownership. An example with an English translation that suggests that an entity, in this case ‘shoes’, belongs to the proto-agent is (23). The last verb form in (15b) above, ‘look after one’s family’, also suggests a kind of ownership.

- (23) Semi-reflexive and ownership

waʔtkaláhtane?
 waʔ-t-k-al-ahtaʔ-ne?
 FACT-DLC-1SG.A-**SEMIREFL**-put.on.shoes-PNC
 ‘I put on my shoes’

However, possession is not entailed. Often, pragmatically it makes sense to think of the object as belonging to the instigator, but (outside of body parts of course) the entity can belong to someone else, or to no one. The semi-reflexive verb just indicates some sort of physical or perceived proximity. In fact, for many verbs, it would be odd to think of the entity as being owned. The verb form in (24) was used in the context of the narrator’s grandmother making baskets, which she sold or traded for goods. The same verb (-uni- ‘make’) occurs in (25), with the affected entity expressed externally rather than by an incorporated noun. Here the narrator is talking about her grandmother making her own butter and cheese. In these contexts, it makes little sense to talk of belongings; rather the sense is making baskets herself for her own purpose; or butter and cheese herself, for her and the family’s use.

- (24) Né· s kwí· yakolaʔnhá·u a·yutaʔahslu·ní·
 Né· s kwí· yakolaʔnhá·u aa-yu-at-aʔahsl-uni-?
 ASSERTION she knows how OPT-3FI.A-**SEMIREFL**-basket-make-PNC
 ‘she really knew how to make baskets.’ Georgina Nicholas, An Oneida Childhood

Karin Michelson

- (25) *né· s kwí· né· owistóhsli? wa?utu·ní· khále?*
 né· s kwí· né·
 ASSERTION butter FACT-3FI.A-SEMIREFL-make-PNC and
cheese, cottage cheese
owistóhsli? wa?yu-at-uni? khále? cheese, cottage cheese
cheese, cottage cheese
 ‘she made butter, and cheese, cottage cheese.’ Verland Cornelius, A
 Lifetime of Memories

This section ends with a brief description of the distribution of the different forms of the semi-reflexive, -at-/ate-/at Λ /-an/-al/-a-, and the overlap with the forms of the reflexive, -atat-/ata-te-. As already mentioned, the reflexive is -ata-te- when adding -ata-t- to the stem would result in a sequence of consonants that is not permitted in Oneida. Similarly, the semi-reflexive form -ate- occurs if otherwise a non-occurring cluster would result. If there were no other semi-reflexive realizations, the reflexive would simply constitute a sequence of two semi-reflexives. However, the semi-reflexive does have additional forms, and the distribution of the forms is only partly phonological: -at Λ - (mainly before stems that begin in n or hn), -al- (before lexically-specified roots that begin in the vowel a), -an- (before lexically-specified roots that begin in the vowel i), and -a- (before a few lexically-specified roots beginning in n or ?n). The same stem can occur predictably with the -atat- or -ata-te- reflexive but select a semi-reflexive form that is not -at- or -ate-. For example, the verb -hninu- ‘buy (from)’ occurs with the semi-reflexive -at Λ - in -at Λ hninu- ‘sell’, listed in (22) above, but with the reflexive -atat- (see (26) below). Another example is -nha?- ‘hire someone’, -at Λ nha?- ‘hire labour’ with the semi-reflexive -at Λ - in (22), and -atatenha?- ‘hire oneself out’ with the reflexive -ata-te- in (15c).

5 Semantic roles

This section is a discussion of pairs of participant roles other than canonical proto-agent and proto-patient that can be coindexed in Oneida, as well as some participant roles that require or allow a reflexive structure in some languages but do not involve the (semi-) reflexive prefixes in Oneida.

A relatively productive suffix in Oneida is the benefactive-applicative, and stems with this suffix can be prefixed with the reflexive to derive stems with arguments that are coindexed, as in the excerpt in (26). Other benefactive verbs are -atatlühuny Λ ni- ‘teach oneself’ (literally, make the matter for oneself) and

10 Reflexive prefixes in Oneida

-atatyοʔtahse- ‘work for oneself’. (There are several forms of the benefactive suffix, some phonologically unrelated; for example -*əni*- and -*hs(e)*-.)

- (26) Reflexive with the benefactive

<i>né-</i>	<i>tsi?</i>	<i>i·</i>	<i>akhwísta?</i>	<i>wá·katste?</i>
<i>né-</i>	<i>tsi?</i>	<i>i·</i>	<i>ak-hwist-a?</i>	<i>waʔ-k-atst-e?</i>
because FIRST PERSON 1SG.POSS-money-NSF FACT-1SG.A-use-PNC				
<i>waʔkatathninúnyuhse?</i>				<i>tsyoʔk nahté·shu?,</i>
<i>waʔ-k-atat-hninu-nyu-hs-e?</i>				<i>tsyoʔk nahté·shu?,</i>
FACT-1SG.A-REFL-buy-DISTR-BEN-PNC all kinds				
'because I used my money to buy all these things for myself,' Norma Kennedy, My First Job in Tobacco				

Interestingly while verbs whose meaning includes a benefactive argument are quite productive with the reflexive, verbs whose meaning includes a recipient seem to be unattested. For example, in Oneida, one cannot give or send something to oneself; but one can give things to one another, as with the reciprocal of the verb -awi-/u- ‘give’ in (27a). For ‘talk to oneself’ a speaker provided the circumlocution in (27b). Here, a form of the emphatic pronoun -ulhaʔ- (see additional examples in (11)–(12)) meaning ‘I am all alone’ is followed by a verb that asserts I am talking; indeed this is perhaps a more careful interpretation of what it means to say ‘talk to oneself’, namely, ‘there I am all alone, and still (nevertheless) I am talking’.

- (27) a. Reciprocal verb (but no corresponding reflexive)

<i>Thoʔnʌ</i>	<i>əhsí·lu?</i>	<i>'tsyoní·tu?</i>
<i>Thoʔnʌ</i>	<i>əhsí·lu?</i>	<i>'tsyoní·tu?</i>
and then you will say beaver		
<i>tetyattnawi·lú?</i>		
te-ty-atat-nawil-u-?		

DLC-1INCL.DU.A-REFL-tooth-give-PNC

‘And then you will say, “beaver let’s trade teeth”. (Mercy Doxtator, Beaver, Let’s Trade Teeth)

- b. *Akulhaʔtsí·wa?* *tho wakéthale?*
ak-ulhaʔ-tsí·wa? *tho wake-thal-e?*
 1SG.POSS-self-intensely there 1SG.P-talk,converse-STV
 ‘I am all alone (and) still I am talking.’ (Spoken by Olive Elm.)

There are no special reflexive forms used for possession. Alienably-possessed entities in Oneida can be inflected with possessive prefixes (related to the Patient

Karin Michelson

series of verbal pronominal prefixes) that identify the person, number and gender of the possessor; inalienably-possessed entities take Agent prefixes. (KoenigMichelson20192020 Koenig & Michelson 2019 are detailed discussions of possession in Oneida.) The excerpts in (28a) and (28b) both have the alienably-possessed form laohwístaʔ ‘his money’ with the third person masculine singular possessive prefix lao-. These excerpts come from a report about a man who regularly left his money with the owner of the local store. When the man died, his son asked the store owner for the old man’s money, but the store owner denied having the money. In (28a) the possessor is coindexed with the masculine singular argument of the verb - atye- ‘throw’, but in (28b) the possessor is disjoint from the masculine singular argument of -hawe- ‘hold, have’. (Out of context, without mention of an overt possessor, the usual interpretation is that the possessor is coreferential with the coargument of the verb.)

- (28) a. Possession

Tho s yakΛ? nú. yehótyehse?
Tho s yakΛ? nú. ye-ho-atye-hse?
 that's habitually reportedly where TRANSLOC-3M.SG.P-throw-HAB

laohwísta?, la-té· latewyΛ·tuhe?
lao-hwist-a? la-té· latewyΛ·tuhe?
 3M.SG.POSS-money-NSF he said

‘That’s where he_i left his_i money, he_i said he_i was saving it.’ Olive Elm, The Dreamer

b. *tsi? lonúhte? kΛ? láhawe?*
tsi lo-anuhe-? kΛ? la-haw-e?
 COMP 3M.SG.P-know-STV right there 3M.SG.A-hold,have-STV

laohwísta? kΛ.
lao-hwist-a? kΛ.
 3M.SG.POSS-money-NSF y’know

‘because he_i knew he_i was holding his_i money right there,’ Olive Elm, The Dreamer

English-like constructions involving coreference with oblique arguments or coreference with a non-subject (patient) do not occur in Oneida. Equivalents of these English-like constructions are expressed differently in Oneida. The excerpt in (29) includes a typical locative structure. There are no adpositions in Oneida and the equivalent phrases require a particle specifying a location (*ohna?*kΛ·shu? ‘along behind’) and the orientation or movement of the located entity (in this case, someone – an unknown and frightening being – is coming along). The excerpt in

10 Reflexive prefixes in Oneida

(30) is given here as an example of a typical multi-clausal structure that is used where in English there is coindexing of a non-subject (e.g. ‘they would talk to them about themselves’). Instead of a prepositional phrase (‘about themselves’) Oneida requires a clause; in this case ‘what their life (or lifestyle) should be like’.

- (29) Locative clause

<i>Né·n</i>	<i>lothu·té.</i>	<i>thik_A tsi?</i>	<i>úhka?</i>	<i>ok</i>	<i>ohna?k_A·shu?</i>
Né·n	lo-athute-?	thik _A tsi?	úhka?	ok	ohna?k _A ·shu?
ASSERTION 3M.SG.P-hear-STV that COMP someone along behind					
<i>ta·y_A·,</i>					
t-a-y _A -e-?					

CISLOC-FACT-3FI.A-come,go-PNC

‘And so he heard someone coming along behind (him),’ Norma Kennedy,
My Father’s Encounter

- (30) 30 Coindexing across clauses

<i>washakotihlo·li·</i>	<i>tsi?</i>	<i>na·hotiliho?t_Ahake?</i>
wa-shakoti-hloli-?		n-aa-hotil-ihw-o?t _A -hak-e?
FACT-3>3M.PL-tell-PNC COMP PART-OPT-3M.PL.P-matter-kind.of-CONT-PNC		
<i>wahotinyake?,</i>		

na *wa-hotil-nyak-e?*
when FACT-3M.PL.P-marry-PNC

‘they would tell them what their life should be like when they got married,’ Hazel Cornelius, Starting Life Together

6 Conclusion

Two verbal prefixes in Oneida, the reflexive and the semi-reflexive, function to coindex arguments of the verb. The basic function of the reflexive is to coindex a proto-agent and proto-patient; the dualic prenominal prefix adds reciprocal meaning. The semi-reflexive is used for verbs of grooming and body care; it also derives anticausatives and meanings expressed by the middle voice in other languages. Both the reflexive and semi-reflexive derive verbs with meanings that cannot be determined simply from combining a coindexing function of the prefixes with the meaning of the verb to which the prefixes are added, and this is especially true of the semi-reflexive. This unpredictability is not surprising for a morphological formation.

Karin Michelson

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Abbreviations

A	agent	INCL	inclusive
BEN	benefactive	JOIN	joiner vowel
CAUS	causative	M	masculine
CISLOC	cislocative,	NSF	noun suffix
COMP	complementizer	OPT	optative
CONT	continuative	P	Patient
DISTR	distributive	PART	partitive
DLC	dualic	PL	plural
DU	dual	PNC	punctual aspect
EXCL	exclusive	POSS	possessive
FACT	factual mode	PROG	progressive
FI	feminine-indefinite	SEMIREFL	semi-reflexive
FUT	future mode	SG	singular
FZ	feminine-zoic	STV	stative aspect
HAB	habitual aspect	TRANSLOC	translocative

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Chapter 11

Reflexive constructions in Yaqui

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In Yaqui (Uto-Aztecan, Mexico), coreferential participants within the same clause can be expressed by reflexive pronouns or nonreflexive personal pronouns. Reflexive pronouns express agent-patient and agent-beneficiary coreference; when noncoreferential, the patient and the beneficiary take accusative case. Nonreflexive personal pronouns express the coreference between the agent and several other semantic roles (e.g., theme, interlocutor, recipient, source, location); when noncoreferential, these participants take oblique case. The agent-possessor coreference alternates: it is usually expressed by nonreflexive pronouns but, under certain circumstances, it is reflexive-marked. These patterns suggest that the use of reflexive pronouns in Yaqui is syntactically conditioned, i.e., reflexive pronouns cannot be combined with postpositions and cannot serve as adnominal modifiers.

1 Introduction

It is a universal tendency that languages avoid using two or more coreferential full NPs within the same clause. As a result of this tendency, coreferential NPs can be marked in two different ways: one of the coreferential NPs may be replaced by a (reflexive) pronoun, or it may be deleted; in the latter case the verb may receive a special reflexive marking (Kemmer 1993; Kazenin 2001; König & Gast 2008; chapters/haspelmath). There are two ways to express coreferential participants in Yaqui: use of reflexive pronouns and use of nonreflexive personal pronouns. Reflexive pronouns are used when the agent is coreferential with the patient (1a) or the beneficiary (1b). Nonreflexive pronouns are used when the agent is coreferential with the recipient (1c) and other semantic roles. When taking noncoreferential NPs, *a'ana* 'dress' takes an accusative patient, *maka* 'give' takes



Lilian Guerrero

an accusative beneficiary, and *bittua* ‘send’ takes an oblique recipient. In Yaqui, oblique core arguments are marked by postpositions.

- (1) a. *Ino=ne* *a'ana-n.*
1SG.REFL=1SG.NOM dress-PASTC
‘I dressed myself.’
- b. *Joan-Ø* *u-ka* *toto'i-ta* *emo* *maka-k.*
John-NOM DET-ACC hen-ACC REFL give-PFV
‘John gave the hen to himself.’
- c. *Lupe-Ø* *supem* *a-u* *bittua-k.*
Lupe-NOM cloth.PL 3SG.OBL-DIR send-PFV
‘Lupe sent clothes to him/her/it, to herself.’

Accordingly, coreferential participants in direct (1a) and indirect (1b) reflexive constructions are marked by reflexive pronouns, whereas coreferential participants in oblique reflexives (1c) are expressed by nonreflexive personal pronouns. Strictly speaking, oblique reflexives are not reflexive constructions because there is no special form that signals the coreference (Haspelmath, this volume). Note that nonreflexive pronouns in (1c) allow a disjoint reference interpretation. In this chapter, coreferential constructions without a special form are called nonreflexive constructions. The agent-possessor coreference is slightly more complex: it is usually expressed by nonreflexive pronouns unless the anaphoric pronoun occupies the object position, i.e., direct and indirect reflexive constructions. Based on these patterns, I propose that the use of reflexive pronouns in Yaqui is syntactically conditioned, i.e., reflexive pronouns cannot be combined with postpositions and cannot function as adnominal modifiers.

I begin this chapter by presenting some basic information about the Yaqui language. In §2, I give a summary of the pronominal system, and briefly touch on reflexive coding in other Uto-Aztecan languages. In §3, I present the analysis of direct, indirect, oblique and adposessive reflexive domains. Then, I discuss some issues on middle voice (§4), and coreferential NPs outside simple clauses (§5). In §6, I offer some conclusions.

1.1 Yaqui and the Uto-Aztecan family

Yaqui belongs to the Uto-Aztecan language family, one of the largest and most widespread language families in the Americas, with representative languages spoken from the western United States all the way to southern Mexico. Uto-Aztecan languages are classified into a southern branch and a northern branch.

11 Reflexive constructions in Yaqui

The southern branch includes Tepiman, Corachol, Nahuatl, and Taracahita languages; the last group includes Yaqui, Mayo, Guarajio and Tarahumara. Historically, Yaqui was spoken by the Yoeme people living along the Rio Yaqui, in Sonora, Mexico and, following the Mexican Revolution of 1920, a large group of Yaqui speakers settled in Arizona, United States. Today, there are fewer than 1,000 speakers in Arizona (Simons & Fennig 2017) and approximately 16,500 speakers in Sonora (Instituto Nacional de Estadística y Geografía (INEGI) 2010), where Yaqui is spoken in several communities spread across eight towns (Figure 11.1). The data analyzed in this chapter come from one of these Sonoran communities, Vicam, where Yaqui is spoken in daily life and taught in several bilingual elementary schools. By age six, most community members are bilingual speakers of Yaqui and Spanish.

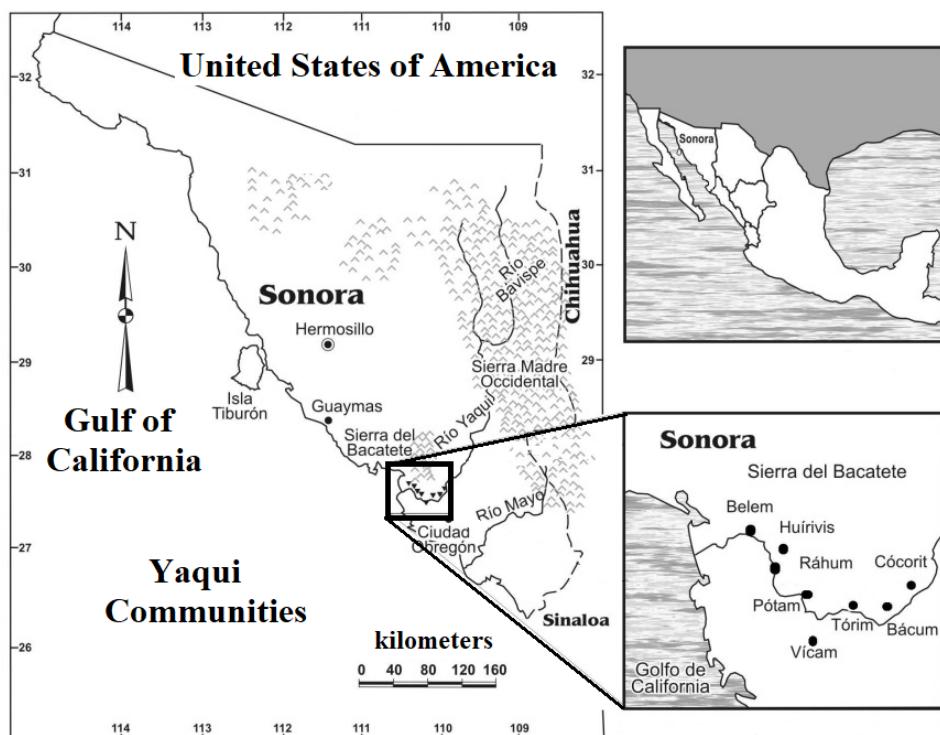


Figure 11.1: Yaqui communities (adapted from Estrada 2009: 18)

Lilian Guerrero

1.2 Basic morphosyntactic features of Yaqui

Yaqui is an agglutinating, dependent-marking, head-final, primary object language (Lindenfeld 1973; Escalante 1990; Dedrick & Casad 1999; Félix 2000; Guerrero 2006). It is the only southern Uto-Aztec language still spoken where case marking on nominals is preserved. Yaqui distinguishes between direct core arguments (marked by nominative and accusative case) and oblique core arguments (marked by postpositions). In nominals, the nominative is morphologically unmarked, and the accusative is marked by *-ta* (2a–2b). There are some issues related to direct case marking that I would like to elaborate upon. First, the nominative and accusative affixes and the plural suffix *-(i)m* are mutually exclusive, meaning plural arguments only take the plural suffix, as does *ume o'ouim* ‘the men’ in (2b). Second, the accusative *-ta* covers several grammatical functions, including the possessed noun inside genitive phrases in (2c) and the nominal complement of some postpositions in (2d) and (3a) below.¹

- (2) a. *U-Ø chu'u-Ø batwe-u bwite-k.*
DET-NOM dog-NOM river-DIR run.SG-PFV
'The dog ran to the river.'
- b. *U-me o'ou-im u-ka chu'u-ta bicha-k.*
DET-PL man-PL DET-ACC dog-ACC see-PFV
'The men saw the dog.'
- c. *Joan-ta juubi-Ø ne=bicha-k.*
John-ACC wife=NOM 1SG.ACC=see-PFV
'John's wife saw me.'
- d. *Lupe-Ø bwa'a-m-ta mabeta-k u-e kobanao-ta-betana.*
Lupe-NOM eat-NMLZ-ACC receive-PFV DET-OBL government-ACC-from
'Lupe received food from the government.'

Postpositions such as the directional *-u* ‘to’, the locatives *-po* ‘in, on’ and *-t* ‘at, on the top of, about’, and a few others mark oblique core arguments. In (2d), the third participant of a three-place predicate is marked by *-betana* ‘from’. In (ex:guerrero:3a-ex:guerrero:3b), the second argument of two-place predicates take *-u* ‘to’ and *-t* ‘about’. When present, determiners reflect the case marking of the head noun. Thus, they are unmarked when modifying a nominative NP

¹See Guerrero (2019a,c) for a detailed discussion of direct and oblique core arguments, the syntactic functions of the suffix *-ta*, and the use of postpositions as oblique case markers. There is also a set of nouns that are always plural, e.g., *supem* ‘clothes’ (1c). In these cases, the plural suffix is not morphologically segmented.

11 Reflexive constructions in Yaqui

(2a), take *-ka* when modifying an accusative NP (2b), *-me* when the NP is plural (2b) and (3a), and *-e* if the NP is marked by a postposition (2d) and (3a). The absence of a determiner favors an indefinite reading of the NP, as *bwa'am* 'food' in (2d). Clause-level word order is rigidly SOV, but other orders are possible, e.g., postverbal phrases.

- (3) a. *U-me yoeme-m u-e jamut-ta-u jina'ateo-*Ø.
DET-NOM man-NOM DET-OBL woman-ACC-DIR complain-PRS
'The men are complaining with the woman.'
- b. *Jaibu-ne ae-t ju'unea-*Ø.
already=1SG.NOM 3SG.OBL-LOCC know-PRS
'I already know about it.'

Verbs in Yaqui do not inflect for person or number, though a number of verbs have suppletive stems that show number agreement, as in (2a). There are few intransitive/transitive verb pairs coded by suppletion, e.g. *uba/ubba* 'take a bath/bathe someone', and many verb pairs that morphologically distinguish between an intransitive form ending in *-e*, *-te*, or *-ke* and a transitive form ending in *-a*, *-ta*, or *-cha* (Dedrick & Casad 1999; Guerrero 2004). When the basic stem describes a change of state, the intransitive/transitive endings encode spontaneous/causative change of state distinction; these verbs have a stative counterpart ending in *-i*, *-ti*, or *-ia* that encodes a result state. The examples in (4) show the three aspectual classes of the verb 'break'. When the stem denotes an active predicate, the endings merely indicate syntactic transitivity, as in *tubukte/tubukta* 'jump/jump something'. It is not the case, however, that all verbs ending in *-e* are intransitive and/or have a transitive counterpart, and vice versa, not all verbs ending in *-a* must be transitive and/or have an intransitive counterpart.

- (4) a. *Empo mesa-ta kok-ta-k.*
2SG.NOM table-ACC break-TR-PFV
'You broke the table.'
- b. *U-Ø mesa-Ø kok-te-k.*
DET-NOM table-NOM break-INTR-PFV
'The table broke.'
- c. *U-Ø mesa-Ø kok-ti-Ø.*
DET-NOM table-NOM break-STA-PRS
'The table is broken.'

Lilian Guerrero

Previous studies on Yaqui verbs have focused on valency-changing functions, e.g. valency and transitivity (Álvarez González 2007; Estrada et al. 2015; Tubino 2017), causative (Guerrero 2008; Tubino 2011), applicative (Guerrero 2007), and passive (Escalante 1990). These mechanisms are marked by verbal suffixes. For instance, the causative suffix *-tua* adds a new (agent) argument to the verb; the example in (5a) corresponds to the causative version of (4a). The suffix *-wa* marks passive and impersonal clauses. Compare the active clause in (4a) and the *-wa* clauses below. In the passive version, the accusative object serves as the nominative subject (5b), whereas in the impersonal version, the object remains the same, i.e., an accusative object (5c). In *-wa* clauses, the agent cannot be expressed syntactically.

- (5) a. *Inepo mesa-ta enchi kok-ta-tua-k.*
1SG.NOM table-ACC 2SG.ACC break-TR-cause-PFV
'I made you break the table.'
- b. *Mesa-Ø kok-ta-wa-k.*
table-NOM break-TR-PASS-PFV
'The table was broken.'
- c. *Mesa-ta kok-ta-wa-k.*
table-ACC break-TR-PASS-PFV
'(Someone) broke the table.'

The expression of reflexives, reciprocals, and middles has been largely ignored in Yaqui grammar. Unlike applicative, causative, and passive constructions, they do not use verbal affixes, but instead use pronominal forms. Before I begin the discussion of these often overlooked constructions, a few words on the Yaqui pronominal system are needed.

2 The pronominal system

2.1 Personal pronouns

The Yaqui pronominal system formally distinguishes between nominative, accusative, oblique, possessive, and self-intensifier functions (Table 11.1). Pronominal elements range in status from fully independent forms to clitics and affixes. Additionally, there are full and reduced pronouns. Full pronouns, such as *inepo* 'I' in (5a), behave like lexical elements in terms of their distribution, while reduced nominative pronouns can behave like "second position" clitics, as in (6a).

11 Reflexive constructions in Yaqui

Occasionally, the two forms co-occur, especially for the first and second person (6b). Nominative third-person pronouns are commonly omitted, and reduced accusatives (available only for third person) tend to cliticize to the verb, as seen in (2c) above. There is also a set of oblique pronouns used as complements of postpositions.

Table 11.1: Yaqui pronominal system

	Nominative	Accusative	Oblique	Possessive	Emphatic
1SG	inepo, ne	nee, ne	ne-	in, nim	inepol, inepela
2SG	empo, 'e	enchi	e-	em	empola, empela
3SG	aapo, Ø	aapo'ik, a'a, a	a(e)-	aapo'ik, a, -wa	aapola, aapela
1PL	itepo, te	item	ito-	item	itepol, itopela
2PL	eme'e, 'em	enchim	emo-, eme-	em, enchim	emepola, emepela
3PL	bempo, Ø	aapo'im, am	ame-	bem, be- mpo'im	bempola, bempela
		bempo'im			

- (6) a. *Kuta-m ili=ne yeu=to-toja-n kaa bu-bu'u-m*
 wood-PL little=1SG.NOM out=RED-take-PSTC NEG RED-a.lot-PL
 juni'i.
 although
 'I took out wood, even if it was just little by little.' (Guerrero 2019b;
 HVF)
- b. *Empo= e kaa 'aman wee'-ean.*
 2SG.NOM=2SG.NOM NEG there go-ought
 >You ought not go there.' (Dedrick & Casad 1999: 243)

In Yaqui, personal pronouns are necessarily referential, i.e., they cannot have a non-specific or generic interpretation. For instance, the direct object of *bwa'e* 'eat' in (7a) is *tajkaim* 'tortillas'; this NP can be substituted by the accusative pronoun *am* (e.g. 'they eat them'). In (7b) the verb takes a non-specific object marked by

Lilian Guerrero

the prefix *ji'i-* ‘thing’, but *ji'i-* cannot be replaced by an accusative pronoun *a* (e.g. ‘they eat it’). Accusative and oblique pronouns are also obligatory when a core argument is extraposed to the right, as illustrated in (7c). In this context, the extraposed NP needs to be topical, as it encodes referents previously introduced in discourse, and it must also be a definite NP (Belloro & Guerrero 2010).

- (7) a. *Bempo tajkaim bwa'e-*Ø.
3PL.NOM tortilla.PL eat-PRS
‘They eat tortillas.’
- b. *Bempo ji'i-bwa'e-*Ø.
3PL.NOM thing-eat-PRS
‘They eat something.’
- c. *Aapo jiba a=bitchu-k, u-ka jamut-ta.*
3SG.NOM always 3SG.ACC=watch-PFV DET-ACC woman-ACC
‘He watched her all the time, the woman.’ (Silva et al. 1998; 2:26)

2.2 Reflexive pronouns

As shown in Table 11.2, the paradigm of reflexive pronouns in Yaqui varies according to different descriptions of the language. The first column shows the paradigm proposed by Dedrick & Casad (1999: 246). Note that all persons have their own reflexive form except the second and third person plural, which are both coded by *'emo*. The second column presents the reflexive pronouns listed by Estrada (2009: 32). In her paradigm, *'emo* also expresses the second person singular and serves as an alternative coding for the third person singular. As shown in (8), reflexive pronouns behave like full pronouns, e.g., they are free forms and occupy the object position (pre-verbally). Yaqui does not allow reflexive pronouns in subject function.

- (8) a. *Hunama beha 'au ko'okoi-su-ka 'au ine'e-te-k.*
there well REFL get.sick-CMPL-PTCP REFL feel-INTR-PFV
‘Well, after having fallen sick, she recovered.’ (Dedrick & Casad 1999: 246)
- b. *Juan-Ø batwe-u emo himaa-k.*
John-NOM river-DIR REFL throw-PFV
‘John threw himself into the river.’ (Estrada 2009: 129)

The third column shows the reflexive pronouns I have found in the field. From the examples in (9a-b), it is clear that the reflexive pronoun *'emo* has extended to

11 Reflexive constructions in Yaqui

Table 11.2: Yaqui reflexive pronouns

	Dedrick & (1999)	Casad (2009)	Estrada (2009)	Field (since 1997)	Notes	Buelna (1890)
1SG	'ino		ino	ino, emo, omo	inone	
2SG	'emp		emo	emo, omo	emore	
3SG	'au		au, emo	au, emo, omo	auo	
1PL	'ito		ito	ito, emo, omo	itote	
2PL	'emo		emo	emo, omo	emorem	
3PL	'emo		emo	emo, omo	emorim	

all grammatical persons. I also found that, for some young speakers, *emo* alternates with *omo*, as illustrated in (9c).

- (9) a. *Kuta-e=ne* *emo beeба-k.*
 stick-with=1SG.NOM REFL hit-PFV
 'I hit myself with the stick.'
 b. *Emo* *lautia* *emo* *supe-tua-Ø.*
 2SG.NOM quick REFL dress-cause-PRS
 'You get dress yourself very quickly.'
 c. *Wa'a-Ø* *ili* *jamut-Ø* *si* *yolisia* *omo* *chichike-Ø.*
 DEM-NOM little woman-NOM INT pretty REFL brush-PRS
 'That girl brushes herself very prettily.'

Therefore, the reflexive pronouns *ino*, *au*, and *ito* can be called personal reflexive pronouns since they vary according to the person of the subject. Since *emo* ~ *omo* can co-refer with any person, it can be considered a general reflexive pronoun 'self'. Apparently, there are no differences in use between personal reflexive pronouns and the 'self' form. It is important to distinguish the reflexive pronoun *au* 'himself/herself/itself' in (8a) from the homophonous oblique *a-u* 'to him/her/it' in (10a). First, the reflexive *au* cannot be split morphologically, and thus cannot take a plural form to indicate a plural referent, though the oblique pronoun can, (10b). Second, reflexive *au* cannot combine with case markers and postpositions, while the oblique pronoun is the base for all postpositions. And third, several Yaqui verbs take oblique arguments marked by the directional postposition *-u* (Guerrero 2019a,c). However, most of these verbs do not accept reflexive readings. In (10) the participants are non-coreferential; the intended reflexive

Lilian Guerrero

reading for (10a) is ungrammatical because, according to my consultants, ‘it does not make any sense to talk to oneself’.

- (10) a. *Peo-*Ø *a-u* *nooka-k.*
 Peter-NOM 3SG.OBL-DIR talk-PFV
 ‘Peter talked to him/her/it, *to himself’
- b. *Inepo* *ame-u* *wat-te-k.*
 1SG.NOM 3PL.OBL-DIR miss-INTR-PFV
 ‘I missed them.’

2.3 Historical notes on reflexive pronouns

Langacker (1977: 47) claims that “innovation, loss, and modifications of reflexive pronouns is an exceedingly complex subject in the Uto-Aztecán grammar”. For Proto-Uto-Aztecán, Langacker reconstructs the reciprocal verbal prefix *na-, and the reflexive verbal prefixes *ni- ‘myself’, *ta- ‘ourselves’, *i- ‘yourselves’, and *mo- for all other persons. The reflexive prefixes have been lost in all northern languages; hence the reciprocal prefix indicates both senses. In some southern languages, reflexive pronouns may cover both functions.

There are no known historical documents on Yaqui that permit us to trace the evolution of its reflexive forms, though there is a grammatical sketch of Cahita (Buelna 1890), a linguistic ancestor of Yaqui and two related languages, Mayo and Tehueco (now extinct). In Buelna’s sketch of Cahita, reflexive pronouns (Table 11.2, last column) include *inone* ‘myself’, *emore* ‘yourself’, *auo* ‘him/herself/itself’, *itote* ‘ourselves’, *emorem* ‘yourselves’, *emorim* ‘themselves’; see the example in (11).

- (11) *Emore* *mahau-tua.*
 2SG.REFL scare-cause
 ‘You make yourself scare.’ (Buelna 1890: 53)

Except for their endings, Cahita and Yaqui reflexive pronouns look remarkably similar. In fact, one can see the diachronic evolution of the reflexive verb prefix *mo- in Proto-Uto-Aztecán (used for second and third person singular and third person plural) to the reflexive pronoun *emo* ~ *omo* in Yaqui (now used for all persons). It is also worth noting that, within the Taracahita group, Yaqui is the only language that has both personal reflexive pronouns (*ino*, *au*, *ito*) and a general reflexive form (*emo* ~ *omo*). The Tarahumara languages only make use of two general reflexive pronouns, e.g. *binóipi* for singular and *abóipi* for plural

11 Reflexive constructions in Yaqui

(Caballero 2002). Guarjio has no distinct reflexive pronouns, but coreferential NPs are coded by anaphoric non-nominative personal pronouns (Félix 2005).

2.4 Self-intensifier pronouns

Buelna (1890) also lists two sets of emphatic pronouns in Cahita. The first group ends in *-riua* or *-e*, as in *empe* for the second person singular (12a). The second group ends in *-(e)la*, as in *empola* ‘you alone, by yourself’. The second pronominal set is preserved in Yaqui (fifth column, Table 11.1) and in (12b). Whereas Buelna (1890: 53–54) calls these forms ‘semi-pronouns’, Dedrick & Casad (1999: 243–244) call them “emphatic reflexive subject pronouns”.

- (12) a. *Empe aman sim-naque.*
 2SG.EMPH there go.SG-want
 ‘You (by yourself) will go there.’ (Buelna 1890: 53)
- b. *'aapela 'am kooba-k.*
 3SG.EMPH 3SG.ACC win-PFV
 ‘He beat them all by himself’ (Dedrick & Casad 1999: 244)

These pronominal forms do not trigger a reflexive meaning, but they function as self-intensifiers (König 2001; Haspelmath, this volume). They can occur by themselves (13a), be adjacent to the coreferential NP (13b), or co-occur with the general reflexive ‘self’ (13c). When translated into Spanish, these structures generally correspond to the adverbial *solo* ‘alone’.

- (13) a. *Inepola Potam-meu-bicha bwite-k.*
 1SG.EMPH Potam.PL-DIR.PL-towards run.SG-PFV
 ‘I ran towards Potam by myself’
- b. *U-Ø kora-Ø aapela weche-k.*
 DET-NOM corral-NOM 3SG.EMPH fall.SG-PFV
 ‘The corral fell down by itself’
- c. *Inepo=ne kaa enchi beba-k, empola emo beba-k.*
 1SG.NOM=1SG.NOM NEG 2SG.ACC hit-PFV 2SG.EMPH REFL hit-PFV
 ‘I didn’t hit you, you hit yourself’

3 Yaqui reflexive constructions

“Reflexive” is a cover term that has, at least, two senses: it may refer to the coreference between two participants in a minimal clause, and/or it may refer

Lilian Guerrero

to the forms that signal coreference (Kemmer 1993; Frajzyngier & Curl 1999; König & Gast 2008; Creissels 2016). In (14a), the accusative clitic signals a disjoint-reference between the agent and the patient; in (14b) the agent and the patient are the same person, hence there must be a reflexive pronoun in object position. In the present description, semantic roles like agent, patient, and recipient are used in a broad sense.²

- (14) a. *U-Ø maejto-Ø si Peo-ta uttia-Ø.*
DET-NOM teacher-NOM INT Peter-ACC admire-PRS
'The teacher admires Peter a lot.'
- b. *U-Ø maejto-Ø si omo uttia-Ø.*
DET-NOM teacher-NOM INT REFL admire-PRS
'The teacher admires himself a lot.'

In what follows, reflexive constructions with reciprocal meaning (§3.1), direct (§3.2), indirect (§3.3) oblique (§3.4) and adposessive reflexive domains (§3.5) are first discussed, followed by middle voice (§4), and coreferential NPs in complex constructions (§5).

3.1 Reflexive constructions with reciprocal meanings

Yaqui reflexive pronouns allow a reciprocal reading when the antecedent (coreferential agent) is plural. The construction in (15a) is ambiguous: it can mean 'they lick themselves' or 'they lick each other'. In (15b), the combination of the reflexive and the adverbial *nau* 'together' highlights the reciprocal interpretation.³ The reciprocal meaning is not limited to the form *emo*, as confirmed by (15c) with the 1PL reflexive pronoun.

²The use of semantic roles instead of terms like subject, object, and indirect object in this chapter is purposeful. While the terms subject and object may be unproblematic, the term 'indirect object' is inadequate in Yaqui grammar for two three main reasons (Guerrero 2019a). (i) Even though some authors have considered *-u* to be a dative, indirect marker (Estrada 2009), *-u* is one among several postpositions marking oblique arguments (recall the examples in (3)); (ii) *-u* can introduce several semantic roles not necessarily related to dative arguments (e.g., source); (iii) the coding of the third participant in three-place predicates varies: it can take accusative, and it can be marked by *-u* or by other postpositions (Guerrero & Van Valin 2004). The use of semantic roles avoids one having to use multiple syntactic terms for this function (e.g., indirect object, primary object, directional object, locative object).

³Most likely, *nau* is related to the reciprocal verbal prefix *na- reconstructed for Proto-Uto-Aztecán (Langacker 1977). However, the adverbial *nau* is not limited to reciprocal meanings in Yaqui.

11 Reflexive constructions in Yaqui

- (15) a. *U-me ili miisi-m emo te'ebwa-*Ø.
 DET-PL little cat-PL REFL lick-PRS
 ‘The kittens are licking themselves/each other.’
- b. *U-me ili miisi-m nau emo te'ebwa-*Ø.
 DET-PL little cat-PL together REFL lick-PRS
 ‘The kittens are licking each other.’
- c. *Pues nanancha te ito ania-taite-k.*
 well equally 1PL.NOM 1PL.REFL help-start-PFV
 ‘So, both of us started to help ourselves/each other.’ (Guerrero2019c;
 HVF)

3.2 Direct reflexive constructions

Cross-linguistically, the most common pattern of coreferential participants involves two-place predicates, with the agent as the antecedent and the patient as the anaphoric form. This coreferential pattern exemplifies the ‘autopathic domain’ (Haspelmath, this volume) or, more simply put, direct reflexives (Kemmer 1993: 41; Kazenin 2001: 918). In (16a), *bicha* ‘see’ takes a non-coreferential agent and patient, hence there is an accusative NP; in (16b) the two participants are coreferential and there is reflexive pronoun in object position.

- (16) a. *U-*Ø *ili jamut-*Ø *Peo-ta bicha-k.*
 DET-NOM little woman-NOM Peter-ACC see-PFV
 ‘The girl saw Peter.’
- b. *U-*Ø *ili jamut-*Ø *eipeeko-po emo bichu-k.*
 DET-NOM little woman-NOM mirror-LOC REFL see.CMPL-PFV
 ‘The girl saw herself in the mirror.’

Reflexive pronouns satisfy the syntactic valency of transitive verbs. Compare the intransitive-transitive verb pairs in (17). The transitive form *omta* ‘hate’ takes a non-coreferential NP in (17a) and a reflexive pronoun when the agent is coreferential with the patient in (17b); the intransitive counterpart *omte* disallows the occurrence of the reflexive pronoun (17c).

- (17) a. *Joan-*Ø *Peo-ta om-ta-*Ø.
 John-NOM Peter-ACC hate-TR-PRS
 ‘John hates Peter.’

Lilian Guerrero

- b. *Joan-*Ø *au om-ta-*Ø.
John-NOM 3SG.REFL hate-TR-PRS
'John hates himself.'
- c. * *Joan-*Ø *au om-te-*Ø.
John-NOM 3SG.REFL hate-INTR-PRS
'John hates himself'

The suppletive transitive verb *me'a* 'kill' takes a non-coreferential anaphoric pronoun in (18a), and a reflexive pronoun in (18b). Again, the intransitive form *muuke* 'die' in (18c) disallows reflexive pronouns. It means that, within the autopathic domain, reflexive pronouns combine with the morphologically marked transitive verb form.

- (18) a. *Joan-*Ø *a=me'a-k.*
John-NOM 3SG.ACC=kill.SG-PFV
'John killed him/her/it.'
- b. *Juan-*Ø *omo me'a-k.*
John-NOM REFL kill.SG-PFV
'John killed himself.'
- c. * *Juan-*Ø *omo muuke-k.*
John-NOM REFL die.SG-PFV
'John killed himself.'

3.3 Indirect reflexive constructions

The expression of indirect reflexives, that is, the coreference of the agent with a participant other than the patient (recipient, goal, beneficiary) has received little focus in the literature (Kemmer 1993; Kazenin 2001: 918). There are two types of indirect reflexives in Yaqui and both involve the beneficiary. The first type includes a few three-place predicates. For example, the verb *maka* 'give' takes an accusative theme and an accusative beneficiary in (19a). When the agent is coreferential with the beneficiary as in (19b), there is a reflexive pronoun. In addition to *emo*, one of my consultants also made use of the nominative personal pronoun as a reinforcement element. In (19c), the agent and the beneficiary of *majta* 'teach' are the same person.

- (19) a. *Juana-*Ø *mo'obei-ta Lupe-ta maka-k.*
Juana-NOM hat-ACC Lupe-ACC give-PFV
'Juana gave Lupe a hat.'

11 Reflexive constructions in Yaqui

- b. *Juana-Ø (aapo) mo'obei-ta omo maka-k.*
Juana-NOM 3SG.NOM hat-ACC REFL give-PFV
'Juana gave a hat to herself.'
- c. *Aapo jiak-nok-ta emo majta-siime-Ø in pamiiiam-mak.*
3SG.NOM yori-talk-ACC REFL teach-go.SG-PRS 1SG.POSS family.PL-with
'She tries to teach herself Yaqui with my family.' (Buitimea 2007;
pueplou: 106)

The second and most common type of indirect reflexive construction involves applicative constructions. In Yaqui, the applicative suffix *-ria* combines with stative, intransitive, and transitive verbs; when associated with transitive verbs, it adds a new (applied) argument with the role of beneficiary. Compare (20a–20b). In the non-derived clause, the beneficiary is coded as an adjunct marked by the postposition *betchi'ibo* 'for'; in the applicative counterpart, the same participant is coded as an accusative NP. In (20c–20d) the agent and the beneficiary are coreferential; in the non-derived version, the coreferential NP is coded as an oblique pronoun, while in the applicative version, the reflexive pronoun serves as the applied argument. An additional example is presented in (20e).

- (20) a. *Kari-ta=ne jinu-k Maria-ta-betchi'ibo.*
house-ACC=1SG.NOM buy-PFV Mary-ACC-for
'I bought a house for Mary.'
- b. *Kari-ta=ne Maria-ta jinu-ria-k.*
house-ACC=1SG.NOM Mary-ACC buy-APPL-PFV
'I bought Mary a house.'
- c. *Emo kari-ta jinu-k e-betchi'ibo.*
2SG.NOM house-ACC buy-PFV 2SG.OBL-for
'You bought a house for yourself.'
- d. *Emo kari-ta emo jinu-ria-k.*
2SG.NOM house-ACC REFL buy-APPL-PFV
'You bought yourself a house.'
- e. *Komo=ne jaibu ju'unea ISSSTE-po bea=ne ino nok-ria-ne.*
like=1SG.NOM already know ISSSTE-LOC DM=1SG.NOM 1SG.REFL talk-APPL-POT
'Since I was already familiar with ISSSTE, I could defend myself.'
(Guerrero ms; Guerrero 2022: 201)

Lilian Guerrero

As pointed out by Zúñiga & Kittilä (2010: 4), while some languages ban agents from being beneficiaries in the same clause, others may use a special construction in these cases, i.e., self-benefactives. Yaqui is a good example of a language that makes use of applicative self-benefactive constructions.

3.4 Oblique nonreflexive constructions

As mentioned previously, adjuncts and oblique core arguments are marked by postpositions. When the complement of a postposition is pronominal, it must take the form of an oblique pronoun. However, reflexive pronouns do not combine with postpositions. In (20c) above, the pronominal complement of *betchi'ibo* ‘for’ is *e-* ‘for you’, instead of the reflexive form *emo*. In the examples below, the agent is coreferential with the theme (21a) and interlocutor (21b) of speech act verbs, the recipient (21c), as well as the location (21d). In all these cases, there is an anaphoric personal pronoun. When the participant refers to the third person, the construction is ambiguous; both coreferential and non-coreferential readings are possible. In (21b), the nonreferential oblique pronoun *ae* can refer to Mary, Lupe, or someone else.

- (21) a. *Fermin-Ø ae-t nooka-k.*
Fermin-NOM 3SG.OBL-LOC talk-PFV
'Fermin talked about him/her/it, about himself.'
- b. *Maria-Ø Lupe-ta-mak ae-betana etejo-k.*
Mary-NOM Lupe-ACC-with 3SG.OBL-from tell-PFV
'Mary talked with Lupe about her/him/it, about Mary, about Lupe.'
- c. *Inepo ne-u ji'i-jioste-bae-Ø*
1SG.NOM 1SG.OBL-DIR thing-write-want-PRS
'I want to write something to myself.'
- d. *U-Ø amureo-Ø maso-ta ae-bicha-po bicha-k.*
DET-Ø hunter-NOM deer-ACC 3SG.OBL-toward-LOC see-PFV
'The hunter saw a deer in front of him/her/it, in front of himself.'

The examples below illustrate agent-goal (22a) and agent-source (20b–20c) coreference in three-place predicates. Note that the nonreflexive personal pronoun can be implicit (22c). According to my consultants, an implicit goal or source favors a coreferential reading.

- (22) a. *U-Ø jamut-Ø mo'obei-ta ea-t yecha-k.*
DET-NOM woman-NOM hat-ACC 3SG.OBL-LOC put.SG-PFV
'The woman put a hat on her/him/it, on herself.'

11 Reflexive constructions in Yaqui

- b. *U-Ø jamut-Ø relo-ta a-u u'ura-k.*
 DET-NOM woman-NOM watch-ACC 3SG.OBL-DIR take-PFV
 ‘The woman took the watch off him/her/it [the arm], off herself.’
- c. *U-Ø jamut-Ø lentem u'ura-k.*
 DET-NOM woman-NOM glasses take-PFV
 ‘The woman took off the glasses.’

3.5 Adposessive nonreflexive constructions

In some languages, reflexive pronouns can combine with possessive pronouns to show agent-possessor coreference ([chapters/haspelmath](#) [this volume]). As shown in Table 11.1 above, Yaqui has a set of possessive pronouns. When the agent refers to the first or second person, the corresponding first or second person possessive forms are used; see the example in (23a). When the agent refers to the third person, there are three coding options: the possessive suffix *-wa* (23b), the possessive pronoun *a* and *-wa* (23c), and a genitive phrase (23d). Even though the most likely reading of (23b–23c) is coreference, a disjoint-reference interpretation is also possible. The explicit use of a genitive phrase leads to a disjoint-reference reading. The same referential ambiguity prevails with an alienable possessee as in (23e). Note that possessive NPs in object position optionally take the accusative suffix *-ta*; genitive phrases disallow a second suffix *-ta*.

- (23) a. *Inepo nim soa(-ta) ubba-k.*
 1SG.NOM 1SG.POSS son-ACC bath.TR-PFV
 ‘I bathed my son.’
- b. *Lupe-Ø asoa-wa(-ta) ubba-k.*
 Lupe-NOM son-POSS-ACC bath.TR-PFV
 ‘Lupe bathed her/his son.’
- c. *Lupe-Ø a asoa-wa(-ta) ubba-k.*
 Lupe-NOM 3SG.POSS son-POSS-ACC bath.TR-PFV
 ‘Lupe bathed her/his son.’
- d. *Lupe-Ø Maria-ta a soa ubba-k.*
 Lupe-NOM Mary-ACC 3SG.POSS son bath.TR-PFV
 ‘Lupe bathed Mary’s son.’ (lit. bathed Mary’s her son)
- e. *Joan-Ø tekile-u a karro-wa-po siika.*
 John-NOM work-DIR 3SG.POSS car-POSS-LOC go.SG.PFV
 ‘John went to work on his own car.’

Lilian Guerrero

When the possessee is a body part, the use of possessive pronouns is complex, and this is true of both coreferential and non-coreferential participants (Guerrero2020). The clause in (24a) was rejected by two of my consultants and was considered odd by a third one. In this context, there are two coding options: the body part is unpossessed and keeps the accusative case (24b), or it is unpossessed and is marked by locative postpositions (24c). The former results in referential ambiguity, while the latter bears a coreferential sense. With disjoint-reference, an external possessive construction is also possible (24d).

- (24) a. # *Joan-Ø a koba-(ta) beba-k.*
John-NOM 3SG.POSS head-ACC hit-PFV
'John hit his head.' (=John's head or someone's else)
- b. *Joan-Ø koba-ta beba-k.*
John-NOM head-ACC hit-PFV
'John hit his head.' (=John's head or someone's else)
- c. *Joan-Ø koba-po beba-k.*
John-NOM head-LOC hit-PFV
'John hit his head.' (lit. hit on head) (=John's head)
- d. *Joan-Ø koba-t enchi beba-k.*
John-NOM head-LOC 2SG.ACC hit-PFV
'John hit you on the head.'

The examples in (23) and (24) confirm that agent-possessor coreference does not use reflexive pronouns in Yaqui. The clause in (25a) is ruled out because there is a reflexive pronoun serving as a possessive pronoun; (25b) is also ruled out because there is an accusative NP and a reflexive pronoun in the same clause. The presence of an overt possessive pronoun with a reflexive form would also be ruled out, e.g., *a omo*.

- (25) a. * *Joan-Ø omo koba-ta beba-k.*
John-NOM REFL head-ACC hit-PFV
'John hit his (own) head.'
- b. * *Joan-Ø koba-ta omo beba-k.*
John-NOM head-LOC REFL hit-PFV
'John hit himself on the head.'

Nevertheless, there are two contexts in which adposessive coreference might be expressed by reflexive pronouns. In the first context, the possessee is coded

11 Reflexive constructions in Yaqui

as an oblique (locative) argument and the anaphoric reflexive pronoun occupies the object position; the reflexive counterpart of (24c) is illustrated in (26a). In the second context, the possessor is introduced as an applied argument within an applicative construction; compare (26a–26a). The first option corresponds to direct reflexives, and the second to indirect reflexives.

- (26) a. *Joan-*Ø *koba-po omo beba-k.*
 John-NOM head-LOC REFL hit-PFV
 ‘John hit his head.’ (lit. hit himself on head)
- b. *U-*Ø *ili jamut-*Ø *pujba-ta baksia-k.*
 DET-NOM little woman-NOM face-ACC wash-PFV
 ‘The girl is washing her face.’
- c. *U-*Ø *ili jamut-*Ø *pujba-ta au baksia-ria-k.*
 DET-NOM little woman-NOM face-ACC 3SG.REFL wash-APPL-PFV
 ‘The girl is washing her face.’ (lit. washing herself the face)

The discussion on coreferential oblique and possessive participants suggests that it is not the semantic role but its syntactic function that determines whether or not a reflexive pronoun is used in Yaqui, i.e., reflexive pronouns cannot be complements of postpositions and cannot be associated with adnominal possession. The use of nonreflexive personal pronouns in these domains oscillates between coreference readings and disjoint interpretations. The actual interpretation depends on the linguistic context and/or discourse-pragmatic information.

4 Reflexive pronouns and middle situations

In middle situations, the agent participant is viewed as the doer of the action as well as the place on which this action is performed; the doer and the place are construed as one and the same entity (Kemmer 1993; Creissels 2006). In Yaqui, several middle situations are expressed by a reflexive + transitive verb combination, but many others are expressed by non-reflexive-marked intransitive clauses. Grooming verbs that can combine with reflexive pronouns include *baksia* ‘wash’, *bekta* ‘shave’, *a’ana* ‘dress (formal ceremonies)’, *supetua* ‘put on clothes’, and *chichike* ‘comb’. These verbs can take a non-coreferential NP as well as a reflexive pronoun in object position; compare the uses of *baksia* as ‘wash something’ in (26a) and ‘wash something on oneself’ in (26b) above, and ‘wash oneself’ in (27a) below. The examples in (27b–27c) show *bekta* ‘shave’, and (27d–27e) illustrate *a’ana* ‘dress’.

Lilian Guerrero

- (27) a. *Joan-*Ø *emo baksia-*Ø.
 John-NOM REFL wash-PRS
 ‘John washes himself.’
- b. *Joan-ta=ne* *bekta-k.*
 John-ACC=1SG.NOM shave-PRS
 ‘I shave John.’
- c. *Joan-*Ø *chau-t* *omo bekta-k.*
 John-NOM beard-LOC REFL shave-PRS
 ‘John shaved his beard.’ (lit. shave himself on the beard)
- d. *Lupe-*Ø *ne* *a'ana-n.*
 Lupe-NOM 1SG.ACC dress-PASTC
 ‘Lupe dressed me.’
- e. *Ino=ne* *a'ana-n.*
 1SG.REFL=1SG.NOM dress-PASTC
 ‘I dressed.’

In opposition, grooming verbs like *baima* ‘wash hands’, *baju'urina* ‘wash face’, *uba* ‘bathe’, and *tajo'ote* ‘dress (everyday clothing)’ are not reflexive-marked. See the use of *baima* in (28a). The last two verbs have a transitive counterpart, but reflexive pronouns are banned in this context. Contrast *ubba* ‘bathe someone’ in (23) above, with the intransitive version *uba* ‘bathe oneself’ in (28b). The verb pair *tajo'ota/tajo'ote* ‘dress someone/oneself’ is illustrated in (28c–28d). The clause in (28e) is ruled out because *tajo'ota* combines with a reflexive pronoun.

- (28) a. *U-*Ø *ili* *yoeme-*Ø *baima-*Ø.
 DET-NOM little man-NOM wash_hands-PRS
 ‘The little boy washes hands.’
- b. *Joan-*Ø *batwe-po uba-*Ø.
 John-NOM river-LOC bath.INTR-PRS
 ‘John bathes in the river.’
- c. *Maria-*Ø *enchi* *tajo'o-ta-*Ø.
 Mary-NOM 2SG.ACC dress-TR-PRS
 ‘Mary dresses you.’
- d. *Empo* *chumti tajo'o-te-*Ø.
 2SG.NOM quickly dress-INTR-PRS
 ‘You dress quickly.’

11 Reflexive constructions in Yaqui

- e. * *Empo chumti emo tajo' o-ta-Ø.*
 2SG.NOM quickly REFL dress-TR-PRS
 ‘You dress yourself quickly.’

In Yaqui, the expression of body-part actions does not necessarily differ from whole-part actions. The reflexive-marked *baksia* ‘wash’ can target a body-part action in (26b–26c) and (27a), but *baima* ‘wash hands’ and *baju'urina* ‘wash face’ are not reflexive-marked. Dressing verbs can be understood as whole-body activities, but *a'ana* combines with reflexive forms and *tajo'ote* does not. In addition, a few body-function action verbs can be used with a reflexive pronoun or not, depending on the degree of affectedness (Frajzyngier & Curl 1999). This is the case of *siise* ‘urinate’, *bwita* ‘defecate’, and *pocho'okunte* ‘defecate (outside, in the woods)’. With the reflexive form (29a), the action is assumed to be an accident; without the reflexive (29b), a regular activity is implied. Verbs like *ko'okoi* ‘be/get sick’ and *ine'ete* ‘recover’ in (8a), *elpeiya/peiya* ‘feel/get better’ in (29c), *i'a* ‘be/get spoiled’, and *mammatte* ‘understand’ are also reflexive-marked.

- (29) a. *U-Ø ili uusi-Ø emo siise-k.*
 DET-NOM little child-NOM REFL urinate-PFV
 ‘The child urinated on himself.’
- b. *U-Ø ili uusi-Ø siise-k.*
 DET-NOM little child-NOM urinate-PFV
 ‘The child urinated.’
- c. *Into=bea a waiwa-Ø jaibu ili emo*
 DM=DM 3SG.POSS sister-NOM already little REFL
pa-p-peiya-n.
 RED-RED-get.better-PASTC
 ‘And then her sister was getting a little better already.’ (Buitimea 2007; ili baro: 70)

Non-translational motion and body-posture verbs are mostly unmarked, e.g., *yehete* ‘stand’ in (30a) and *bwalsapte* ‘stretch’ in (30b). The exceptions I have found so far include *cha'a* ‘hang’ in (30a) and *yooa* ‘tremble’ in (30c) which are reflexive-marked.

- (30) a. *Au kom=cha'a-tu-k u-Ø buuru-Ø 'aman jika-t*
 3SG.REFL down=hang-VBLZ-PFV DET-NOM donkey-NOM there up-LOC
yehete-k.
 stand.SG-PFV
 ‘The donkey bent down and stood up.’ (Johnson 1962; burro& coyote:

Lilian Guerrero

34)

- b. *Aapo bwalsap-te-Ø.*
3SG.NOM stretch-INTR-PFV
'He is stretching.'
- c. *Mejiko-po u-Ø bwia-Ø jiba au yooa-Ø.*
Mexico-LOC DET-NOM earth-NOM always 3SG.REFL tremble-PRS
'In Mexico, the earth always trembles.'

Spontaneous change of state verbs are not reflexive-marked. Compare the intransitive-transitive verb pair in (31a-b). However, there are a few verbs that combine with reflexive forms: *eta* 'close', *etapo* 'open', *esso* 'hide', *ta'aru* 'lose', *jiima* 'throw', *piarora* 'borrow'. Compare (31c-d). In this context, *emo* functions as a kind of anti-causative marker, i.e. it does not imply any potential agent.

- (31) a. *U-Ø ba'am poj-te-k.*
DET-NOM water.PL boil-INTR-PFV
'The water boiled.'
- b. * *U-Ø ba'am omo poj-ta-k.*
DET-NOM water.PL REFL boil-TR-PFV
'The water boiled.'
- c. *U-Ø jeeka-Ø u-ka puenta-ta etapo-k.*
DET-NOM wind-NOM DET-ACC door-ACC open-PFV
'The wind opened the door.'
- d. *U-Ø puenta-Ø emo etapo-k.*
DET-NOM door-NOM REFL open-PFV
'The door opened.'
- e. *U-Ø tomi-Ø boosa-po kateka-me emo ta'aru-k.*
DET-NOM money-NOM purse-LOC sit.SG.PFV-NMLZ REFL lose-PFV
'The money that was in the purse got lost.'

Two things appear to be clear at this point: (i) not all morphologically-marked transitive verbs combine with reflexive pronouns, and (ii) the use of reflexive pronouns as middle markers is unpredictable (i.e., lexically determined). The lack of productivity of Yaqui reflexive forms in middle situations contrasts not only with Romance, Germanic, and Slavic languages (see Janic, this volume, for Polish), but also with other Southern Uto-Aztecan languages. In Southern Tepehuan ([García 2005](#)), for example, the use of reflexive pronouns as middle markers is very productive; Pima Bajo ([Estrada 2005](#)) uses the third-person non-subject as a middle

11 Reflexive constructions in Yaqui

marker; Wixárika (Ramos 2017) uses the reflexive third-person prefix *yu-* as signs middle functions.

5 Coreferential participants within complex clauses

Thus far, I have focused on examples of two coreferential NPs within the same clause. However, two participants can also be coreferential within complex constructions. When the main subject and the dependent subject are coreferential, the coding of the anaphoric pronoun depends on the clause linkage type (Guerero 2006): some linkage types demand an implicit participant (32a), others require a possessive (32b) or accusative (32c) anaphoric pronoun, and a few allow anaphoric nominative pronouns (32d). The accusative and the nominative pronouns lead to referential ambiguity.

- (32) a. *Nim achai-Ø ju'une'ea-k [loteria-ta yo'o-kai].*
1SG.POSS father-NOM know-PFV lottery-ACC win-CLM
'My father_i knew he_i had won the lottery.' (=my father won the lottery)
- b. *Ne_i a-u_j wawate-n [nim_i enchi ji'i-beje-tua-ne-'u].*
1SG.NOM 3SG.OBL-DIR remember-PASTC 1SG.POSS 2SG.ACC
thing-cost-cause-POT-CLM
'I didn't remember (it) to pay you.'
- c. *Jorge-Ø_i a-beas_j kopte-k [taream a_i ya'a-ne-po_j].*
Jorge-NOM 3SG.OBL-about forget-PFV homework.PL 3SG.ACC
make-POT-CLM
'Jorge forgot about doing the homework.'
- d. *Peo-Ø_i Vicam-meu siika [bweituk aapo_{i/j} kaba'i-ta jinu-n].*
Peter-NOM Vicam.PL-DIR.PL go.SG.PFV CLM 3SG.NOM horse-ACC
buy-PASTC
'Peter_i went to Vicam because he_{i/j} bought a horse.'

There are two mental verbs that seem to allow a reflexive pronoun when the two subjects are the same person: *-machia* 'believe' and *'ea* 'think'. The examples in (33) resemble long-distance reflexives; in (33a), the presence of the reflexive seems optional, but not in (33b–33c).

Lilian Guerrero

- (33) a. *Ne (ino) tui kaba'i-ta jinu-maachia-*Ø
 1SG.NOM 1SG.REFL good horse-ACC buy-believe-PRS
 'I believe I would buy a good horse.'
- b. *Aapa [lautia emo siim-bae-benasia] 'ea-*Ø.
 3SG.NOM early REFL go-want-CLM think-PRS
 'She_i has the feeling that she_i wants to go early.'
- c. *Nim ae_i tuisi omo_i ye'e-t-'ea-*Ø *bweta ka luturia.*
 1SG.POSS mother good REFL dance-CLM-think-PRS but NEG true
 'My mother_i thinks she_i dances pretty well, but it is not true!'

6 Conclusion

As evidenced in this chapter, Yaqui reflexive pronouns signal agent-patient and agent-beneficiary coreferential participants, but they cannot express the coreference between the agent and the recipient, source, goal, theme, location, or possessor. There is a syntactic explanation for these patterns: reflexive pronouns must occupy the object position (autophatic domain) and are thus banned as complements of postpositions (oblique domain) or as adnominal modifiers (adposessive domain). In this context, a nonreflexive personal pronoun must be used. The use of nonreflexive pronouns in the oblique and adposessive domains alternates between coreference readings and disjoint interpretations. Personal pronouns are also preferred in clause combining. Additionally, the use of reflexive pronouns as middle markers is allowed with some but not all middle situations in Yaqui.

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Abbreviations

I use the Leipzig glossing rules, with the following additions:

11 Reflexive constructions in Yaqui

CLM	clause linkage marker	PASTC	past continuative
CMPL	completive	POT	potential
DIR	directional	RED	reduplication
INT	intensifier	STA	stative

All uncited data are taken from my field notes; examples from oral texts include the story title and page number of the digital manuscript. The examples are presented using a practical orthography accepted by the Yaqui community except for data quoted from grammatical studies, in which case the original orthography has been preserved (except accents) but the morphological glossing has been amplified or adjusted.

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Lilian Guerrero

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Part IV

South America

Chapter 12

Reflexive and reciprocal in Aguaruna

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This paper describes the grammatical means for expressing reflexive and reciprocal situations in Aguaruna (Chicham). The two functions are marked with dedicated verbal derivational suffixes which reduce the valency of the verb. There are some clear examples of lexicalized reflexive and reciprocal markers, with attendant semantic narrowing, but in general the semantic effects of these markers are predictable and combinatorial. Reflexive and reciprocal suffixes can co-occur with valency increasing derivational suffixes (causative and applicative) and are mutually exclusive with inflectional object agreement markers. [New paragraph:] Aguaruna is spoken between the Andes and the Amazon Basin, and its use of valency reducing derivations to mark reflexive and reciprocal situations is consistent with areal tendencies. However, the presence of distinct markers for reflexive and reciprocal makes Aguaruna more like the Andean Quechuan languages, as Amazonian languages tend to have a single multipurpose valency reducing derivation.

1 Introduction

This paper describes the grammatical means for expressing reflexive and reciprocal situations in Aguaruna, a Chicham language spoken in north Peru.¹ While the paper is largely descriptive in nature, it also aims to situate the description in the typological literature as much as possible.²

¹I use the name Aguaruna when writing in English, as this is the most frequently encountered term. The language is officially named *awajún* in Peru, and native speakers I have worked with typically refer to it as *iinia chicham*. The ISO 639-3 code is agr, and glottocode agua1253.

²I thank all the Aguaruna speakers who have helped me learn and understand their language, especially Lady Akintui Tsajuput, Yanua Atamain Uwarai and Eduardo Cungumas Kujancham for answering my questions about reflexive constructions. The paper also benefitted from the



Simon Overall

The Chicham family (formerly known as Jivaroan) consists of five closely related varieties, defined politically as distinct languages. In addition to Aguaruna, the other languages are Shuar, Wampis, Shiwiar, and Achuar. Aguaruna is the most distinct, at least from a phonological perspective, but speakers of all varieties are generally able to converse, although this may involve some initial difficulty in accommodating to differences.³ All five languages are spoken in the south of Ecuador and north of Peru, in an area mostly within the Santiago, Pastaza and Marañón River basins (see Map 1). This area is linguistically diverse, and in addition to Chicham languages there are populations speaking languages from other families (Quechuan, Kawapanan) as well as some isolates (Kandozi-Chapra). Linguistic diversity in the Marañón River basin appears to have been even higher at the time of the Spanish invasion (Adelaar & Muysken 2004: 172–173). Although this paper relates solely to Aguaruna, the facts are substantially the same for the other languages of the family.

The description presented here is based on field data collected in various visits since 2004. Examples are cited in the same orthography used by Overall (2017), in which the following graphs differ from IPA values: <ch> = /tʃ/, <sh> = /ʃ/, <y> = /j/. Where examples are not taken from a published source, they are cited with the filename of the relevant recording; these recordings are currently being prepared for archiving. Examples are from recorded narrative except where otherwise specified. Original orthography is indicated by angle brackets.

The structure of the paper is as follows: §2 gives an overview of Aguaruna grammar. §3 describes the formal marking of reflexive and reciprocal constructions, and their interaction with other categories, and §4 goes into more detail regarding the semantic range of reflexive and reciprocal. §5 discusses how Aguaruna fits into areal patterns, and §6 offers a brief conclusion.

2 Typological profile and grammar overview

Aguaruna is nominative-accusative, and typically shows SV/APV constituent order. The morphology is almost entirely suffixing, basically agglutinating, and shows both head and dependent marking: at the clause level, subjects and speech act participant (SAP) objects are indexed with verbal suffixes, and NP arguments are marked for case; and within the possessive NP, possessed nouns are morphologically marked as possessed, along with person and number of the possessor,

editors' very helpful comments. Of course I take full responsibility for any remaining errors of fact or interpretation.

³See Overall & Kohlberger (in preparation), for more detailed description of the Chicham family

12 Reflexive and reciprocal in Aguaruna

and possessors are also marked (lexical nouns take a genitive form, pronominal possessors take accusative case). Example (1) illustrates a possessive NP with lexical possessor. Note that there is no grammatical way to disambiguate third person possessors (e.g. *she_i cut her_{i/j} hand*) – see §4.2 for examples.

- (1) *washí yakahí*
 [washi yaka-hí]_{NP}
 monkey.GEN arm-PSSD.3
 ‘the monkey’s arm’ [agr040723_29]

While the phonology is relatively straightforward, productive processes of vowel elision can obscure the agglutinating nature of the morphology. Vowel nasalization is contrastive and spreads to adjacent vowels and glides, and the nasal consonants /m, n/ may be denasalized when followed by oral vowels (see Overall 2017: 67–71 for details).

2.1 Finite and non-finite verbs

Verbs are obligatorily inflected, and verbal morphology shows a clear distinction of finiteness. Finite verbs are marked for the following verbal grammatical categories: aspect, tense, person/number and mood/modality. Verbal morphology is entirely suffixing apart from an unproductive causative prefix, and can be usefully viewed in terms of morphological slots, as in the schematic overview in Figure 12.1.

	A	B	C	D	E	F	G
ROOT	Valency	Object	Aspect	Negation	Tense	Subject	Mood

Figure 12.1: Morphological slots in the verbal word

Table 12.1 shows the slot F suffixes that mark subjects in finite verbs. For second and third person, there is some allomorphy triggered by tense. The distinction between singular and plural number is only consistently maintained in first person; third person does not distinguish number and the second person “singular” form may also be found with plural reference, where number is irrelevant or apparent from the context. Note that plural subject can also optionally be specified along with aspect marking in slot C, independently of the person marking.

Simon Overall

Table 12.1: Finite verbal subject markers

PERSON	TENSE	MARKER	
		SG	PL
1	all tenses	-ha	-hi
2	past tenses	-umi	-uhumi
	non-past tenses	-mi	-humi
3	present and definite		-wa
	future tenses		
	other tenses	portmanteau tense + person	markers

The categories of slots B to G are obligatorily specified, but not always overtly morphologically marked: in some slots, absence of a marker contrasts meaningfully with presence of a marker.

Aguaruna makes heavy use of non-finite clause types in clause-chaining constructions, especially in narrative texts. These clauses are morphosyntactically dependent in that they can only appear in a construction with an associated finite predicate: the verbs of dependent clauses are marked for most of the same categories as finite verbs, but lack tense and mood marking; they are also marked for switch-reference (same-subject versus different-subject, and some more specific relations). Nominalizations are also widely used, forming relative and complement clauses and also functioning in lieu of finite verbs in some contexts such as traditional narratives (Overall 2017: 537–540; and see detailed discussion in Overall 2018).

Reflexive and reciprocal markers are valency changing derivations and appear in slot A; they can appear in all verb forms, including subordinate verbs and nominalizations.

2.2 Grammatical relations and object marking in the verb

Aguaruna shows nominative-accusative alignment. This is manifested in case marking of NPs and verbal agreement, as well as grammatical processes such as nominalization and switch-reference, which distinguish subject (S or A) from non-subject (objects and obliques). For example, the non-subject nominalizer -tāi forms a nominal that may refer to the notional object (*yu-tāi* eat-NMLZ ‘food’), instrument (*auja-tāi* write-NMLZ ‘pen’) or location (*kanu-tāi* sleep-NMLZ ‘dormitory’) (Overall 2017: 267). The objects of underived ditransitive clauses, as well

12 Reflexive and reciprocal in Aguaruna

as those added by valency increasing derivation, are also apparently identical to those of monotransitive clauses in their case marking, agreement, and syntactic behaviours such as nominalization and switch-reference (Overall 2017: 269). Compare the 1SG object of an underived simple transitive clause in (2), recipient of the underived ditransitive clause in (3), and object of applicative derivation in (4), all of which are identically marked with accusative case and with verbal object agreement.

- (2) *mína huhuktá*
mi=na hu-hu-ki-ta
1SG=ACC carry-1SG.OBJ-PFV-IMP
'carry me!' (Overall 2017: 281)
- (3) *mína suhustá*
mi=na su-hu-sa-ta
1SG=ACC give-1SG.OBJ-PFV-IMP
'give it to me' (Overall 2017: 243)
- (4) *mína túhutmi*
mi=na tu-hu-tu-mi
1SG=ACC say-APPL-1SG.OBJ-RECPST.3.DECL
'(she) told me' (Overall 2017: 304)

Verbs fall into two classes, manifested in the forms of the applicative suffix in slot A and the object marking suffixes in slot B, which show initial /h/ or /t/ depending on the class of the verb. The applicative suffix has the form *-hu* or *-tu*, and the first person singular object suffix has the same form – but where applicative and first singular object co-occur, they alternate *h/t* forms (as in example 4 above). The second person object suffix has the basic forms *-hama* or *-tama*, with a variant *-pa* that seems to be phonologically conditioned (Overall 2017: 244). First plural object is generally marked identically to second person, except that the form *-kahatu* can be used where second person is specifically excluded, and is also used to mark generic human objects. Only SAP objects are indexed with verbal suffixes – third person objects are always zero-marked. There is no difference in verbal indexing of notional direct, indirect or derived objects, but only one object can be indexed on the verb. Overall (2017: 275) shows that speakers avoid grammatical configurations that trigger competition for this marking slot, that is, clauses that include two SAP objects. Object marking is obligatory, and may co-occur with overt object NPs, as in examples (2–4) above. Examples (5)

Simon Overall

and (6) illustrate simple SAP object marking, and (7) shows a SAP object added by the applicative derivation.

- (5) *ūyūntusta*
 uyun-tu-sa-ta
 accompany-1SG.OBJ-PFV-IMP
 ‘go with me!’ [agr040721_07]
- (6) *áu waipákmi*
 au wai-pa-ka-mi
 DEM.DIST see-2.OBJ-PFV-RECPST.3.DECL
 ‘s/he saw you’ (*Overall 2017*: 314)
- (7) *pasún minithamkūish*
 pasun mini-tu-hama-ku-ĩ=sha
 evil.spirit arrive-APPL-2.OBJ.IPFV-SIM-DS=CONCES
 ‘even though an evil spirit arrives to your detriment’ [agr041005_21]

The combination of first person A and second person P does not involve object marking in slot B (Object), instead being marked in slot F (Subject) with the suffix *-hami* if both arguments are singular (as in example 8) or *-himí* if either or both of the arguments is plural. Although these forms are clearly based on first person markers *-ha* (SG) / *-hi* (PL) + second person *-mi*, their non-combinatorial semantics with respect to number leads *Overall (2017*: 244–245) to treat them as portmanteau morphs.

- (8) *kami yabái wíshakam díkáhuahami*
 kami yabai wi=shakama dika-hu-a-hami
 indeed now 1SG=ADD know-APPL-PFV-1SG.SBJ/2SG.OBJ.DECL
 ‘now I know that about you too’ [agr041005_21]

Two productive valency-increasing operations are marked with suffixes in slot A (valency), these are applicative *-hu/-tu* and causative *-mitika*. Both operations increase the valency of the verb by one, adding an object to the clause. Applicative derivation straightforwardly adds an object argument, semantically typically a beneficiary (as is the added 1SG object in example 9) or maleficiary (as in example 7 above). In the case of causative, there is a rearrangement of roles from the underived clause, as the added ‘causer’ argument is the subject and the notional subject of the causativized verb becomes an object (‘causee’) (example 10).

12 Reflexive and reciprocal in Aguaruna

- (9) *minásh batái ukuithúkta*
 mi=na=sha batai ukui-tu-hu-ka-ta
 1SG=ACC=ADD chambira detach-APPL-1SG.OBJ-PPV-IMP
 ‘get some chambira (fruit sp.) for me too!’ (Overall 2017: 302)
- (10) *ámi mína dushímtihami*
 ami mi=na dushi-mitika-ha-mi
 2SG 1SG=ACC laugh-CAUS-1SG.OBJ.IPFV-2SG.DECL
 ‘you are making me laugh’ (Overall 2017: 300)

A set of verbs form causatives not with the slot A (valency) suffix but with a prefixed vowel whose quality is not completely predictable: *i-tsiki-* (CAUS-jump-) ‘startle’; *i-ta-* (CAUS-arrive-) ‘bring’.

A few verb roots show unproductive phonological alternants with differing transitivity values. In general, the intransitive variant is the more marked member of such pairs, for example *shiki-* ‘urinate on (transitive)’, *shiki-pa-* ‘urinate (intransitive)’, with unproductive detransitivizer *-pa*.

Reflexive and reciprocal markers are the only productive valency reducing operators, and their formal properties form the topic of the following section.

3 Reflexive and reciprocal marking in the verb

Reflexive and reciprocal constructions encode situations in which there is coreference between two semantic participants. Reflexive applies to verb roots that typically appear in transitive clauses, and signals coreferentiality of the notional A and P arguments. Reciprocal marking similarly signals coreference of A and P arguments, but acting on each other rather than on themselves. The reciprocal construction therefore implies two or more participants, at least semantically.

In Aguaruna, both reflexive and reciprocal derivations are marked with verbal suffixes in slot A (Figure 12.1): reflexive *-m(a)* or *-mam(a)*; and reciprocal *-n(a)i*, with denasalized form *-d(a)i*.⁴

At first glance, these markers appear to function as members of the object-marking paradigm. Like object markers, reflexive and reciprocal are obligatory whenever there is an appropriate configuration of subject and object. In the examples in (11), the SAP object markers in (a) and (b) appear to form a paradigm with the reflexive marker in (c). Similarly, compare the verb marked with the

⁴The bracketed vowels are elided in phonologically predictable environments. The selection of *-ma* or *-mama* appears to be lexically conditioned.

Simon Overall

reciprocal suffix in (12) with the same verb marked for second person object in (6) above – both the reciprocal and the object suffix appear directly following the root, and preceding the aspect marker.

- (11) a. *áu tsupíŋkami*
au tsupi-hu-ka-mi
DEM.DIST cut-1SG.OBJ-PFV-RECPST.3.DECL
's/he cut me' (Overall 2017: 247)
 - b. *tsupíŋmakmi*
tsupi-hama-ka-mi
cut-2.OBJ-PFV-RECPST.3.DECL
'he has cut you' (Overall 2017: 307)
 - c. *tsupímakmi*
tsupi-ma-ka-mi
cut-REFL-PFV-RECPST.3.DECL
'he has cut himself' (Overall 2017: 307)
- (12) *ãhúm wainiámi*
ãhum wai-nai-a-mi
later see-RECP-PFV-HORT
'let's meet (i.e. see each other) later' (Overall 2017: 424)

But Overall (2017: 306) points out that reflexive and reciprocal markers are not compatible with overt object NPs. This indicates that they are in fact valency reducing, and can be considered to constitute REFLEXIVE VOICE and RECIPROCAL VOICE, respectively (in the sense of Kulikov 2011; and see chapters/haspelmath [this volume]: ??–??). In contrast, the object markers are compatible with overt NPs (13, 14) and are therefore more like agreement. Outside of elicitation contexts, overt pronouns are more likely to appear in emphatic contexts such as (15), where the pronominal object NP is separated from the verb by the multi-word subject NP.

- (13) *mína isátni*
mi=na isa-tu-ini-i
1SG=ACC bite-1SG.OBJ-PFV-3.DECL
'it bit me' (Overall 2017: 293)
- (14) *mína suhustá*
mi=na su-hu-sa-ta
1SG=ACC give-1SG.OBJ-PFV-IMP
'give it to me' (Overall 2017: 243)

12 Reflexive and reciprocal in Aguaruna

- (15) *amina apahui tuki puhuwa nuu yaimpakti*
 ami-na [apahui tuki puhu-wa nu] yaĩ-pa-ka-ti
 2SG=ACC_i God always live-3 ANA help-2.OBJ_i-PFV-JUSS
 ‘may God, who is eternal, help you’ (personal correspondence)

There is no reflexive or reciprocal pronoun, and indeed the valency-reducing nature of these constructions means that there would be no function for such a pronoun, since it would be expected to occupy the object role.

As noted above, overt pronouns are used in emphatic contexts. Example (16) illustrates such a context with a reflexive marked verb: a man (subject of the final nominalized verb *wainkau* ‘saw’) discovers that his younger brother is turning into a monster and eating himself. The verb ‘eat’ is marked with the reflexive suffix, and the unexpected nature of this situation is signaled by representing the subject with an overt pronoun marked with the enclitic =ki (glossed ‘restrictive’ following Overall 2017, and indicating exhaustive focus). Note that a bilingual speaker translated this into Spanish with the emphatic reflexive *sí mismo*.

- (16) *níŋki yúmamak puhúttaman wainkáu*
 [nĩ=ki yu-mama-a-kũ puhu-tatamana] waina-ka-u
 3SG=RESTR eat-REFL-IPFV-SIM.3.ss live-SBJ>OBJ see-PFV-NMLZ
 ‘he_i saw that he_j was eating himself’ (*vio que estaba comiendo en sí mismo*) (agr040720_22)⁵

While their interaction with the object marking paradigm and their obligatoriness make reflexive and reciprocal markers appear more like traditional inflection, they also show properties that align them with traditional derivation. In particular, some stems are lexicalized and show non-combinatorial semantics. Lexicalized reflexives include *su-ma-* (give-REFL-) ‘buy’ (not ‘give to oneself’; but cf. reciprocal ‘give to each other’ in example 30 below); and *wai-ma-* (see-REFL-) ‘see a vision under the influence of hallucinogens’. In order to express the meaning ‘see oneself’, a different verb root *nii-* ‘look at’ is used: *nii-ma-* (look.at-REFL-) ‘look at oneself’.⁶

Lexicalized reciprocal forms include *iŋki-ni-* ‘hold hands’ < *iŋki-* ‘put away, keep safe, load gun’; and *maa-ni-* (kill-RECP-) ‘fight’.⁷ In order to express the

⁵The final verb is nominalized and functioning as a finite verb, a frequent construction in traditional narratives (cf. §2.1). The auxiliary verb ‘live’ in the bracketed clause is marked for switch-reference indicating that its subject is coreferent with the object of the final verb (see Overall 2017, §§??).

⁶Yanua Atamain, personal communication and Eduardo Cungumas, personal communication.

⁷The verb ‘kill’ shows some variation, surfacing as /ma/, /maa/ or /mā/ (cf. example 18) depending on its morphological context.

Simon Overall

sense ‘kill each other’, one can use a different verb, such as *amu-* ‘finish off’ – this verb can refer to finishing up a serving of food or drink, or to exterminating a group of people. Its reciprocal marked form appears in the place name *wiqa amuníkbau* (17), the site of a historic battle with many casualties.

- (17) *wiqa amuníkbau*
 wiqa amu-nai-ka-mau
 ancestor finish.off-RECP-PFV-NMLZ
 ‘place of the ancestors killing each other’ [agr041005_18]

In sum, although I have labelled reflexive and reciprocal as derivational markers (cf. Haspelmath, this volume §??), I note that “the traditional division into derivational and inflectional morphology is not a very useful one for Aguaruna verbs” (Overall 2017: 233; cf. Plungian 2001).

3.1 Applicative and reflexive verbal markers

Reflexive and reciprocal markers can co-occur with the applicative suffix, which they may precede or follow, depending on the semantics. The lexicalized reflexive and reciprocal verb stems, with non-combinatorial semantics, are treated like underived roots in having the applicative derivation added to them. The verb root *iki-* ‘move something into another position’, ‘put’ has a lexicalized reflexive form *iki-ma-* (put-REFL-) with the specific meaning ‘sit down’. This stem may then take the applicative suffix *iki-ma-tu-* (put-REFL-APPL-) giving the meaning ‘sit on something’ (Overall 2017: 308–309). On the other hand, reflexive and reciprocal markers can occupy the morphological slot immediately following the applicative suffix, marking the notional object of the applicative and giving a self-benefactive construction, as in (18) where the applicativized stem *mā-tu-* (kill-APPL-) ‘kill for someone’ is reflexivized to give the sense ‘kill for oneself’; similarly in (19).

- (18) *wikaiuqák wiuwai kuntínun*
 wíkaiuqa-kū wi-u=ai [kuntinu=na
 walk.IPFV-SIM.3.SS go.PFV-NMLZ=COP.3.DECL animal=ACC
mantumaátatus
mā-tu-ma-a-tatus]
 kill-APPL-REFL-PFV-INTENT.3.SS
 ‘he went walking to kill animals for himself’ (i.e. ‘he went hunting’)
 (Overall 2017: 492)⁸

⁸Note that the main verb in this example (‘he went’) is nominalized and formally marked as

12 Reflexive and reciprocal in Aguaruna

- (19) *yúpichu huhumtáyami*
 yupichu hu-hu-ma-tayami
 easy take-APPL-REFL-NORM
 ‘we easily take it away (for ourselves)’ ([Overall 2017](#): 617)

Similar examples can be found for reciprocal marking. The non-combinatorial stem *maa-ni-* (kill-RECP-) ‘fight’ (not ‘kill each other’), can be applicativized to give *maa-ni-tu-* (kill-RECP-APPL-) ‘fight for something’. On the other hand, the verb root *kanu-* ‘sleep’ can be applicativized to give a stem meaning ‘reach the same spirit power as someone by having the same dream’, and this stem in turn can take a reciprocal marker following the applicative suffix: *kanu-tu-dai-* (sleep-APPL-RECP-) ‘reach the same spirit power as each other’.

3.2 Reciprocal and plurality

Although a reciprocal situation must involve multiple participants semantically, these are not necessarily encoded as plural subjects. [Overall \(2017\)](#) gives the following elicited example (20) of the derived verb stem *maa-ni-* (kill-RECP-) ‘fight’. Although there is semantically more than one participant, the verb is marked for first person singular subject, and no other participant is mentioned.

- (20) *kashín wíi maániktathai*
 kashini wi maa-nai-ka-tata-ha-i
 tomorrow 1SG kill-RECP-PFV-FUT-1SG-DECL
 ‘tomorrow I’m going to fight’ ([Overall 2017](#): 311)

There is no direct NP coordination in Aguaruna, instead the comitative enclitic =*hai* may be used to express plural participants. NPs marked with this enclitic may be treated as conjoined or simply oblique; that is, [NP_{SUBJECT} NP=*hai*] may trigger singular or plural subject marking. Example (20) can be read as having an implied second participant treated as an oblique NP and therefore not reflected in the verb inflection.

The narrative passage in (21) illustrates this use of comitative =*hai*, combined with the indeterminacy of number marking. The subordinate verbs are marked simply for third person subject, unspecified for number. The woman was the subject of the previous clause and is the implied subject here; the husband must be interpreted as a semantic participant but it remains ambiguous as to whether he is treated as a syntactic subject.

the complement of the copula enclitic (see detailed discussion of this construction in [Overall 2018](#)).

Simon Overall

- (21) *aíshihā̃* *maá* *maánia**kū̃* *nuwanú̃*
 [aishī=hã] maa maa-nai-a-kawā] nuwanu=̃
 husband.PSSD.3=COM REDUP kill-RECP-IPFV-REPET.3.SS ANA=LOC
chicháman *ipin̄kā* *huwáku* *túwahami*
 [chichama=na ipin̄ki-kā] huwa-ka-u tuwahami
 problem=ACC resolve-PFV.3.ss stay-PFV-NMLZ NARR
 '(the woman) fighting with her husband, they then resolved their
 problems, so the story goes' (*Overall 2017*: 311)

4 Semantics of reflexive constructions

The previous section has described the details of formal marking of reflexive and reciprocal constructions. As shown above, the reflexive and reciprocal suffixes interact with a paradigm of object markers on the verb, clearly distinguishing situations in which the notional subject and object are coreferent from those in which they are not. At the level of the clause, these constructions reduce valency, making the appearance of an object NP impossible. This section goes into more detail regarding the semantic effects of the reflexive and reciprocal constructions in Aguaruna.

4.1 Extroverted and introverted verb types

Extroverted verbs describe actions that prototypically apply to a second participant, while introverted verbs are those that describe prototypically self-directed actions (*Haiman 1983*: 803). There is no evidence that the Aguaruna reflexive or reciprocal constructions behave differently in their morphology or syntax with different semantic classes of verbs, but a few examples of verbs with inherently reflexive semantics but no overt reflexive marking are all of the introverted semantic type, as predicted by *Haiman (1983)*.

The extroverted verb type was illustrated with the verb *tsupi-* ‘cut’ in examples (11 a–c) in §3 above. Similarly, *iti-* ‘beat with nettle’ (< *itti* ‘wasp’?), forms the reflexive as *iti-ma-* (beat.with.nettle-REFL-) ‘beat oneself with nettle’. The extroverted verb *ma-* ‘kill’ is illustrated in example (22).

- (22) *āwi* *dakáka* *maámi*
 au=̃ daka-ka ma-a-mi
 DEM.DIST=LOC wait-PFV.1PL.SS kill-PFV-HORT
 ‘let’s ambush him there and kill him!’ [agr041005_19]

12 Reflexive and reciprocal in Aguaruna

Adding reflexive gives the sense ‘kill oneself’ (Uwarai Yagkug et al. 1998: 76 translate the stem *maa-ma-* (kill-REFL-) into Spanish as *suicidarse* ‘commit suicide’). Example (23), from a translation of the New Testament, relates how a jailer had drawn his sword to kill himself after thinking that the people he was guarding had escaped.⁹

- (23) <*Nunitai Pablo senchi untsuká: -Maamawaipa, jutiik nuni-taĩ Pablo s̄inchi untsu-kã “maa-ma-aw-aipa hutii=ka do.that-3.ds Paul strongly call-PFV.3.ss kill-REFL-PFV-PROH 1pl=TOP ashí betek batsatji, -tiuwai.>*
ashi bitika batsata-hi” ti-u=ai all full be.PL.IPFV-1PL say.PFV-NMLZ=COP.3.DECL
‘when he did that, Paul called out loudly, “don’t kill yourself! we are all here!” he said.’ (La Liga Bíblica 2008: 245)

The introverted verb type can be illustrated with the verb *ayamhu-* ‘defend’. Example (24) shows a simple transitive use of this verb; in (25) it is marked with first person singular object; and in (26) it is reflexivized to give ‘defend oneself’.

- (24) *makishkish ayamhúkchahui*
makichiki=sha ayamhu-ka-cha-aha-u=i
one=ADD defend-PFV-NEG-PL-NMLZ=COP.3.DECL
‘not even one defended him’ (Overall 2017: 195)
- (25) “*ikámŷāwā tukúhui, ayamhútakata!*”
[ikama_yawaã tuku-hu-a-wa-i ayamhu-tu-ka-ta
jaguar attack-1SG.OBJ-IPFV-3-DECL defend-1SG.OBJ-PFV-IMP
tus untsúmu
tus] untsuma-u
say.SBD.3.ss call.IPFV-NMLZ
“‘A jaguar is attacking me! Help me!’ he was calling’ (Overall 2017: 561)

- (26) *yuwáta támá nuní áyamhumak ...*
[yu-a-ta-ha ta-ma] nuni ayamhu-ma-kã
eat-PFV-IFUT-1SG say.IPFV-NSBJ>SBJ thus defend-REFL-PFV.3.ss
‘when (the puma) tried to eat him, he defended himself like that...’ lit.
when (the puma) said “I will eat him!”... (Overall 2017: 565)¹⁰

⁹The relevant passage is Acts 16:28, translated in the *New International Version* as: “But Paul shouted, ‘Don’t harm yourself! We are all here!’”.

¹⁰Note that the verb ‘say’ in the bracketed clause is marked for switch-reference indicating that

Simon Overall

Verbs of grooming fall into the introverted semantic class, and are typically reflexivized, with the unmarked root being transitive. For example, *timashi-* ‘comb someone’s hair’, *timash-ma-* (comb.hair-REFL-) ‘comb one’s own hair’, as shown in (27).

- (27) *wíi timáshmahai*
 wi timashi-ma-ha-i
 1SG comb-REFL.IPFV-1SG-DECL
 ‘I am combing my hair’ (cf. *Overall 2017*: 306)

The verb *ikinj-ma-* ‘wash one’s hands’ is also reflexive, the stem *ikihu-* meaning ‘wash someone’s hands’.¹¹ These verbs treat the person being groomed as the object, not the specific affected body part (i.e. ‘hair’ and ‘hands’ in these examples are encoded as part of the verbal semantics and not treated as participants).

Although most introverted actions are expressed with reflexivized verbs, there are also some underived verbs of this type, as predicted by Haiman (1983: 803ff). For example, the verb *niha-* ‘wash (clothes etc.)’ is not reflexivized to describe people washing themselves, instead there is an underived intransitive verb *maa-* ‘bathe’. This verb can in turn be causativized to give *i-ma-* (CAUS-bathe-) ‘bathe someone (such as a child)’.

Verbs describing inherently reciprocal actions tend to be basically transitive and take reciprocal marking: *ijku-ni-* (meet-RECP-) ‘meet each other’, *kumpam-dai-* ‘greet each other’,¹² in addition to *maa-ni-* (kill-RECP-) ‘fight’ already mentioned above.

4.2 Exact and partial coreferences

I have not encountered any clear examples of the contrast between exact and inclusive coreference, of the type that would distinguish *he defended himself* from *he defended [himself and others]*. The comitative marker described in §3.2 above would presumably allow such non-exact coreference to be encoded with the standard reflexive construction.

With respect to actions directed at body parts, the examples of grooming verbs given above (§4.1) illustrate a strategy of lexicalizing the action as a transitive

a non-subject participant (the object, in this example) is the subject of the controlling clause (see *Overall 2017*: §13.6).

¹¹This stem may include the causative prefix *V-*, and is perhaps related to semantically similar verbs *kita-* ‘drip’, *kitama-* ‘be thirsty’, *kiha-* ‘absorb liquid nasally’. It may also include the applicative suffix *-hu*.

¹²The /kumpa/ element is from Spanish *compadre* ‘close friend’.

12 Reflexive and reciprocal in Aguaruna

verb with the possessor of the body part (not the body part itself) as object. These introverted verbs can be reflexivized with the standard reflexive construction (as in example 27 above). With extroverted verbs directed at body parts, however, the body part itself is the grammatical object, heading its own NP. Compare example (28), in which the subject of the verb *hu-* ‘take’ is possessor of the object, the possessed noun *katī* ‘his penis’, and example (29), in which the subject of the same verb *hu-* ‘take’ is different from the possessor of the object NP headed by the possessed noun *bakui-chi-hī* (thigh.PSSD-DIM-PSSD.3) ‘his little thigh’. As noted in §2 above, there is no way to disambiguate third-person possessors ('his' vs 'his own') other than by adding a lexical possessor NP: the same suffix *-hī* (-PSSD.3SG) is used in the situation of coreference in (28), and in disjoint reference in (29). As can be seen in (28), the reflexive construction is not used when the object is a body-part of the subject.

- (28) *katín uwihín húki ikák*
 katī=na uwi-hī=nī hu-kī
 penis.PSSD.3 hand-PSSD.3=LOC take-PFV.3.ss
 ‘[the devil] having taken his (own) penis in his hand...’ (Overall 2017: 467)
- (29) *núna yachiuchíhin bakuichíhin*
 nu=na yachi-uchi-hī=na bakui-chi-hī=na
 ANA=ACC brother.PSSD-DIM-PSSD.3=ACC thigh.PSSD-DIM-PSSD.3=ACC
 hukíuwai
 hu-ki-u=ai
 take-PFV-NMLZ=COP.3.DECL
 ‘he took his little brother’s little thigh’ [agr041005_14]

4.3 Coreference of the subject with various semantic roles

Examples thus far have illustrated verbs whose objects are semantically patients or themes, and these are the targets of reflexive marking. When combined with applicative derivation, reflexive targets a beneficiary or maleficiary as a grammatical object, as described above (§3.1, 18–19).

The underived ditransitive verb *su-* ‘give’ has a gift and a recipient object, the latter of which is more likely to be human and therefore potentially coreferent with the subject. There is a semantic change when this verb combines with reflexive, giving the stem *su-ma-* (give-REFL-) ‘buy’, not ‘give to oneself’. With reciprocal, however, the meaning is compositional *su-nai-* (give-RECP-) ‘give to each other’, as in (30).

Simon Overall

- (30) *nuwanúi sudáisauwai*
 nuwanu=í su-nai-sa-u=ai
 ANA=LOC give-RECP-PFV-NMLZ=COP.3.DECL
 ‘then they gave each other (their songs)’ [agr041005_17]

Note that the reflexivized stem *su-ma-* (give-REFL-) ‘buy’ has a self-benefactive reading (i.e. ‘buy for oneself’). To express the notion of buying for someone else, the applicative suffix can be added, as in (31).

- (31) *wíi haánchin sumáŋkathami*
 wi haanchi=na su-ma-hu-ka-ta-hamí
 1SG clothes=ACC give-REFL-APPL-PFV-IFUT-1SG.SBJ/2SG.OBJ.DECL
 ‘I will buy you clothes’ (*Overall 2017*: 309)

The verb *tu-* ‘say’ takes a speech report complement and may also take an object referring to the addressee, or to a person being spoken about. The latter type of object is the target of reflexive in (32).

- (32) *atákik tumámipa*
 ataki=ka tu-mami-ipa
 again=TOP say-REFL.PFV-PROH
 ‘don’t say that about yourself again’ (agr041005_22)

It seems clear, then, that any grammatical object is a potential target of reflexivization, regardless of the semantic role it encodes.

4.4 Long-distance coreference

Where coreference involves an argument in a subordinate clause whose antecedent is in a matrix clause, there may be the possibility of ambiguity of the type seen in English (33), and reflexive marking may be used to disambiguate in the case of coreference.

- (33) She_i thought that she_{i/j} had enough money

In Aguaruna, reflexive is not used in such constructions, and in fact there is no chance of ambiguity as subordinate clauses are not finite, and are marked for switch-reference. The nearest construction to a finite subordinate clause is the speech report construction, which is used not only to report direct speech but also for complements of thought, intention and purpose. Because speech reports are always direct speech, there is no chance of the ambiguity seen in (33), as the equivalent would look like (34) or (35).

12 Reflexive and reciprocal in Aguaruna

- (34) She_i thought saying “she_j has enough money”

- (35) She_i thought saying “I_i have enough money”

The following text examples illustrate coreference and disjoint reference in subjects of subordinate clauses formed with speech reports. In (36) the subject of the matrix clause is the same as that of the apprehensive clause, and since this is a direct speech report it is expressed as first person singular. In (37) the subject of the verb in the speech report is different from that of the matrix clause, consequently it is expressed as third person.

- (36) *áimak imamkimas “intáhaiŋ” tus]*
 aima-a-kū imamkima-sā [inta-ha-i-ha tus]
 say.SBD.3.ss fill-IPFV-SIM.3.ss take.care-SBD.3.ss break-PFV-APPR-1SG
 ‘filling them carefully, lest he should break them’ lit. saying “may I not
 break them” (Overall 2017: 363)

- (37) *iwíyahi “tipistí” tusá*
 iwi-ya-hi [tipi-sa-ti tu-sa]
 raise.hand-REMPST-1PL.DECL lie.down-PFV-JUSS say-SBD.1PL.SS
 ‘we raised our hands saying “may it stop!”’ (Overall 2017: 350)

5 Areal tendencies

Reflexive and reciprocal are valency-reducing derivations in Aguaruna, and this is in keeping with a common pattern in Amazonian languages, but Aguaruna lacks the vagueness that characterizes the detransitivizers of other languages, for example Derbyshire (1999: 44) describes a verbal detransitivizing derivation in most Carib languages “which is added to a transitive stem and carries the meanings of ‘reflexive’ or ‘reciprocal’, or simply ‘intransitive’ which is often best translated as a passive in languages like English”. Similarly: “A number of [Tupí] languages have a general intransitivizing prefix, which covers reflexive, reciprocal and passive” (Rodrigues 1999: 120). Summarizing this trend, Payne (2001: 596) suggests a general detransitivizing affix as an areal feature of Amazonian languages. Aguaruna is only partially in keeping with this trend, as its reflexive and reciprocal markers are detransitivizing verbal derivations, but their semantically specific nature means that they do not follow the tendency towards a single semantically vague detransitivizing derivation. In this, Aguaruna is more akin to the Quechuan languages spoken to the west, which have a range of semantically

Simon Overall

specific valency changing derivations including reflexive and reciprocal, as well as valency increasing causative and applicative (Adelaar & Muysken 2004: 229). Overall (2017: 31–32) has observed that Aguaruna grammar shows features of both Amazonian and Andean types, as is to be expected given its location in the foothills of the Andes at the western edge of the Amazon basin.

6 Concluding remarks

This paper has described the processes of reflexive and reciprocal marking in Aguaruna grammar. The most notable point is that the markers of these functions straddle the divide between traditional notions of derivation and inflection. They reduce the valency of the verb, but they are obligatory and form a paradigm with inflectional categories of participant agreement. The function of reducing valency, rather than marking reflexivity within a syntactically transitive clause, is consistent with patterns found in neighbouring Quechuan languages (mentioned in §5) and in the wider Amazonian area (Birchall 2014: 187).

There are some clear examples of lexicalized reflexive and reciprocal markers, with attendant semantic narrowing, but these are the exception. For the most part, the semantic effects of these markers are predictable and combinatorial, and this is more like Quechuan languages, in contrast to the Amazonian tendency towards a single, semantically indeterminate, valency reducing derivation.

The description presented above is largely based on textual examples. Future research focusing on elicitation will no doubt help to tease out more details of the subtleties of reflexive and reciprocal marking in Aguaruna.

Abbreviations

Glossing and abbreviations follow the Leipzig standards, with the following abbreviations:

12 Reflexive and reciprocal in Aguaruna

1, 2, 3	first, second, third person	LOC NARR	locative narrative modality
ACC	accusative	NEG	negative
ADD	additive	NMLZ	nominalizer
ANA	anaphoric pronoun	NORM	normative
APPL	applicative	NSBJ	non-subject
APPR	apprehensive	OBJ	object
CAUS	causative	PFV	perfective
CNTR.EX	counter expectation	PL	plural
COM	comitative	PROH	prohibitive
CONCES	concessive	PSSD	possessed form of
COP	copula		noun
DECL	declarative	RECP	reciprocal
DEM	demonstrative	RECPST	recent past
DIM	diminutive	REDUP	reduplication
DIST	distal	REFL	reflexive
DS	different subject	REMPST	remote past
EP	epenthetic segment	REPET	repetitive
FUT	future	RESTR	restrictive
GEN	genitive	SAP	speech act participant
HORT	hortative	SBD	subordinate
IDEO	ideophone	SBJ	subject
IFUT	immediate future	SG	singular
IMP	imperative	SIM	simultaneous
INTENT	intentional	SR	switch-reference
IPFV	imperfective	SS	same subject
JUSS	jussive	TOP	topic

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Simon Overall

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Chapter 13

Reflexive constructions in Kakataibo (Pano, Peru)

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The present paper presents a discussion of reflexive constructions in Kakataibo, a Pano language spoken in Peruvian Amazonia. The language exhibits a productive verbal reflexive, which is mainly used on transitive verbs, as well as a middle marker which is also used to express reflexive meanings. Kakataibo emphatic pronouns and the noun *nami* ‘body’ can also participate in reflexive constructions, but require additional indicators of co-referentiality: emphatic pronouns require the presence of the verbal reflexive marker, whereas the noun *nami* ‘body’ needs a possessive marker and an emphatic clitic. Their need for extra markers of co-reference suggests that neither emphatic pronouns nor the noun *nami* ‘body’ are fully grammatical reflexive nominals.

1 Introduction

The present paper presents a discussion of reflexive constructions in Kakataibo, a Pano language spoken in Peruvian Amazonia. Following Haspelmath’s (this volume) definition of reflexive constructions, I discuss here all the Kakataibo constructions that satisfy the two main criteria listed in (1) (taken from *chapters/haspelmath* [this volume]).

- (1) A reflexive construction is a grammatical construction
 - (i) that can only be used when two participants of a clause are coreferential; and
 - (ii) that contains a special form (a reflexivizer) that signals this coreference.



Roberto Zariquiey

The criteria stipulated in (1) are satisfied in Kakataibo by constructions with a reflexive verbal marker. Some constructions featuring emphatic pronouns or the noun *nami* ‘body’ also fit the definition in (1), under the condition that they also carry a verbal reflexive marker. Reflexive voice markers include the reflexive marker and the middle marker (see *Zariquiey 2018: 306ff*). The reflexive voice marker is a truly derivational verbal suffix (with a rich morphophonology), whereas the middle marker is used in some cases as a derivative marker, while in other instances it is part of what *Valenzuela (2017: 416ss)* calls “alternative derivation” (pairs of transitive-intransitive verbs obtained from bound roots which lack a transitive category and can never be used in discourse by themselves; see §3.2 for some illustration of this).

This chapter is structured as follows. In §2, I present some background information on the Kakataibo language and its speakers. The verbal markers that express reflexive meanings are discussed in §3 (§3.1 illustrates the reflexive marker and §3.2 discusses the middle marker). The reflexive constructions with emphatic pronouns and the noun *nami* ‘body’ are presented in §4.1 and in §4.2, respectively. Finally, some conclusions are listed in §5.

2 The Kakataibo language and its speakers

Kakataibo is a Pano language spoken by approximately 3000–3500 people in the Peruvian departments of Huánuco and Ucayali. The Kakataibo people live along the Aguaytía, San Alejandro, Shamboyacu, Sungaroyacu and, more recently, Pisqui Rivers (see Figure ??), where the language remains vital and is learnt by children despite intense contact with Spanish.

Figure 13.1: Location of major Kakataibo settlements

Kakataibo is the westernmost Pano language and, within the language family, Kakataibo is the only member of its branch (*Shell 1965; d'Ans 1973; Loos 1999; and Fleck 2013*). As described in *Zariquiey (2011)*, there are four extant Kakataibo dialects, spoken in the Lower Aguaytía, Upper Aguaytía, Sungaroyacu and San Alejandro Rivers, respectively. “Nokamán”, a variety named and minimally documented by *Tessmann (1930)*, was a fifth dialect of the language, now extinct (*Zariquiey 2013*). The Lower Aguaytía variety is the one studied in this paper (for a full grammar of this dialect, see *Zariquiey 2018*).¹ This dialect exhibits the

¹The examples in this paper are given in the Kakataibo practical orthography: (IPA symbols are enclosed in square brackets where these differ from the practical representation): a, e, ē [i], i, o, u, p, t, k, ku [kʷ], b [β], r [r], m, n, ñ [n], s, sh [ʃ], x [ʂ], ts, ch [tʂ] and ‘ [ʔ].

13 *Reflexive constructions in Kakataibo (Pano, Peru)*

phonological inventory given in Tables 13.1 and 13.2 (the orthographic conventions followed in this paper are given in angle brackets if different from IPA).

Table 13.1: Kakataibo consonant inventory

	Labial	Alveolar	Post-alveolar	Retroflex	Palatal	Velar	Glottal
Stop	p	t			k	kʷ	? <‘> <ku>
Affricate		ts	tʃ <ch>				
Fricative		s	ʃ <sh>	ʂ <x>			
Nasal	m	n			j	n <ñ>	
Liquid		r	<r>				
Approximant	β						

Table 13.2: Kakataibo vowel inventory

	Front	Central	Back
High	i	i <ë>	u
Mid	e		o
Low		a	

Kakataibo is an agglutinative language with scarce instances of fusion. Verbal morphology is far more complex than nominal morphology and verbal forms may include a long number of affixes (see example 2), although the average number of suffixes per verbal root in natural speech is only 1.64 (see Zariquiey 2018: 150).²

- (2) *Pimibëtsintëkënkankëxa*
pi-mi-bëtsin-tëkën-kan-akë-x-a
eat-CAUS-coming:TRAN-again-PL-REM.PST-3-NON.PROX
‘while coming, they made (someone) eat again a long time ago’

²The examples included in this paper come both from elicitation and texts. Some of the examples have been adapted from Zariquiey (2018: 308).

Roberto Zariquiey

The language exhibits a complex alignment system that combines ergative and tripartite case marking with accusative subject cross-referencing both on verbs and second position enclitics. Clausal constituent order is pragmatically determined, but there is a tendency towards verb-final sentences. Word order in the noun phrase is not fixed and most nominal modifiers can appear either before or after the nominal head. The language also exhibits a rich switch-reference system and a pervasive use of nominalizations in discourse.

In this chapter, I assume a very basic distinction between transitivity and valence in Kakataibo. In Kakataibo, transitivity is a lexical property of verbs, and two lexical transitivity classes can be distinguished in the language: intransitive and transitive. The transitivity class of the verb is encoded in various parts of the sentence, by means of various transitivity agreement and transitivity harmony phenomena. Therefore, it is always obvious if a verb is lexically transitive or intransitive. This is illustrated in the following examples. In (3), which features the predicate *pi* ‘eat’, the pronominal subject bears the A-enclitic *=n*, the switch-reference marker takes the form *-xun* ‘subject > A, simultaneous event’ and the associated motion suffix is *-bëtsin* ‘coming’, which exclusively appear with transitive verbs. In turn, in (4), which features the verb *tan* ‘rest’, we find the S-enclitic *=x* on the pronominal subject, as well as the switch-reference marker *-ax* ‘subject > S, simultaneous event’ and the associated motion suffix *-kuantsin* ‘coming’, which exclusively appear with intransitive verbs. All Kakataibo transitive verbs behave like *pi* ‘eat’ and all Kakataibo intransitive verbs behave like *tan* ‘rest’.

- (3) *kuan-xun kana ‘ë=n ‘atsa pi-bëtsin-i-n*
 go-SUBJ>A:SIM NAR:1SG 1SG=A manioc eat-coming:TRAN-IPFV-1/2
 ‘Having gone, I am eating manioc while coming.’
- (4) *kuan-ax kana ‘ë=x tan-kuantsin-i-n*
 go-SUBJ>S:SIM NAR:1SG 1SG=S rest-coming:INTR-IPFV-1/2
 ‘Having gone, I am resting while coming.’

I understand valence, in turn, as the number of arguments with which a verb is used in a specific construction (following, for example, Dixon & Aikhenvald 2000: 3). Although there are strong cross-linguistic associations between transitivity and valence (e.g., transitive verbs have a valence of at least two, whereas verbs with one argument are intransitive), in Kakataibo, the transitivity category of a verb cannot be predicted 100% of the time based on its valence (see Zariquiey 2017 and Zariquiey 2018: 217ff). This mainly relates to the existence in Kakataibo of a small set of bivalent intransitive predicates, whose non-subject arguments

13 Reflexive constructions in Kakataibo (Pano, Peru)

(which are called **quasi-objects** in Zariquiey 2017) are reminiscent of objects due to their lack of marking, but exhibit critical behavioral differences in relation to them. Let us compare the examples in (5) and (6). The fact that the predicate in (5) is transitive is revealed by the form of the pronominal subject, which bears the A-enclitic =n. Therefore, *atsa* ‘manioc’ in (5) is a grammatical object, which remains unmarked as is the case of absolutive arguments. In (6), we find the bare noun phrase ‘*atsa* ‘manioc’ as the quasi-object of the intransitive verb *pishin* ‘lack’ (note that the subject of *pishin* ‘lack’ carries the S-marker =x).

- (5) ‘En kana ‘atsa pin.
 ‘En kana ‘atsa pi-i-n
 1SG=A NAR:1SG manioc eat-IPFV-1/2
 ‘I eat manioc.’

- (6) ‘Ex kana ‘atsa pishinin.
 ‘Ex kana ‘atsa pishin-i-n
 1SG=S NAR:1SG manioc lack-IPFV-1/2
 ‘I lack manioc.’

3 Verbal reflexive markers

The languages of the world may show different mechanisms for reducing valence, including (i) passives and anticausatives; (ii) antipassives; and (iii) reflexives and reciprocals (see the discussion in Dixon & Aikhenvald 2000). In Kakataibo, there is special verbal morphology for reflexives and reciprocals (and a non-productive middle marker), but there are no passive, antipassive or anticausative markers.

Following Haspelmath (this volume), I define a reflexive voice marker as a verbal affix that indicates the coreference of two participants of a verb (the object participant is coreferential with the subject participant). In this section, I briefly discuss the uses and functions of the reflexive marker in Kakataibo (§3.1), and introduce the middle marker of the language, which has reflexive functions (§3.2).

3.1 The reflexive marker

The Kakataibo reflexive verbal marker *-akat* (and its allomorph) is a derivative suffix (see Zariquiey 2018: 307). In terms of its usage, the Kakataibo reflexive marker fits the definition provided by Haspelmath (this volume): it is a marker that appears on the verb stem and indicates that two participants of the event expressed by the verb are coreferential. In many languages, the reflexive voice

Roberto Zariquiey

marker reduces the verbal valency. One important piece of information, however, is that, as indicated in §1, Kakataibo makes a rigid distinction between transitive and intransitive verbs (see examples 3 and 4). Therefore, in morphological terms, the reflexive marker can only be used on transitive and ditransitive stems. Reflexive transitive and ditransitive stems become grammatically intransitive, in terms of how transitivity is encoded and defined in the language (see [Zariquiey 2018: 217ss](#) for more on transitivity in Kakataibo, and [Zariquiey 2017](#), for a discussion of more intricate cases related to bivalent intransitives).

As reported by [Zariquiey \(2018: 307\)](#), the Kakataibo reflexive marker exhibits one of the most complex allomorphic alternations in the language, as it may surface as one of the following allomorphs: *-akat*, *-(ë)kët*, *-(u)kut*, *-(i)kit*, *-mët* and *-mëkët*. The first allomorph appears in the majority of contexts, while *-(ë)kët*, *-(u)kut*, and *(i)kit* surface when following a stem that ends in a syllable containing *ë*, *u*, and *i*, respectively.³ Thus, *-(ë)kët*, *-(u)kut*, and *(i)kit* are the result of a vowel harmony process. If the preceding syllable does not have an overt coda (only fricatives and the nasal *n* can act as syllable codas), we obtain *-kët*, *-kut*, and *-kit*. If the preceding syllable ends in a fricative, we obtain *-ëkët*, *-ukut*, and *-ikit*. Finally, if the stem ends in *n*, the allomorphs *mët* and *mëkët* appear in apparently free variation. In the examples in (7) and (8), we find two instances of the reflexive marker. In (7), it surfaces as *-kut* and attaches to the transitive verb *churu* ‘untie’, and in (8), it surfaces as *-mët* and attaches to the transitive predicate *bëman* ‘touch in the eyes’. The list of abbreviations is included at the end of this chapter.

- (7) *matsut-ia=bi* *kaisa* *chaxu a=n*
 sweep-S/A>P:SE=EMPH NAR:REP:3 deer 3SG=A
 churu-kut-kwain-kin *kaisa* *xanu xëni-rá*
 untie-REFL-passing:INTR-S/A>A:SE NAR:REP:3 woman old:ABS-DIM
 chaxu=n makwëx-akë-x-ín
 deer=ERG beat.up-REM.PST-3-PROX
 ‘It is said that, while (the woman) was sweeping, the deer beat her up,
 untying himself.’
- (8) *kaisa* *uni* *ëëëëëë* *ki-i* *kaisa*
 NAR:REP:3 person:ABS ëëëëëë say:INTR-S/A>S:SE NAR:REP:3

³I have no examples of *-(e)ket*, simply because there are no transitive predicates attested in my database that end in the vowel *e*. In addition, there is no *-(o)kot* allomorph: when a transitive predicate ends in *o*, as is the case of forms carrying the factitive *-o*, it takes the reflexive form *akat*.

13 Reflexive constructions in Kakataibo (Pano, Peru)

bë-man-akat-akë-x-ín
 eyes-touch-REFL-REM.PST-3-PROX

‘It is said that the man touched himself in his eyes saying “éééééé”:

In (9) and (10), we illustrate the verbs *churu* ‘untie’ (also in (7)) and *bë-man* ‘eyes-touch’ (also in (8)) in their non reflexive usage, proving that these two verbs are lexically transitive.

- (9) *Juan=nën ka ain kamon churu-bëtsin-a-x-a*
 Juan=ERG NAR:3 3:POS dog:ABS untie-coming:TRAN-IPFV-3-NON.PROX
 ‘Juan untied his dog, while coming’
- (10) *Juan=nën ka ain kamon*
 Juan=ERG NAR:3 3:POS dog:ABS
bë-man-bëtsin-a-x-a
 eyes-touch-coming:TRAN-IPFV-3-NON.PROX
 ‘Juan touched his dog in the eyes, while coming’

With a few transitive verbs, the reflexive marker is used to build a construction, where the S argument is linked to the patient of the event, and the agent is not overtly expressed. See the example in (11). Although there is not a proper passive construction in Kakataibo, constructions like the one in (11) can be interpreted as passive-like, which are primarily attested with the verb *më* ‘beat up’ and, for some speakers, also with *bits* ‘pick up’ and *mëra* ‘find’ (this passive interpretation is more widely found in Shipibo-Konibo reflexive constructions; see Valenzuela 2003: 775–800). For many Kakataibo speakers, the passive-like use of the reflexive implies that there is some sort of kinship relationship between the two participants. Thus, there is no coreference relation between the two participants, but there is some sort of inalienable relation, which make them in some way related. See the example in (11), where the only possible interpretation of the passive-like reading is that the agent was the father or the uncle of the patient. In this kind of construction, the Agent cannot be overtly expressed and is always inferred (see Keenan 1985: 253–254, for a brief discussion of reflexives as a cross-linguistically common source for passives). Note that in (11) a reflexive interpretation is also possible.

- (11) *mi=x kamina më-akat-a-n*
 2SG=S NAR:2 beat.up-REFL-PFV-1/2
 ‘You were beaten beaten up (by your father/your uncle). / You beaten yourself up.’

Roberto Zariquiey

3.2 The middle marker

The Kakataibo marker *-t*, glossed as ‘middle’ in *Zariquiey (2018: 308)*, is not very productive, but it appears in combination with a few transitive verb roots, as a valence decreasing and transitivity reducing strategy. Crucially, as is often the case with so-called middle markers, *-t* in Kakataibo gets both stative (non-reflexive) and reflexive interpretations. For some verbs, one of these functions is not available, as indicated in the examples in Table 13.3. As can be seen in §3.1, all the allomorphs of the Kakataibo reflexive marker (*-akat*, *-(ë)kët*, *-(u)kut*, *-(i)kit*, *-mët* and *-mëkët*) exhibit a final *t*, which is likely to be diachronically related to the marked glossed here as middle. Note that the reflexive marker discussed in §3.1 does not have a stative interpretation. A further difference between the reflexive and the middle marker is that the former is much more widespread.

Table 13.3: The Kakataibo middle marker

Transitive form	Meaning	Intransitive form	Stative meaning	Reflexive meaning
<i>pëxku</i>	‘cure some-body’	<i>pexku-t</i>	‘become cured’	cure oneself’
<i>unë</i>	‘hide’	<i>unë-t</i>	be hidden	hide oneself’
<i>xui</i>	grill	<i>xui-t</i>	be grilled’	--
<i>këñu</i>	‘finish’	<i>këñu-t</i>	finish up	--
<i>chuka</i>	‘wash’	<i>chuka-t</i>	--	‘wash oneself’

As indicated in §2, Kakataibo verbs are lexically either transitive or intransitive. A few roots like **tsó-* ‘seat, sit down’ or **ërë-* ‘light, burn’ are not subcategorized for transitivity and are obligatorily combined with one of the suffixes *-n* ‘transitive’ or *-t* ‘intransitive’, thus producing pairs of verbs that are distinguished by transitivity. This constitutes an instantiation of what *Valenzuela (2017: 416ss)* calls “alternative derivation”. The marker in the intransitive form in these transitivity-based pairs, *-t*, is the semi-productive middle described in this subsection, and the meaning of the intransitive member of the verb pairs often gets reflexive-like interpretations, as illustrated in Table 13.4. The difference between the examples in Table 13.3 and Table 13.4 has to do with the fact that in Table 13.3 the unmarked form of the predicate is lexically transitive, whereas in Table 13.4, both the transitive and the intransitive predicates are equally marked.

13 Reflexive constructions in Kakataibo (Pano, Peru)

Table 13.4: The Kakataibo middle marker

Etymological root	Transitive form	Meaning	Intransitive form	Meaning
*tsó	<i>tsón</i>	'seat'	<i>tsót</i>	sit down, live'
*ëré	<i>ëren</i>	'light'	<i>ëret</i>	'burn'
*niri	<i>nirin</i>	'drag'	<i>nirit</i>	'crawl'
*nanë	<i>nanën</i>	'submerge (something)'	<i>nanët</i>	'submerge oneself'
*chiki	<i>chikin</i>	'take out'	<i>chikit</i>	'go out'

4 Reflexive nominals

According to Haspelmath (this volume), reflexive nominals are the most prominent type of reflexivizer in the world's languages. Kakataibo exhibits a full paradigm of emphatic pronouns which are etymologically made up of anaphoric (non-reflexive) pronouns combined with the self-intensifier adverbial enclitic *=bi*. According to Haspelmath (this volume), the use of emphatic pronouns as reflexive pronouns is well attested cross-linguistically, and König et al. (2005) reported 94 languages (of a total of 168) with identity of reflexive pronouns and emphatic pronouns of the Kakataibo sort. Kakataibo also has another instance of a reflexive nominal: the noun *nami* 'body' may also be used to express agent-patient coreference, or coreference in a minimal clause. Both emphatic pronouns and the noun *nami* 'body' require the verbal reflexive marker in order to be part of reflexive constructions (but see the example in 16a). Emphatic pronouns are discussed in §4.1, whereas the instances of the noun *nami* 'body' in reflexive constructions is presented in §4.2.

4.1 Emphatic pronouns

Kakataibo personal pronouns make up a quite complex paradigm. Kakataibo pronouns are associated with two non-singular forms. One can be rendered as archaic (see Zariquiey 2006), whereas the other, which is based on the general plural marker of the language *=kama*, can be considered as innovative. The archaic forms are often interpreted as dual (in the case of first and second person) or paucal (in the case of third person) by some speakers, but this interpretation is not systematic. Kakataibo also exhibits a distinction between first person plural

Roberto Zariquiey

inclusive and first person plural exclusive, which is falling into disuse, but can be reconstructed for the proto-language (Zariquiey 2006). Pronouns in Kakataibo exhibit a tripartite case marking system, where the A, S and P functions are expressed differently (the first two functions are marked by two different enclitics and the last one is unmarked). Kakataibo pronominal forms are presented in Table 13.5 (adapted from Zariquiey 2018: 177).

Table 13.5: Personal pronouns in Kakataibo

Person	A	S	P
1p singular	‘ <i>ë</i> = <i>n</i>	‘ <i>ë</i> = <i>x</i>	‘ <i>ë</i>
2p singular	<i>mi</i> = <i>n</i>	<i>mi</i> = <i>x</i>	<i>mi</i>
3p singular	<i>a</i> = <i>n</i>	<i>a</i> = <i>x</i>	<i>a</i>
1p dual (inclusive)	<i>nu</i> = <i>n</i>	<i>nu</i> = <i>x</i>	<i>nu</i>
1p plural (inclusive)	<i>nukama</i> = <i>n</i>	<i>nukama</i> = <i>x</i>	<i>nukama</i>
1p plural (exclusive)	‘ <i>ékama</i> = <i>n</i>	‘ <i>ékama</i> = <i>x</i>	‘ <i>ékama</i>
2p (dual)	<i>mitsu</i> = <i>n</i>	<i>mitsu</i> = <i>x</i>	<i>mitsu</i>
2p (plural)	<i>mikama</i> = <i>n</i>	<i>mikama</i> = <i>x</i>	<i>mikama</i>
3p (dual/paucal)	<i>atu</i> = <i>n</i>	<i>atu</i> = <i>x</i>	<i>atu</i>
3p (plural)	<i>akama</i> = <i>n</i>	<i>akama</i> = <i>x</i>	<i>akama</i>

Kakataibo's personal pronouns can be combined with the adverbial enclitic =*bi* 'emphatic' to produce emphatic pronominal forms, which can be translated as *self*-pronouns into English. Emphatic pronouns with =*bi* seem to some extent lexicalized. Valenzuela (2003: 188–191) reports for the sister language Shipibo-Konibo that emphatic pronouns can be modified (again) by the enclitic =*bi* producing forms like *ëbi=bi* '1SG:EMPH=EMPH', but so far I have not found equivalent examples in Kakataibo.

Differently from non-emphatic pronouns, emphatic ones exhibit a neutral case alignment, according to which they remain unmarked, regardless of their grammatical function. However, the first person singular emphatic pronoun can also take a dedicated 'S' marker =*x*, thus producing an example of a horizontal alignment type. All this is summarized in Table 13.6 (taken from Zariquiey 2018: 177).

In (12), I illustrate the paradigm of the first person emphatic pronoun. In (12a), it appears as the S argument of the intransitive verb *ux* 'sleep'; in (12b) it appears as the A argument of the transitive verb *mëë* 'hit'; and in (12c) the first person emphatic pronoun appears as the P argument of the same transitive verb. None of the examples in (12) features a reflexive use of an emphatic pronoun, since the criteria proposed by Haspelmath (this volume) are not satisfied: there is no coreference relation with an antecedent with subject function.

13 Reflexive constructions in Kakataibo (Pano, Peru)

Table 13.6: Emphatic personal pronouns in Kakataibo

Person	A	S	P
1p singular	‘ëbi	‘ëbi(=x)	‘ëbi
2p singular/plural	mibi	mibi	mibi
3p singular/plural	abi	abi	abi
1p plural	nubi	nubi	nubi

- (12) a. ‘ëbi=x *kana* ‘ux-a-x-a
 1SG:EMPH=S NAR:1 sleep-PFV-3-NON.PROX
 ‘I myself slept.’
- b. ‘ëbi *kana* *a* mëë-a-x-a
 1SG:EMPH NAR:1 3SG:P hit-PFV-3-NON.PROX
 ‘I myself hit him.’
- c. ‘ëbi *ka* *a=n* mëë-a-x-a
 1SG:EMPH NAR:3 3p=A hit-PFV-3-NON.PROX
 ‘He hit ME (of all people).’

Emphatic pronouns can also be used in combination with the verbal reflexive marker introduced in §3.1, as illustrated in (13a), which is basically synonymous with (13b), although (13a) is often interpreted with a more volitional and controller subject. In any case, it is clear that the reflexive meaning comes from the verbal marker and not from the emphatic pronoun. Note that due to the fact that emphatic pronouns exhibit a neutral alignment type, it is not obvious whether the pronoun is the subject or the object of the construction in (13a), but since the predicate carries the reflexive marker and thus is detransitivized in Kakataibo, we may assume that *abi* in (13a) is a subject pronoun.

- (13) a. *abi* *ka* *is-akat-a-x-a*
 3SG:EMPH NAR:3 see-REFL-PFV-3-NON.PROX
 ‘she saw herself (voluntarily) / he saw himself (voluntarily)’
- b. *a=x* *ka* *is-akat-a-x-a*
 3SG=S NAR:3 see-REFL-PFV-3-NON.PROX
 ‘she saw herself / he saw himself’

A slightly different situation is found with reflexive ditransitive constructions, in which the use of an emphatic pronoun does trigger a significant difference

Roberto Zariquiey

in interpretation. Ditransitive predicates use two different reflexive strategies depending on the argument that is coreferential with the subject. If the T (theme) is coreferential with the subject, only the reflexive marker is required. If the R (recipient) is coreferential with the subject, in addition to the reflexive marker, an emphatic pronoun is required. Therefore, non-emphatic pronouns in reflexivized ditransitives always trigger a co-reference relation between the subject and the T argument (a T-reflexive), whereas emphatic ones systematically trigger a co-reference relation between the subject and the R argument (a R-reflexive). This is illustrated in (14). In (14a), the non-emphatic pronoun triggers a T-reflexive, whereas in (14b), the emphatic pronoun triggers a R-reflexive.

- (14) a. ‘*ë=x kana ‘inan-mët-i-n*
 1SG=S NAR:1SG give-REFL-IPF-1/2
 ‘I will give myself (to someone else)’
 (*‘I will give (something) to myself’)
 b. ‘*ëbi=x kana ‘inan-mët-i-n*
 1SG:EMPH=S NAR:1SG give-REFL-IPFV-1/2
 ‘I will give (something) to myself’
 (*‘I will give myself (to someone else)’)

The first person emphatic pronominal form ‘*ëbi* in (14b) lacks an identifiable antecedent and both the pronominal form in (14a) and the one in (14b) are subjects. The reflexive meaning in both examples comes from the verbal reflexivizer. The use of a non-emphatic pronoun in (14a) and an emphatic one in (14b) only triggers a different type coreference relation: in (14a) the Subject is coreferential with T, whereas in (14b) the Subject is coreferential with R.

A more prototypical instance of an emphatic pronoun used as a reflexive pronoun follow in (15a). In (15a), we find an example of an emphatic pronoun occurring as a reflexive object and it is clear that there is an antecedent which is crucially the subject of the clause. For this function to be accomplished by an emphatic pronoun, two requirements are in order: (i) the subject cannot be itself an emphatic pronoun (see 15b); and (ii) the verb must carry itself a reflexive marker (see 15c). The fact that the (15c) is ungrammatical reveals that emphatic pronouns are not a truly reflexive pronouns, but just emphatic pronouns used in reflexive constructions.

- (15) a. ‘*ë=x kana ‘ëbi is-akat-i-n*
 1SG=S NAR:1SG 1SG:EMPH see-REFL-IPFV-1/2
 ‘I look at myself’

13 Reflexive constructions in Kakataibo (Pano, Peru)

- b. * ‘ëbi=x kana ‘ëbi is-akat-i-n
1SG:EMPH=S NAR:1SG 1SG:EMPH see-REFL-IPFV-1/2
 (‘I look at myself.’)
- c. * ‘ë=x kana ‘ëbi is-i-n
1SG=S NAR:1SG 1SG:EMPH see-IPFV-1/2
 (‘I look at myself.’)

A more prototypical use of an emphatic pronoun as a reflexive pronoun can be found with the intransitive verb *bana* ‘speak’. In this case, the requirement of the presence of a verbal reflexivizer does not apply since the verbal reflexive marker can only be combined with transitives and ditransitives (16a). Note, however, that the restriction regarding the use of an emphatic pronoun in the subject position holds (16b). It would be interesting to explore if such construction is applicable with other intransitives.

- (16) a. ‘ë=x kana ‘ëbi bana-i-n
1SG=S NAR:1SG 1SG:EMPH speak-IPFV-1/2
 ‘I speak to myself.’
- b. * ‘ëbi=x kana ‘ëbi bana-i-n
1SG:EMPH=S NAR:1SG 1SG:EMPH speak-IPFV-1/2
 (‘I speak to myself.’)

The examples in (15a) and (16a) feature instances of emphatic pronouns being used in reflexive constructions. It is important to note, however, that in both examples the predicate needs to be intransitive, either because of the presence of a reflexive marker in the verb (15a), or because the verb is already intransitive (16a). Only the example in (16a) might be seen as a true instance of an emphatic pronoun being used as a proper reflexive pronoun, since in (15a), although we do find co-reference with the subject, there is a reflexive marker in the verb. The example in (16a) is highly idiosyncratic and it might be a very special use exclusively associated with the verb *bana* ‘say’.

With the exception of (16a), all the cases of emphatic pronouns in reflexive constructions, even those ones with a co-referential subject in the same clause require the use of an external reflexivizer: a verbal reflexive. This suggests that emphatic pronouns are not reflexive pronouns. One may hypothesize a future stage in which the verbal reflexive marker is not required anymore and thus truly reflexive pronouns are developed in Kakataibo. This stage, however, has not occurred in the language (with the exception of the highly idiosyncratic example in (16a)).

Roberto Zariquiey

4.2 Nami ‘body’

With some transitive verbs, Kakataibo exhibits a construction in which the word *nami* ‘body’ is used to express a co-referentiality relation equivalent to the one associated with reflexive constructions. Languages of world often exhibit reflexive pronouns etymologically related to nouns with meanings like ‘body’ or ‘head’ (chapters/haspelmath [this volume]; *Schladt 2000*). In the case of Kakataibo, the use of *nami* ‘body’ as part of reflexive constructions requires it to be explicitly accompanied by a possessive pronoun (the possessive pronoun has to be coreferential with the subject of the verb) and it also needs to carry the emphatic marker =*bi*. This is illustrated in (17). Note that a non-reflexive interpretation (‘his own body’) was also given in elicitation.

- (17) *Juan ka ain nami=bi is-i-a*
 Juan NAR:3 3SG:GEN body:ABS=EMPH see-IPFV-NON.PROX
 ‘Juan sees himself / Juan sees his own body.’

As in the case of the emphatic pronouns discussed in §3.1, it is clear that the coreference interpretation associated with the reflexive meaning in (16) comes from an external element, in this case the possessive pronoun and the emphatic marker =*bi*. Therefore, the use of *nami* ‘body’ as a reflexive nominal has not been fully grammaticalized.

5 Conclusions

The present chapter has discussed the main strategies for expressing reflexive meanings in Kakataibo. The language exhibits a productive verbal reflexive voice marker, which is used on transitive verbs in order to indicate coreferentiality between their two participants (which also detransitivizes the verb). The middle marker of the language, -*t*, also gets reflexive overtones with some predicates, but is not fully productive. Kakataibo also has constructions that may be seen as reflexive nominals. These include the use of emphatic pronouns and the use of the noun *nami* ‘body’ with transitive predicates to express reflexive meanings. The reflexive interpretation of emphatic pronouns requires the presence of the reflexive marker, whereas the reflexive use of the noun *nami* ‘body’ requires the possessive marker and the emphatic clitic =*bi*. This fact suggests that they are not proper reflexive nominals but elements that contribute to the interpretation of reflexive constructions, in which the co-referentiality component of the meaning comes from a different element. Their need for some extra markers of co-reference (a reflexive marker or a possessive pronoun) suggests that in

13 Reflexive constructions in Kakataibo (Pano, Peru)

Kakataibo there are not fully grammatical nominal reflexives. How should we call the reflexive uses of the emphatic pronouns and the noun *nami* ‘body’ in Kakataibo? What does it imply for such nominal elements to participate in reflexive constructions under the condition that the verbal reflexive is also there? Answering such questions may have consequences for our understanding of reflexive nominals as a descriptive category and the nature of nominal reflexives in languages which already have a reflexive verbal marker.

Abbreviations

1	first person	PFV	perfective
2	second person	PROX	proximal
3	third person	R	recipient-like
A	most agentive participant of a transitive predicate		argument of ditransitive construction
ABS	absolutive	REFL	reflexive
DIM	diminutive	REM.PST	remote past
EMPH	emphatic	REP	reportative
ERG	ergative	S	single participant of an intransitive predicate
GEN	genitive		
INTR	intransitive		
IPFV	imperfective	SE	simultaneous event
NAR	narrative	SG	singular
NON.PROX	non-proximal to the addressee	T	theme argument of ditransitive constructions
P	most patientive participant of a transitive predicate		

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Roberto Zariquiey

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Chapter 14

Reflexive constructions and middle marking in Mojeño Trinitario

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Mojeño Trinitario (Arawak, Bolivia) shows a middle marker *-wo* that encodes, among other functions, the coreference of subject and object within the same clause, within reflexive constructions. The middle marker *-wo* is not only used for prototypical reflexive situations (the central interest of this volume), but also for situations types that are best considered middle (in line with Kemmer 1993), including grooming, non-translational motion, other body actions, translational motion and positionals, reciprocals, mental events (cognition and emotion), and spontaneous events. The middle marker *-wo* can also be used in situation types where it just adds various types of emphasis on the subject. Interestingly, the marker *-wo* is only one of several middle-marking strategies in the language. Coreference other than between the subject and the object, within a clause or beyond the clause, are left unmarked, as the language has neither a set of reflexive pronouns nor of reflexive possessor indexes. Coreference beyond the reflexive construction is therefore left as a possible interpretation, depending on the semantico-syntactic and discourse context.

1 Introduction

Mojeño Trinitario is a language of the Arawak family spoken in Bolivia (§2). Reflexive constructions in Mojeño Trinitario make use of a middle marker *-wo* as in (1)–(2) (§3). This encodes, among other functions, the coreference of what are subjects and objects in a corresponding non-reflexive clause (2).



Françoise Rose

- (1) *ñ-omuire=po t-etpiri-k-wo=po*
 3M-also=PFV 3-arrange-ACT-MID=PFV
 ‘He got ready too (lit. he arranged himself too).’ [T38.186]
- (2) *p-etpiri-gi-a j-ma-ro-no*
 2SG-arrange-ACT-IRR DEM-NH.PL-MED-PL
 ‘Arrange these!’ [about pictures in the Family problem Solving Task]¹
 [T45.002]

There are other types of coreference, within a clause or beyond the clause, that are left unmarked (§4), as the language does have neither a set of reflexive pronouns nor of reflexive possessor indexes. Coreference beyond the reflexive construction is therefore left as a possible interpretation, depending on the semantico-syntactic and discourse context. The middle marker *-wo* is not only used for prototypical reflexive situations, the central interest of this volume (§5), but also for situation types that are best considered middle (in line with Kemmer 1993), including grooming, non-translational motion, other body actions, translational motion and positionals, reciprocals, mental events (cognition and emotion), and spontaneous events. The middle marker *-wo* can also be used in situations types where it does not show a middle function, but puts various types of emphasis on the subject. Interestingly, the marker *-wo* is only one of several middle-marking strategies in the language, and it is the most agent-oriented one (§6).

The data on which this paper is based have been collected in the field by the author since 2005. It constitutes a database of 8 hours of (semi)-spontaneous texts, 2 hours of isolated sentences elicited with stimuli, and additionally 4900 elicited sentences (Rose 2018).

2 Introduction to Mojeño Trinitario

2.1 The language

Mojeño (trin1274) is an endangered Arawak language (Gill 1957; Rose 2015b) spoken in Lowland Bolivia (Map 1).² The Trinitario dialect is spoken by a few thousand speakers (Crevels & Muysken 2009), most of which are bilingual in Spanish.

Mojeño Trinitario is a highly agglutinating language, with a large number of suffix/enclitic slots and a few prefix slots. Lexical and grammatical morphemes

¹This task is described in San Roque et al. (2012).

²This map is the English version of a map originally published in French in Rose (2010).

14 *Reflexive constructions and middle marking in Mojeño Trinitario*

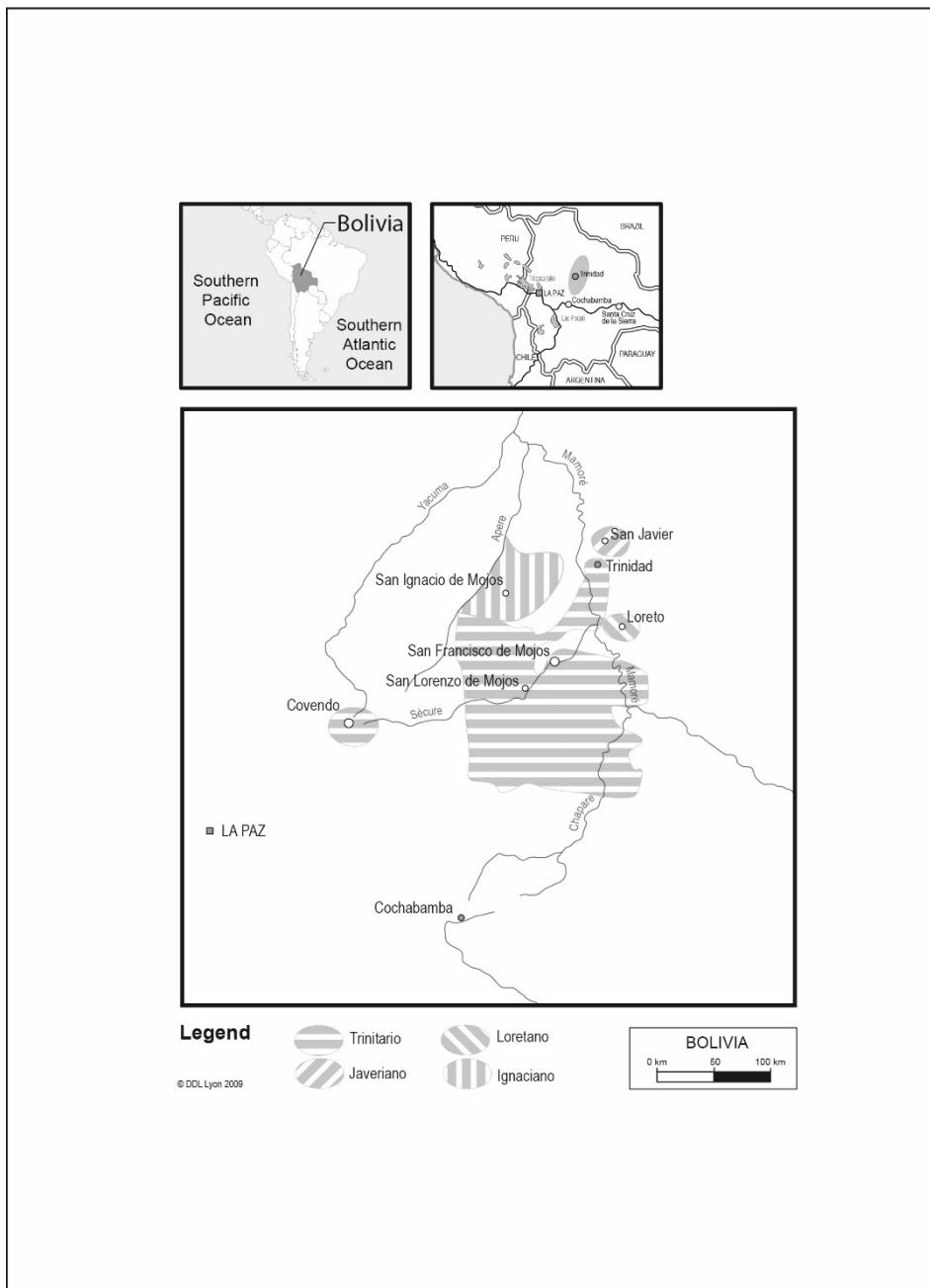


Figure 14.1: Geographical distribution of the Mojeño speakers

Françoise Rose

display several surface forms, due to a rich system of morphophonemic rules and a pervasive process of vowel deletion (Rose 2019). The next sections will present some aspects of the grammar of Mojeño Trinitario that are important for the issue of reflexivization: pronominal markers (§2.2), argument encoding (§2.3) and the active suffix (§2.4).

2.2 Sets of pronominal markers

Mojeño Trinitario shows four sets of pronominal markers: free pronouns, demonstrative formatives,³ person prefixes and person suffixes. Table 14.1 shows that these sets share the same semantic categorization and cognate forms (demonstratives, of little relevance here, are left out).⁴ For third person, note that number is neutralized for non-human, gender is neutralized for human plural, and there is a genderlect distinction for the third person human singular masculine depending on the gender of the speaker (Rose 2013; 2015a). Importantly, there is no set of reflexive pronominals. The same affix sets are used on both verbs and nouns: prefixes for subject on verbs and possessor on nouns, suffixes for object on verbs and subjects on non-verbal predicates. The only difference is that the semantically non-specific third person marker *t-* is found on verbs only. The number of a third person subject marked with *t-* can be specified with the plural suffix *-ono*, also used to mark plurality on nouns. The use of the pronominal markers is discussed in the next section.

2.3 Argument encoding

Argument encoding is essentially marked by the obligatory person indexation (the last two columns of Table 14.1). Noun phrases are indeed optional, and unflagged. Free pronouns are also used optionally, usually when the referent has been identified previously.⁵ When noun phrases are overt, the basic order is SVO for transitive clauses and VS for intransitive clauses.

The obligatory person indexation works as follows. Subjects are indexed on verbs with prefixes (3). First and second person objects are indexed on verbs with suffixes (4), while third person objects are not overtly marked in the verb. Subject and object affixes on the same verb cannot be coreferential. A typological

³These take a demonstrative prefix *p-* and one of a set of distance/epistemic suffixes to form a demonstrative (Rose 2017)

⁴For a full presentation and discussion of the pronominal paradigm, see Rose (2015b)

⁵Free pronouns also show a use within noun phrases headed by a noun, where they either precede or replace the determiner (free pronoun + noun, or free pronoun + determiner + noun).

14 Reflexive constructions and middle marking in Mojeño Trinitario

Table 14.1: Mojeño Trinitario pronominal markers

	PRONOUNS	PREFIXES (A, Sa, Sp, Poss)	SUFFIXES (P, argument of non-verbal predicate)
1SG	<i>nuti</i>	<i>n-</i>	<i>-nu</i>
2SG	<i>piti</i>	<i>py-</i>	<i>-vi</i>
1PL	<i>viti</i>	<i>vy-</i>	<i>-(wok)ovi</i>
2PL	<i>eti</i>	<i>a-</i>	<i>-'e</i>
3M(SG.H)	<i>ema</i>	<i>ma-(~ mu-, m-)</i>	-
speaker♂			
3M(SG.H)	<i>eñi</i>	<i>ñi-(~ ñ-)</i>	-
speaker♀			
3F(SG.H)	<i>esu</i>	<i>s-</i>	-
3NH(SG/PL)	<i>eto</i>	<i>ta-(~ t-)</i>	-
3PL(H)	<i>eno</i>	<i>na-(~ n-)</i>	<i>-woko</i> (3PL)
3		<i>t- (~ ty-)</i> verbs only	

particularity of Mojeño Trinitario is that the presence and the person of an object triggers a differential indexation of third person subjects (Rose 2011). On the one hand, the non-specific third person subject prefix *t-* is found both on intransitive verbs as in (5) and on transitive verbs with a first or second person object as in (4). On the other hand, a semantically specific third person subject prefix (*ma-*, *ñi-*, *s-*, *na-* and *ta-*) is found when the object is a third person as in (3). The selection of a third person subject prefix depends on transitivity, which does not solely depend on the number of the arguments and the person of the co-argument, but is also sensitive to various transitivity criteria, like aspect, mood, information structure, etc. (Rose 2011).

- (3) *ma* ‘moperu-gra **mu-em-'o=po** to *jani-on*
ART.M child-DIM 3M-see-ACT=PFV ART.NH bee-PL
'The little boy saw the bees.' [T11.019]

- (4) *t-im-it-ko-wokovi*
3-CAUS-know-ACT-1PL
'He teaches us.' [T28.099]

Françoise Rose

- (5) *t-junopo=po te to smeno*
 3-run=PFV PREP.NH ART.NH woods
 ‘It ran through the woods.’ [T11.018]

Mojeño Trinitario shows A-preserving lability, also called agentive ambitransitivity: the same root can be used without any formal change either transitively with both A and P, or intransitively with a unique S participant (with S being semantically equivalent to A). Ambitransitivity is observable in the example (6), where the root *ew* ‘sow’ is used intransitively in the first clause and transitively in the second clause (observe the change in third person subject indexes).

- (6) *ene t-ew-ko-m=po, na-ew-ko=po to arusu*
 and 3-sow-ACT-PL=PFV 3PL-sow-ACT=PFV ART.NH rice
 ‘And they start to sow, they sow rice.’ [T21.038]

Obliques (adjuncts or peripheral arguments) always occur with a preposition, and are also distinguished from objects by not being indexed on the verb. There is a single simple preposition *te*, illustrated in (5),⁶ that shows multiple meanings such as ‘with’, ‘in’, ‘on’, ‘for’, ‘from’, etc.

2.4 The active suffix

Mojeño Trinitario roots are either active (i.e. dynamic) or stative, and activity is overtly marked at the stem level with the active suffix (-ko ~ -cho ~ -'o)⁷. This suffix comes almost at the end of the verb stem, made out of the root and its derivational morphology, and sketched in Figure 14.2.⁸

CAUS/MID-ROOT-RED-CLF/APPL3-N-PLURACT-ACT/RECP-APPL1/2/PASS

Figure 14.2: Verbal stem template

The active suffix is normally used with active roots (be they intransitive or transitive). The active suffix can be seen in examples (3), (4) and (6) in the verb stems *im-'o* ‘see/watch’, *it-ko* ‘know’ and *ew-ko* ‘sow’. However, it does not show

⁶The form *te* is actually a reduced form of a prepositional root *ye'e* with a third person non-human prefix *ta-*. If the preposition introduces a first or second person, or a human third person, this is indexed as a prefix on *ye'e*, as in *p-ye'e* ‘with you, for you, etc.’

⁷The allomorphs are selected depending on the preceding vowel (often not visible due to the rhythmic syncope process).

⁸The interaction of the active suffix with the reciprocal will be discussed in §6. Also note that the middle marker present in the stem template is a prefix, distinct from the middle suffix *-wo*.

14 Reflexive constructions and middle marking in Mojeño Trinitario

in some active verb stems, as on *junopo* ‘run’ in (5) and *samo* ‘feel’ in (7) (see more below on this distribution). Stative roots such as *itve* ‘be sweet’ do not normally take the active suffix, but when they do, an active (transitive) verb stem is derived, such as *itve-cho* ‘sweeten’. Conversely, the active suffix is left out of constructions that are stativizing active roots, like the patient nominalization in (8) where the nominalizer replaces the active suffix.

- (7) *je'e ty-uri p-samo?*
so 3-good 2SG-feel
'So, is it good how you feel?' [T19.114]
- (8) *na-ni-ru*
3pl-eat-SP.P.NMLZ
'their food' [T19.102]

There are two inflectional classes of active stems. The two rows of Table 14.2 illustrate the behavior of the active suffix with respect to these two classes. Most active verbs always carry the active suffix. This is illustrated with *jaño-ko* in the first row: the active suffix is present in the absence or presence of any other suffixes. A smaller number of active verbs (all with root-final /o/) obligatorily take the active suffix in some contexts only, basically when carrying stem-internal suffixes (the pluralional *-ri*, a classifier, or the reduplicant). Otherwise, when carrying no suffix or stem-external suffixes (such as *-nu*, first singular object), this class of active verbs does not show the active suffix. This is illustrated in the second row with *jikpo* that does not show the active suffix in the first two columns, but does so in the third one. With this background in mind, we will see shortly that the middle-marker *-wo* interacts unexpectedly with the active suffix §5.

3 Reflexive constructions in Trinitario

There is a single reflexive construction in Mojeño Trinitario. It involves the middle marker *-wo* and marks the coreference of core participants. There is no other morphosyntactic strategy to encode reflexivity in the language (see §4.). This section first presents the morphological properties of the middle suffix *-wo* §3.1, which are the same whatever its use, and then presents the semantics (§3.2) and the syntax (§3.3) of the reflexive construction only, in line with the focus of the volume. Other uses of the middle marker will be discussed in §5.

Françoise Rose

Table 14.2: The active suffix on the two classes of active stems

only active	with most stem-external suffixes	with all stem-internal suffixes
<i>n-jaño-ko</i> 1SG-watch-ACT 'I watch'	<i>ty-jaño-k(o)-nu</i> 3-watch-ACT-1SG 'he/she/it watches me'	<i>ty-jaño-ri-ko</i> 3-watch-PLURACT-ACT 'he/she/it always watches'
<i>n-jikpo</i> 1SG-answer 'I answer'	<i>ty-jikpo-nu</i> 3-answer-ACT-1SG 'he/she/it answers me'	<i>ty-jikpo-ri-ko</i> 3-answer-PLURACT-ACT 'he/she/it always answers'

3.1 Morphological properties of the middle suffix -wo

The middle suffix *-wo* attaches to the verb stem, in the same slot where object suffixes appear (although they never combine). This distributional fact could lead to an analysis where *-wo* is a pronominal element, but this analysis does not hold because *-wo* is invariant whatever the person of the subject, as shown in (9) and (10). Figure 14.2 outlines the verb template, where “V stem” stands for the template presented in Figure 14.3. Please note that the middle suffix *-wo* occurs in a position outside of the stem (Figure 14.3 shows a middle marker within the stem, which is the prefix *ko-*, see §6.).

S/A-IRR-VSTEM-IRR-MID/O-COMP-EVAL-PL=TAME=DEGREE=TAME=DM

Figure 14.3: Verbal word template

- (9) *n-etpiri-k-wo=po nuti*

3-prepare-ACT-MID=PFV 1SG

'I got ready.' [T38.182]

- (10) *v-echpu-ko vi-oso-ko-wo te yuku*

1PL-get_up-ACT 1PL-heat-ACT-MID PREP.NH fire

'We would get up and warm up next to the fire.' [T25.066]

The middle marker *-wo* has several allomorphs. The first three are predictable through general prosodic and phonological processes of the language, while the fourth results of a more restricted process.

14 Reflexive constructions and middle marking in Mojeño Trinitario

- -mo when it immediately follows an /m/, as in *n-sam-mo* 1SG-listen-MID ‘I listen to myself’;
- -v (realized [β]) before front vowels (after hiatus resolution) or before y as in the sequence -v=yore ‘-MID=FUT’ used in (21) (the sequence /w+j/ is often realized [ɥ]);
- -w when the o is deleted through rhythmic syncope as in (13);
- this /w/, stranded in coda position after the syncope of o, is deleted and compensated by vowel lengthening when it precedes a labial consonant /p/ or /w/ - then the middle marker is not realized at all, but its presence is visible through lengthening of the preceding vowel, as in (41);
- -po when it follows the irrealis suffix -a, as in (11).

This last allomorph results from a very restricted rule: the labio-velar approximant /w/ (and its realization [β] before front vowels) plosivize in /p/ after the irrealis suffix -a in the morphemes -wo [wo] ‘MID’ and -wi [βi] ‘2SG’ (see example (62)).⁹

- (11) *t-emtyo-k-a-po=pka*
 3-lose-ACT-IRR-MID=DUB
 ‘It may get lost.’ [T25.148]

A surprising property of the middle suffix is that it makes the active suffix (presented in §2.4) appear on the class of active verbs that show the active suffix only when a stem-internal suffix is present. Table 14.3 is similar to the last row of previous Table 14.2 in showing that the active suffix is present on some verbs, here represented by the verb *echo* ‘know’,¹⁰ only if they take a stem-internal suffix. But the last column adds the information that the middle marker -wo is also a trigger of the presence of the active suffix on those active verbs that do not

⁹The syllable *wo* is also realized *po* with irrealis in roots that are likely the result of the lexicalization of the middle marker. The forms *fowō*‘come back’, *ifmowō*‘find’, and *itkowō*‘find, succeed’ are synchronically considered as roots, with /wo/ being part of the root. This analysis is due to the fact that the first two forms never occur without *wo*, while the third one has quite a different meaning without *wo*: *it-ko* means ‘know’. Anyway, even though *wo* is not segmentable as the middle marker in these forms, the irrealis is still added before *wo* rather than after the root, and *wo* is realized as *po*. As a consequence, roots *fowō*‘come back’, *ifmowō*‘find’, and *itkowō*‘find, succeed’ show suppletive irrealis forms *fapo*, *ifmapo* and *itkapo*.

¹⁰The example in the table is not illustrative of the reflexive meaning per se but of another middle use of the marker -wo (see §5).

Françoise Rose

always show the active suffix. In a way, although the middle-marker *-wo* occurs outside of the verb stem, it behaves like a stem-internal suffix. This is coherent with the fact that stem-internal affixes are essentially derivational affixes and built up the semantic and syntactic argument structure of the stem. The position of the middle marker further away from the root is probably to be taken as a sign of a more recent grammaticalization.

Table 14.3: . Interaction of the active suffix with stem-internal suffix or middle marker

only active	with most stem-external suffixes	with all stem-internal suffixes	with middle marker <i>-wo</i>
<i>n-echo</i>	<i>wo n-ech-a</i>	<i>n-ech-pi-ko</i>	<i>wo n-echo-k-a-po</i>
1SG-know 'I know'	NEG 1SG-know-IRR 'I don't know'	1SG-know-CLF-ACT 'I know (a language, a song, a word)'	NEG 1SG-know-ACT-IRR-MID 'I did not know'

In addition, the middle suffix also applies on verbs that are not active, such as *itna* 'be used to' in (42) (where it is realized *etna* for phonotactic reasons).

3.2 Semantics of the reflexive construction

This section reviews the situation types expressed by the middle marker that can be conceived as falling within the reflexive domain. "Situation types can be thought of as sets of situational or semantic pragmatic contexts that are systematically associated with a particular form of expression." (Kemmer 1993: 7; following Talmy 1972). The Mojeño Trinitario middle marker *-wo* is used on extroverted verbs like (9) to express true reflexive situation types in the sense of Kemmer (1993: 45): « The direct reflexive situation type comprises semantic contexts which involve coreference in an event consisting of a single event frame ». Although this situation type is generally conceived as the prototypical reflexive function, it represents only a small part of the uses of the middle marker *-wo* in Mojeño Trinitario: in a random sample of 91 occurrences of *-wo*, only 9 of them (i.e. less than 10%) are actually expressing a direct reflexive situation type. The marker *-wo* is also used on introverted verbs, in situation types often lumped with reflexive:¹¹ these are body actions situation types, comprising grooming

¹¹Kemmer (1993: 53–70) considers these situation types to be distinct from the reflexive situation types because the participant roles are not as easily distinguishable as in reflexive situations.

14 Reflexive constructions and middle marking in Mojeño Trinitario

(12), change in body posture (13), other body actions (14), translational motion (15) and positionals (16). Other situation types that are clearly middle and do not belong to this intermediate body action types are described in §5..

- (12) *t-vejamuiri-k-wo p-ñi ‘chane*
3-undress-ACT-MID DEM-M person
'The man gets undressed.' (PathC.031)
- (13) *powre-chicha ty-akyo-j-rii-ko-w=ri’i*
poor-EMP 3-fold-CLF.amorph-PLURACT-ACT-MID=IPFV
'Poor him, he is bent, crouched down.' [T40.070]
- (14) *j-ma-ni ty-uuja-ja-me-k-wo-n=ri’i te*
DEM-NH.PL-PROX 3-scratch-RED-CLF.fabric-ACT-MID-PL=IPFV PREP.NH
n-chokio
1SG-be_close
'these (stinky dogs) are scratching themselves next to me.' T29.046
- (15) *t-pojcha-j-ko-wo te j-ena ‘mu’ji*
3-enter-CLF:amorph-ACT-MID PREP.NH NH.SH-DIST husk
'He got into that heap of corn husks (to hide).' [T35.061]
- (16) *t-chum-ko-wo*
3-hang-ACT-MID
'It hangs.' [Answer to the question: Where is the lamp?] (LocC.13)

3.3 The syntax of the reflexive construction

As mentionned above, the middle suffix *-wo* can indicate coreference between two core participants that could be expressed as subject and object in a non-reflexive construction (compare (1) and (2)). These two participants can be agent and patient as in (17), or other semantic roles like stimulus and experiencer as in (18). Through combination with the benefactive applicative as in (19), the subject of the reflexive construction can combine the roles of agent and benefactive (the applied object of the applicative construction).

- (17) *s-yoyure-wo=richu s-echti-k=ri’i to s-ye’e=yo*
3F-rush-MID=RESTR 3F-cut_soft-ACT=IPFV ART.NH 3F-GPN=FUT
'She rushed to cut her share.' [T27.031]

Françoise Rose

- (18) *n-imooro-k-wo*

1SG-watch-ACT-MID

‘I am looking at myself.’ [elicited]

- (19) *ma-wachri-s-no-wo*

3M-buy-ACT-APPL-MID

‘He bought it for himself.’ (adapted from Gill 1957: 132)

The middle marker is found with the reflexive meaning on transitive verb stems only, since this meaning involves a situation type with two distinguishable participant roles. I consider the Mojeño Trinitario reflexive constructions to be intransitive: no object noun phrase ever occurs (recall that there is no set of reflexive pronouns in the language (§2.2)), and only the subject is indexed on the verb with a person prefix. However, since subject marking for first and second person subjects do not differ depending on transitivity and noun phrases are optional (§??), the transitivity analysis of individual sentences is often ambiguous at the surface level. Nevertheless, detransitivization is overtly marked when the subject is a third person, because it is then always indexed with *t*-, as on intransitive verbs (and transitive verbs with a first or second person object).

This section has described the uses of the middle marker -*wo* that can be considered to be reflexive, even though some of these are considered by other authors like Kemmer (1993) not to carry a true reflexive meaning, but rather some senses of the middle. Other middle uses of -*wo*, clearly distinct from the reflexive uses, are discussed in §5.

4 The expression of coreference situations other than between core participants

The preceding section has shown that the middle marker -*wo* is used to encode the coreference between two core participants. Coreference of two arguments other than the core participants are not usually marked with this marker in Mojeño Trinitario. This section inquires on how these situations can be encoded.

Non-core arguments are indexed by person prefixes. Person prefixes on nouns express their possessors, while person prefixes on prepositions express their object). These person prefixes can have either reflexive or non-reflexive interpretations. This indetermination is illustrated here for adnominal possession, and exemplified with the third person prefix for a feminine possessor *s*- ‘her’. Obviously, the interpretation of coreference with the subject is excluded if the possessed noun is part of the subject noun phrase as in (20), or if the subject is not

14 Reflexive constructions and middle marking in Mojeño Trinitario

a third person as in (21). In examples where the possessed noun is not the subject, and the subject is a third person of the same gender/number, the referent of the possessor is interpreted as coreferential or not with the subject depending on the context. Most of the time, the context makes it transparent who is the referent of the possessor.¹² In example (22) from a text, the feminine possessor of the object is interpreted as coreferential with the subject, but in some other context (for example, if we knew that the referent of the subject does not own a recorder), it could refer to another feminine third person. In (23), it is also clearly coreferential with the subject.

- (20) *ñi-ke=pripu=iji* *ñi s-imá*
 3M-be_like=CONC.MOT.IPFV=RPT 3M 3F-husband
 'Her husband was coming.' [T20.044]
- (21) *juiti v-naekcho-v=yore=po p-jo-ka* *s-emtöne*
 today 1PL-start-MID=FUT=PFV DEM-NH-PROX 3F-work
 'Today we are going to start her work.' [T04.001]
- (22) *kope s-era'i-ko to s-ye'e gravadora*
 past_day 3F-leave-ACT ART.NH 3F-GPN recorder
 'The other time, she_i left her_{i/j} recorder.' [T26.037]
- (23) *p-su 'seno t-ero=ri'i une s-ko-chane p-ñi s-imá=puka*
 DEM.F woman 3-drink=IPFV water 3F-vz-person DEM-M 3F-husband=DUB
 'The woman_i drinks water with a man who might be her_{i/j} husband.'
 (PathS.75) [the speaker is describing a video stimulus on the expression of path, and does not know the two actors nor their personal relationship]¹³

There is a subtype of the reflexive construction using the middle marker *-wo* that encodes the coreference of the possessor of a noun with the subject: a noun expressing a body part is incorporated in a verb, which is reflexivized with the middle marker *-wo*, as in (24). There is another construction where the middle marker *-wo* helps interpreting the coreference of the adnominal possessor and the subject, but where the middle marker expresses grooming situation types, or self-affectedness, rather than reflexivity (for example, in (25), the woman is not literally plaiting herslef, her body). This can be used whether the object is a body

¹²Searching for all nouns carrying a third person feminine possessive prefix in my corpus, there was no example the interpretation of which was in fact ambiguous.

¹³This task is described in Vuillermet & Kopecka (2019).

Françoise Rose

part (25) or not (26), and the clause is not detransitivized. In contrast, a lexical way to explicitly inform on the non-coreference with the subject is to use the adjective ‘*pona* ‘other’ (27).

- (24) *ñi t-yuk-pan-ne-ch-wo=o'i*
 ART.M 3-touch-jaw-CLF.back-ACT-MID=IPFV
 ‘the one who is pressing his cheeks’ [T45.066]
- (25) *su 'seno t-eja-ra-ko=o'i t-jigwaj-ji-ch-wo to*
 3F woman 3-sit-PLURACT-ACT=IPFV 3-plait-CLF:amorph-ACT-MID ART.NH
 s-chutmoko
 3F-hair
 ‘The woman is sitting and plaiting her hair.’ (PathM.12)
- (26) *t-vemju-ju-pew-cho-wo j-ma s-epkopewo*
 3-take_off-RED-CLF.foot-ACT-MID DEM-NH.PL 3F-flipflop
 ‘She takes off her flipflop.’ (PathC.68)
- (27) *t-yusti-j-ko p-jo s-chutmoko su 'po-na 'seno*
 3-cut-CLF:amorph-ACT DEM-NH.SG 3F-hair ART.F other-CLF:h woman
 ‘She cuts the hair of another woman.’ (Cut& BreakF.33)

As for obliques coreferential with the subject, the single inflectable preposition in the language takes a single person prefix paradigm, so that coreference cannot be marked in the obliques.¹⁴ In elicitation as in (28), a consultant made use of the unstressed restrictive clitic =(ri)chu ‘only, just, exactly’ on a prepositional phrase to create a contrast between two possible interpretations of the person prefix on the preposition. The restrictive marker¹⁵ does not in itself express coreference, but refines the identifiability of the referent by excluding alternative referents. The only morphological resource to mark the coreference of a peripheral participant is the combination of an applicative -(‘)u and the middle marker -wo, which marks the coreference of an object (the promoted oblique) and a subject. This is illustrated in (29) with the goal applicative -(‘)u, and had been illustrated in (19) with the benefactive applicative -(i)no.

¹⁴ Most locative meanings are actually expressed either through verbs or relational nouns.

¹⁵ The restrictive marker =(ri)chu can be found on various parts of speech and is usually translated as ‘just, only, precisely’.

14 Reflexive constructions and middle marking in Mojeño Trinitario

- (28) *su 'seno s-wachri-k=ri'i to charuji s-ye'e=yo /*
 3F woman 3F-buy-ACT=IPFV ART.NH food 3F-PREP=FUT /
s-ye'e=yore=richu
 3F-PREP=FUT=RESTR

'The woman has bought food for her / herself (litt. for her precisely).'
 [elicited]

- (29) a. *p-su 'seno t-semo s-ye'e*
 DEM-F woman 3-be_angry 3F-PREP
 'The woman is angry with her.' [elicited]
- b. *p-su 'seno t-sem-u-ch-wo=richu*
 DEM-F woman 3-be_angry-APPL-ACT-MID=RESTR
 'The woman is angry with herself.' [elicited]

There is no means of marking coreference between two non-core arguments. Again, the restrictive clitic =richu can be used, at least in elicitation, to help the addressee interpret the potentially ambiguous reference of the person prefix.

- (30) *n-ime-ri-ch=ri'i su Maria et-na s-kuna*
 1SG-show-PLURACT-ACT=IPFV ART.F Maria one-CLF.gen 3F-image
s-ye'e / s-ye'e=richu
 3F-PREP / 3F-PREP=RESTR
 'I showed Maria a picture of her / herself only (litt. precisely her).'
 [elicited]

Middle-marking is not used for coreference across clauses. The examples (31) and (32) show that there is no marking for coreference between an element of a complement clause (here the subject) and the subject of the matrix clause. In discourse, a set of focus suffixes combinable with pronouns only can be useful for reference tracking across sentences, like -pooko 'the very same' in (32).¹⁶

- (31) *esu s-echo to ñ-epia-k=yore to peti*
 3F 3F-know ART.NH 3M-make-ACT=FUT ART.NH house
 'She knew that he was going to build a house.' [elicited]

¹⁶There is a set of focus suffixes used on pronouns only: -ji illustrated in (45) and (46), -koocho, -pooko in (33), -yo and -yumja. They are used only on pronouns in core argument positions, but not in reflexive constructions.

Françoise Rose

- (32) *esu s-echo=po to s-joch-ra=yre to tapajo to*
 3F 3F-know=PFV ART.NH 3F-close-EV.NMLZ=FUT ART.NH door ART.NH
peti
 house

‘She remembered to close the house door.’ [elicited]

- (33) *tyompo esu t-k-ijare=e'i... esu-pooko=tse=ro, esu*
 and.also 3F 3-vz-name=IPFV 3F-FOC=CONTRAST=UNQ 3F
tkijaree'i Dolorosa
 3-vz-name=IPFV Dolorosa

[Preceding text: But there are only two: the Carmen Virgin and the mother of God, Holy Mary], and also the one called... the very same one, the one called Dolorosa. [the speaker realizes that the Holy woman he wanted to add to his list was the same person than the preceding one]. [T25.141]

5 Other functions of the middle marker -wo

This section explores the functions of the middle marker -wo other than its reflexive use. It first lists the situation types for which the middle marker -wo is used. Then it lists the various semantico-syntactic changes produced in verbs stems by the use of -wo. Finally, the use of -wo on nominalizations is mentioned.

Middle situation types are events in which (a) the Initiator is also an Endpoint, or affected entity and (b) the event is characterized by a low degree of elaboration (Kemmer 1993: 243), excluding reflexive and reciprocal proper. Below is a list of the middle situation types encoded in Mojeño Trinitario with the middle marker -wo.

- the reflexive situation types (§3);
- some middle situation types : grooming, change in body posture, other body actions, translational motion and positionals (§3);
- prototypical reciprocal (34) and naturally reciprocal situation types (35);¹⁷

¹⁷Kemmer (1993: 17; 96–97) defines these as follows: “The prototypical reciprocal context is a simple event frame expressing a two-participant event in which there are two relations; each participant serves in the role of Initiator in one of those relations and Endpoint in the other.” and “Naturally reciprocal events are actions or states in which the relationship among two participants is usually or necessarily mutual or reciprocal. This class includes verbs of fighting, embracing, meeting, greeting, conversing, and so forth.”

14 Reflexive constructions and middle marking in Mojeño Trinitario

- cognition (36);
- emotion (37);
- and spontaneous events (38),¹⁸ including the expression of phases like ‘start’ in (39) or ‘end’.

(34) *juiti v-yon=ñore v-echji-ri-k-wo=yre na-e*
 today 1PL-go=FUT 1PL-speak-PLURACT-ACT-MID=FUT 3PL-PREP
p-no-kro
 DEM-H.PL-POT.LOC
 ‘Today we are going to discuss with these.’ [T24.087]

(35) *esu t-itu-ch-wo=yre=ripu=ini=ji*
 3F 3-marry-ACT-MID=FUT=PFV=PST=RPT
 ‘It is said that she was about to get married.’ [T19.177]

(36) *t-ponre-ri-k-wo=ripo*
 3-think-PLURACT-ACT-MID=PFV
 ‘He is pensive/worried.’ [T40.154]

(37) *n-yugiej-ko-wo*
 1SG-make_uneasy-ACT-MID
 ‘I feel uneasy’ [T38.040]

(38) *t-si-'o-o=po to une*
 3-be.much-ACT-MID=PFV ART.NH water
 ‘There had been a flood (lit. the water had been much).’ [T38.102]

(39) *juiti v-naekcho-v=yore=po to v-ye'e gravasion*
 today 1PL-start-MID=FUT=PFV ART.NH 1PL-GPN recording
 ‘Today we are going to start our recording.’ [T30.001]

Finally, there are some cases where the event does not seem to fall within a situation type described as middle, but are instead typically one- or two-participant events. In these cases, there is some emphasis on the subject. Three types of functions have been observed :

¹⁸A common example is the verb form *t-ekti-k-wo* 3-blown_hard-ACT-MID ‘it blows hards’ used nominally with an article, *to tektikwo* ‘a strong wind’.

Françoise Rose

- the subject is particularly affected as in (40);¹⁹
- the subject is fully involved in the activity, with verbs strongly involving the agent, and not necessarily for their own benefice, as in ‘do fast’, ‘look for’, ‘carry’, or ‘pull’ illustrated in (41);
- the subject is contrasted with other possible referents (42).

- (40) *ene takepo v-era'i-k-wo=po v-ke=ripo una hora o dos horas*
 and then 1PL-leave-ACT-MID=PFV 1PL-do.like=PFV one_or_two_hours
 ‘And then we left it for one or two hourse (about a heavy load)’ [T25.004]
- (41) *t-chuu-ko-o=po to kareta to wiyo-no te to*
 3-pull-ACT-MID=PFV ART.NH cart ART.NH OX-PL PREP.NH ART.NH
 ‘chene
 path
 ‘The oxen pull the cart on the path.’ [T28.057]
- (42) *n-itna, te p-jo-ka 'wósare wo'=richu*
 1SG-be_used PREP.NH DEM-NH.SG-PROX village NEG=RESTR
na-(a)-etna-wo
 3PL-IRR-be_used-MID
 ‘I am used to it, here in town they are not used to it.’ [T34.049]²⁰

The middle uses have been up to now considered in terms of the situation types covered by this marker. The remainder of this section focuses on the various semantico-syntactic changes induced by the use of -wo in the argument structure of the verb root. Detransitivization with subject and object being coreferential has been discussed in §3. (the reflexive construction). The middle marker -wo involves four other types of detransitivization:

- decausative, as in (16) where the P participant is promoted as subject and the A is left unexpressed;
- autocausative, as in (17), where the subject has both A and P roles, but the action on oneself is not fully identical with the same action realized on some other participant;

¹⁹See Creissels (2007) for a similar analysis of *se-* verb forms in French involving no valency change.

²⁰The three vowels (/a/ of the prefix, /a/ of the irrealis prefix and the initial vowel of *itna* ‘be used to’) merge into a diphthong *ae*.

14 Reflexive constructions and middle marking in Mojeño Trinitario

- antipassive with demotion of P as an oblique, as in (34) (the verb *echijiriko* ‘speak to’ normally takes the addressee as the object, but in (34) the addressee is encoded in a prepositional phrase, in what is called a discontinuous reciprocal construction)²¹;
- antipassive with P deletion, as in (43) (the verb *issiko* ‘whistle’ can normally take an object for the addressee).

- (43) *t-issi-sio-k-wo=pri'i=ji*
 3-whistle-RED-ACT-MID=CONC.MOT.IPFV=RPT
 ‘He was coming whistling.’ [T6.093]

Additionally, there are cases where no valency change is observed, on either transitive or intransitive verbs. First, a transitive verb affixed with *-wo* can remain transitive, as in (39) and (41) for instance where an object noun phrase follows the verb. Second, the middle marker *-wo* can be found on intransitive verbs, where it logically has no detransitivization effect either, as in (44).

- (44) *p-no po-mri-ono t-eja-ru-pue-k-wo-n=ri'i*
 DEM-PL other-CLF:group-PL 3-sit-?-CLF:ground-ACT-MID-PL=IPFV
 ‘The others are sitting all over the ground.’ [T46.011]

Finally, one observes the use of a sequence *wo* on some other parts of speech than verbs. There are a few attestations of *wo* on pronouns, after a focus marker *-ji* as in (42). This *wo* could well be the middle marker, as it alternates in that position with the reciprocal marker *-k(o)ko* shown in (43).

- (45) *nut-ji-wo m-ponre-ri-k-wo*
 1SG-FOC-MID 1SG-thing-PLURACT-ACT-MID
 ‘I have been thinking.’ [T43.029]

- (46) *eno-ji-kko t-imkata-koko-no*
 3PL-FOC-RECP 3-help-RECP-PL
 ‘They both help each other.’ [elicited]

Also, a sequence *wo* is rather frequent after various nominalizers.²² Out of a small random list of 91 occurrences of *wo* on an item comprising a verb root, 9

²¹“Discontinuous constructions are those in which the second reciprocant is a non-subject.” (Ned-jalkov & Geniušienė 2007: 396)

²²The location of the middle marker after the nominalizer may look surprising, but note that other verbal morphology like TAME occurs after nominalizers in Mojeño Trinitario, and that other Arawak languages also commonly show the sequence nominalizer + middle in that order, such as Yukuna (Lemus Serrano, in preparation).

Françoise Rose

are nominalized. I consider this *wo* to be the middle marker. In some examples, there is indeed a clear middle function, like the reciprocal one in (47). In others, it can simply be interpreted as antipassive, since the patient of the ‘fool’ event is left unexpressed and is interpreted generically (48). Since most nominalization processes are effectively reducing the valency of the affected clause, there is a logical link between nominalization and middle.

- (47) *to v-itu-ch-ra-wo*
 ART.NH 1PL-marry-ACT-EV.NMLZ-MID
 ‘our marriage’ [T42.008]
- (48) *to na-kitem-ra'-wo*
 ART.NH 3PL-fool-HAB.A.NMLZ-MID
 ‘their being tricksters’ [T6.021]

6 The middle marker *-wo* among middle marking strategies

Mojeño Trinitario has many other strategies than the middle-marker *-wo* that participate in the middle domain. They are briefly presented in §6.1 and then the overall coverage of the middle domain is discussed in §6.2.

6.1 Mojeño Trinitario middle-marking strategies

Lability has been mentioned in §2.3, but four other markers compete with the middle marker *-wo* for the expression of either a low differentiation of A and P roles or demotion of one of these two roles.

First, there is a reciprocal marker, the verbal suffix *-koko* (*-kko* under syncope) used in the slot following that of the active suffix (see Figure 14.1).²³ It marks reciprocity between two core participants only, in prototypical reciprocal events. Unlike the middle marker *-wo*, it is not used for naturally reciprocal events (see definitions in footnote 17). The use of the reciprocal marker is usually decreasing the valency of the verb root: in (50), the verb is detransitivized, as is visible from the use of the semantically non-specific third person subject prefix *t-*.

²³When the reciprocal is supposed to follow the *-ko* allomorph of the active suffix, only two *ko* syllables are realized. For glossing purposes, I consider in those cases that the reciprocal *-koko* then replaces the active suffix, as in (50)

14 Reflexive constructions and middle marking in Mojeño Trinitario

- (49) *v-echem-cho-kko=po*
 1PL-understand-ACT-RECP=PFV
 ‘Now we understand each other.’ [T24.131]
- (50) *ene t-emna-kko-no t-ko-chicha-m=po*
 and 3-love-RECP-PL 3-vz-children-PL=PFV
 ‘And they love each other and have children.’ [T21.093]

Second, there is another middle marker, a prefix *ko-* immediately preceding the verb root (see Figure 14.1). It occurs only on transitive verb roots and detransitivizes them. When it is the only middle-marking device on a verb root, the verb does not carry the active suffix. Most of the time, it then shows some medio-passive meaning as in (51) and (52). The agent is usually not expressed (either unknown, generic or not individually important) and there is no hint of agency (expression of will, or purpose). I hypothesize that in those cases the meaning is resultative, which the absence of active morphology seems to support. It is however sometimes found with a passive function as in (53), but also with an auto-causative meaning (54), a reflexive meaning (55),²⁴ a reciprocal one (56), on body actions like grooming (57), and on positionals (58).

- (51) *to letra, t-k-aju*
 ART.NH letter 3-MID-write
 ‘The letters, they are written [on a T-shirt].’ (LocL.68)
- (52) *to vaka t-ko-ywa*
 ART.NH meat 3-MID-grind
 ‘The meat is ground.’ [T25.045]
- (53) *p-su-ka powre 'chosi 'seno s-imooro-o-ko=o'i to*
 DEM-F-PROX poor old woman 3F-watch-PLURACT-ACT=IPFV ART.NH
t-k-e'na=a'i
 3-MID-hit=IPFV
 ‘This poor old woman, she watches them being hit.’ [40.168]
- (54) *t-ko-yumrugi t-piko-vi=i'i*
 3-MID-hide 3-be_scared-2SG=IPFV
 ‘He hid himself, he was scared of you.’ [T35.092]

²⁴Out of context, this sentence could be interpreted as a medio-passive ‘we got covered with it’, but in the specific context of this biography, the subject plays both the A and P roles.

Françoise Rose

- (55) *eto v-k-epko-’u*
 3NH 1PL-MID-COVER-APPL
 ‘We covered ourselves with it (lit. we put this over for ourselves).’ [about protecting oneselfs from the cold with home-made blankets and hammocks] [T25.066]
- (56) *t-imo-ko-n=giereko=o’i t-ko-komji-wko*
 3-sleep-ACT-PL=CNT=IPFV 3-MID-embrace-CLF.amorph
 ‘They are sleeping, they are embraced.’ [T30.073]
- (57) *t-ko-sp-ugi-ono ta-ye’e*
 3-MID-wash-CLF.face-PL 3NH-PREP
 ‘They wash their faces in it.’ [T20.026]
- (58) *t-ko-kojaru-ji te p-jo aramre*
 3-MID-spread_out-CLF.amorph PREP.NH DEM-NH.SG wire
 ‘They are hanging on the barbed wire.’ [Answer to the question: Where are the clothes?] (LocC.037)

Third, there is a less frequent suffix *-si* that attaches to the verb in the slot after that of the active suffix (see Figure 14.1). It has no effect on the presence of the active suffix: it neither deletes it as does the middle-marker *ko-*, nor forces its presence on those active verbs that do not always display it, as does the middle marker *-wo* (see §2.4.). It is rare in discourse,²⁵ and attaches to transitive verbs as in (59) and (60). In these examples, even though the person prefixes *v-* and *ñ-* on verbs marked with *-si* refer to P, and the agent is expressed by a prepositional phrase introduced by the preposition *mue’ ~ ñe*, the verb form does not seem to have been intransitivized: specific prefixes are used for third person subjects, such as *ñ-* in (60). However, the suffix *-si* most often associates with the middle prefix *ko-*, as in (61) and (62). In these cases, the verb form looks detransitivized (see the non-specific third person prefix *t-* in (61)). The function is always clearly passive, and most of the time an agent can be identified (even though it is actually not usually expressed).

- (59) *v-icho-ri-k-si-po mue’ ma viya*
 1PL-call-PLURACT-ACT-PASS=PFV PREP.M ART.M Lord
 ‘We have been called by the Lord.’ [T24.061]

²⁵It occurs in the text corpus without the prefix *ko-* in two examples only, (59) and (60).

14 Reflexive constructions and middle marking in Mojeño Trinitario

- (60) *eñi t-wonokore ñ-imit-ko-si ñe ñi ñi-chicha*
 PRO.M 3-obey 3M-teach-ACT-PASS PREP.M ART.M 3M-son
 'He was obeying, his son had taught him to be so. (lit. he had been taught by his son)' [T19.164]
- (61) *eto=ri'i t-k-ijro-ri-k-si te to Trinra*
 PRO.NH=PFV 3-MID-vendre-PLURACT-ACT-PASS PREP.NH ART.NH Trinidad
 'This was being sold in Trinidad'. [T25.033]
- (62) *p-a-k-kojcho-si, t-kojch-a-p=rine*
 2SG-IRR-MID-scold-PASS 3-scold-IRR-2SG=RESTR
 'Be scold, let her just scold you!' [T37.087]

Finally, some middle situations are simply unmarked, like most changes in body posture like (63) and non-translational motions like (64).

- (63) *t-eja-k=po*
 3-sit-ACT=PFV
 'He sat.' [T42.055]
- (64) *ene n-epñu-k=po te wowre*
 and 1SG-turn-ACT=PFV PREP.NH left
 'And I turned to the left'. [elicited]

6.2 Mojeño Trinitario middle domain

The middle marker *-wo* that is used to mark reflexive constructions has a much wider extension, covering many of the situations types of the middle domain. The prefix *ko-* can also be considered to be a middle marker, and also has a wide extension covering a rare reflexive use, but its most frequent use really is the middle passive. Finally the two other markers are highly specialized, one as the reciprocal, *-koko*, and the other as a passive marker, *-si*. In the end, the Mojeño Trinitario middle domain is unusual in showing two true middle markers, whereas Kemmer (1993) was considering languages to have at best one middle marker. For a comparable situations in Bantu languages, Dom et al. (2016: 146) suggest to add a fourth type to Kemmer (1993)'s typology : multiple-form systems. "In such a system, multiple verbal morphemes cover different parts of the canonical middle, yet sometimes conveying meanings situated on the periphery of the canonical middle domain. In most Bantu languages, the semantic space of

Françoise Rose

the middle voice seems to be organized along two domains, which can be qualified as agent-oriented vs. patient-oriented functions.” Such a complementary distribution does not obviously show for Mojeño Trinitario when looking at the distribution of the markers in Figure 14.3, but when the most frequent use of the two middle markers *ko-* and *-wo* are examined, then it is clear that *ko-* is more patient-oriented (uses to the right of the figure) than *-wo*. Middle *ko-* blocks the expression of activity on the verb and always demotes or deletes A, while middle *-wo* combines with stems marked for activity. A further remark is that the fact that non-transitional motion (called non-translational motion in the rest of Kemmer’s book and this paper) is always morphologically unmarked in Mojeño Trinitario is contradicting its supposed intermediary position in Kemmer (1993: 222)’s typology.²⁶

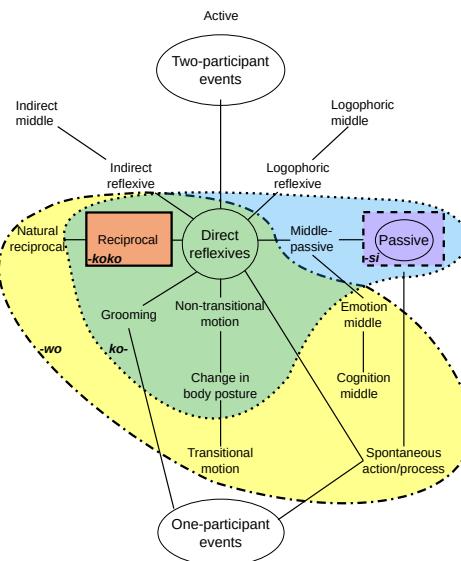


Figure 14.4: The middle domain in Mojeño Trinitario, based on Kemmer (1993: 202).

7 Conclusion

This paper started off by exploring the encoding of reflexive constructions, which make use of a marker *-wo*. Reflexive constructions are canonical: they are reduced

²⁶A caveat that Kemmer (1993: 225) gives herself is that verbs of non-translational motion are rare in her data, so that there is no positive evidence that they follow the predictions of the semantic map in Figure 14.4.

14 Reflexive constructions and middle marking in Mojeño Trinitario

to coreference between the two core arguments, and the valency of the verb root is decreased. The language shows neither coreferential person pronouns or indexes, nor any dedicated marker for the other types of coreference. Pronoun focus suffixes, the restrictive clitic and the middle marker *-wo* can be helpful in tracking referents, but they are not dedicated markers either. As is frequent cross-linguistically (Kemmer 1993), the marker *-wo* used to encode reflexive situation types has a much wider use and can be considered a middle marker. Furthermore, the middle marker *-wo* is one of the few markers that cover the middle domain in Mojeño Trinitario. Within that domain, reflexivity is neither central, salient nor really important. Not only is there no dedicated marker for reflexivity, but also the expression of reflexivity in discourse is not frequent: it is a minor use of middle *-wo* and a rare use of middle *ko-*, and is also expressed lexically by a few verb roots. The typologically most interesting aspects of the encoding of the middle-domain in this language are i) the semantic distribution of the various middle markers as illustrated in Figure 14.3, ii) the fact that two markers are best described as middle markers, which is not accounted for by the typology of middle systems (Kemmer 1993), and iii) the complex relationship of middle-marking strategies with the encoding of activity/stativity.

Françoise Rose

Abbreviations

ACT	active		
APPL	applicative		
ART	article		
CAUS	causative		
CLF	classifier	MID	middle
CNT	continuative	NEG	negation
CONC.MOT	concomitant	NH	non-human
	motion	PASS	passive
CONTRAST	contrastive	PST	past
COMP	comparison	PFV	perfective
DM	discourse marker	PL	plural
DEM	demonstrative	PLURACT	pluractional
DERIV	derivative	POT.LOC	potential location
DIM	diminutive	PREP	preposition
DIST	distal	PRO	pronoun
DUB	dubitative	PROX	proximal
EMP	empathy	RECP	reciprocal
EVAL	evaluative	RED	reduplication
	morphology	RESTR	restrictive
EV.NMLZ	event nominalizer	RPT	reportative
F	feminine (singular)	Sa	single argument of a canonical active
FOC	focus marker		intransitive verb
FUT	future	Sp	single argument of a canonical stative
GPN	generic possessive noun		intransitive verb
H	human	SG	singular
HAB.A.NMLZ	habitual agent nominalizer	SP.P.NMLZ	specific patient nominalizer
INDET	indeterminate	UNQ	unquestionable
INTENS	intensifier	VZ	verbalizer
IPFV	imperfective		
IRR	irrealis		
M	masculine (singular)		

14 *Reflexive constructions and middle marking in Mojeño Trinitario*

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Françoise Rose

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Name index

- Abbott, Clifford, 635
Abdoulaye, Mahamane L., 84, 87, 99
Adane Hailu, 150
Adelaar, Willem F. H., 684, 700
Aikhenvald, Alexandra Y., 706, 707
Alamaayyo G/Tsiyoon, 150, 157–159,
 162
Alamu Banta, 150, 157–159, 162
Alemu Banta Atara, 144, 149
Alexandra, Aikhenvald, 483
Allen, Nicholas Justin, 310
Alpher Barry, Nicholas Evans, 500
Alunan, Merlie M., 451
Amiridze, Nino, 23, 28
Antonio Ramos, Pafnuncio, 601
Ariel, Mira, 14
Arkadiev, Peter M., 221, 238
Arthur, Capell, 480
Ashton, Ethel O., 186, 188

Bach, Emmon, 633
Baker, Brett, 480
Barry, Alpher, 480, 488, 500
Barss, Andrew, 29
Belletti, Adriana, 29
Belloro, Valeria, 660
Benjamins, John, 4
Benveniste, Émile, 298
Bernard, Yves, 96
Bickel, Balthasar, 324
Bielec, Dana, 282, 294, 296, 302, 303
Birchall, Joshua T. R., 700

Blake, Barry, 556
Boas, Franz, 583
Bogdanova, Ekaterina, 94
Bolt, Janet E., 510–512
Bostoen, Koen, 175, 186
Bowden, John, 21
Bréal, Michel, 305
Bresnan, Joan, 28, 550
Brooks, Joseph, 354
Brooks, Maria Zagórska, 295
Brown, Lea, 430
Bruening, Benjamin, 29
Buelna, Eustaquio, 661–663
Buitimea, Crescencio, 667, 673
Büring, Daniel, 16
Burzio, Luigi, 564
Butt, Miriam, 508

Caballero, Gabriela, 389, 662
Campbell, Eric, 583–585, 588, 598
Campbell, Eric W., 584
Campbell, Lyle, 583
Caron, Bernard, 74, 76, 99
Carroll, Alice, 403, 404
Carroll, Matthew J., 386, 397, 398, 405
Casad, Eugene, 656, 657, 659–661, 663
Central Statistical Agency, 143
Chadwick, Neil, 505
Chafe, Wallace, 361, 645
Chirikba, Vyacheslav A., 220
Chomsky, Noam A., 16, 29, 45, 273
Cleverly, John Robert, 510

Name index

- Cobbinah, Alexander, 209
Cole, Peter, 12, 15, 33, 34
Colley, Justin, 249, 251, 270
Comrie, Bernard, 304, 365, 367, 512,
 520, 523
Coon, Jessica, 37
Crass, Joachim, 150
Creissels, Denis, 21, 198, 298, 663, 671,
 736
Crevels, Mily, 720
Cruz, Emiliana, 583
Cubberley, Paul V., 293, 296
Culicover, Peter W., 29
Culy, Christopher, 22
Curl, Traci S., 46, 663, 673

Dahl, Östen, 40
Dalrymple, Mary, 585
Davies, Mark, 467
de Vries, Lourens, 357
Déchaine, Rose-Marie, 15, 20, 37, 39,
 46
Dedrick, John, 656, 657, 659–661, 663
DeLancey, Scott, 311
Dench, Alan Charles, 19
Dench, Allan, 489
Derbyshire, Desmond C., 699
Despić, Miloje, 43
Dictionary, Groote Eylandt, 496
Dimmendaal, Gerrit, 212
Diouf, Jean-Léopold, 138
Dixon, R. M. W., 483, 706, 707
Dixon, R. M. W., 13, 42, 43, 45, 510,
 520–522, 548
Dixon, Robert M. W., 479, 483, 544
Döhler, Christian, 386–388, 392, 393,
 403, 406
Dom, Sebastian, 186, 741
Donohue, Mark, 17, 386

Doron, Edit, 21
Downing, Laura J., 174
Dowty, David, 636
Doxtator, Mercy, 635, 637, 639
Dryer, Matthew S., 279, 311, 430
d'Ans, Marcel, 704

É. Kiss, Katalin, 28
Eagle, Josephine Pearl White, 607
Edmondson, Jerry A., 94
Elvin, Jaydene, 414
Escalante, Fernando, 656, 658
Estrada, Zarina, 655, 658, 660, 661, 664,
 674
Evans Nicholas, Alice Gaby, 535
Evans, Nicholas, 386, 396, 398, 480
Everaert, Martin, 4, 13, 16, 17, 45, 46,
 273
Evseeva, Natalia, 17, 241

Faltz, Leonard, 13, 24, 36, 46, 240, 334
Faltz, Leonard M., 76, 99, 540
Farmer, Ann, 273
Feldstein, Ronald F., 282, 292, 297
Félix, Rolando, 656, 662
Fennig, Charles D., 655
Fiedler, Ines, 113
Fleck, David W., 704
Foley, William, 354
Foley, William A., 508
Foote, Tom, 530, 536–538, 543
Forker, Diana, 28, 45
Frajzyngier, Zygmund, 3, 4
Frajzyngier, Zygmunt, 46, 663, 673

Gaby, Alice, 36, 513, 515, 520, 521, 535,
 542, 543
Gaby, Alice R., 534, 540
García, Gabriela, 674

Name index

- Gast, Volker, 37, 46, 70, 95, 127, 160, 343, 518, 653, 663
 Geetaahun Heelleebo Baachchoore, 158
 Gelderen, Elly van, 273
 Geniušienė, Emma, 4, 13, 36, 46, 133, 187, 188, 512, 513, 515
 Geniušienė, Emma Š., 737
 Genko, Anatolij N., 220
 Gill, Wayne, 720, 730
 Giorgi, Alessandra, 32, 45, 557
 Givón, Talmy, 24
 Givón, Thomas, 589
 Glaude, Herby, 273
 Glinert, Lewis, 23
 Good, Jeff, 198
 Goto, K. V, 188
 Greenberg, Joseph H, 12
 Grestenberger, Laura, 345
 Guerrero, Lilián, 656–661, 664, 675
 Güldemann, Tom, 113
 Haiman, John, 177, 319, 338, 457, 694, 696, 752
 Hale, Kenneth, 549–553, 558, 559, 562, 565
 Hall, Allen H., 530, 532–534, 536–541, 543
 Hammarström, Harald, 386
 Hammond, Jeremy, 38
 Hampe, Beate, 13, 20, 618
 Hantgan, Abbie, 57, 58, 62–67, 69, 70
 Harnish, Robert, 273
 Harris, Alice, 389
 Harris, John, 506
 Hartmann, Iren, 517, 598, 610, 614, 621, 626, 627
 Harvey, Mark, 480, 500, 505, 544
 Haspelmath, Martin, 14, 18, 20, 30, 42, 43, 57, 77, 80, 87, 91, 100, 240, 372, 522, 598
 Haspelmath0000-0003-2100-8493, Martin, 335
 Heath, Jeffrey, 57, 58, 62, 64–67, 70, 480, 493
 Heim, Irene, 39
 Heine, Bernd, 3, 57, 240, 245, 246, 273, 306, 581, 597, 599
 Helmbrecht, Johannes, 609, 612, 616, 625, 626
 Henderson, Robert, 37
 Hewitt, B. George, 20, 220, 240
 Hirose, Yukio, 24
 Hock, Hans Henrich, 345
 Honti, László, 249
 Hopkins, Bradley L., 107
 Hopper, Paul J., 240, 613
 Hovav, Malka Rappaport, 564
 Huang, Yan, 13, 15
 Inkelas, Sharon, 486
 Instituto Nacional de Estadística y Geografía (INEGI), 583, 655
 Isingoma, Bebwa, 174
 Jackendoff, Ray, 13
 Jackendoff, Ray S., 28, 29
 Jacques, Guillaume, 313, 322
 Jaggar, Philip J., 76, 80, 82, 96, 99
 Janic, Katarzyna, 36, 521
 Jayaseelan, K. A., 30, 31, 35
 Jaydene Elvin, Weicong Li, 414
 Jelinek, Eloise, 551
 Johnson, Jean B., 673
 Kaburaki, Etsuko, 28
 Kaksin, Andrey D., 262, 268

Name index

- Kambaata and Hadiyya Translation Project Hosaina, 153–155, 161
- Kapitonov, Vanya, 41
- Karlsson, Fred, 23
- Kawachi, Kazuhiro, 150
- Kazenin, Konstantin I., 36, 46, 653, 665, 666
- Keenan, Edward, 709
- Kemmer, Suzanne, 36, 68, 69, 165, 240, 261, 285, 290, 291, 295, 298, 305, 316, 319, 336, 343, 370, 376, 385, 408, 541, 581, 594, 597, 653, 663, 665, 666, 671, 719, 720, 728–730, 734, 741–744
- Khachaturyan, Maria, 196, 211
- Kibrik, Aleksandr A., 94
- Kiparsky, Paul, 30, 31, 34, 35, 45, 273
- Kirchhoff, Paul, 583
- Kiss, Katalin É., 251, 270
- Kittilä, S., 3, 4
- Kittilä, Seppo, 667
- Klychev, Rauf N., 226
- Koenig, Jean Pierre, 635, 636
- Koenig, Jean-Pierre, 648
- Kofod, Frances, 521
- Kohlberger, Martin, 684
- König, Ekkehard, 15, 25, 30, 37, 42, 46, 70, 92–95, 100, 127, 160, 177, 202, 214, 273, 343, 346, 408, 419, 446, 518, 519, 540, 597, 601, 653, 663, 711
- Konoshenko, Maria, 196
- Kopecka, Anetta, 731
- Kornfilt, Jaklin, 35
- Koshkaryova, Natalya B., 251
- Kozinsky, Isaak, 378
- Kozlov, Aleksey, 250, 251
- Kratzer, Angelika, 39
- Kulikov, Leonid, 336, 338–341, 343, 591, 601, 690
- Kümmel, Martin Joachim, 338
- Kuno, Susumu, 28
- Kuteva, Tania, 240
- La Liga Bíblica, 695
- Lahaussois, Aimée, 18, 310, 313, 314, 322
- Lambrecht, Knud, 366
- Lander, Yury A., 221
- Langacker, Roland W., 662, 664
- Langacker, Ronald W., 15
- language experts, Kuuk Thaayorre, 534, 540
- LaPolla, Randy, 311, 316
- LaPolla, Randy J., 28, 33, 608
- Larson, Richard K., 29
- Lasnik, Howard, 29
- Laughren, Mary, 548, 550, 551, 562, 569, 575
- Launey, Michel, 221
- Lazard, G., 3
- Lazard, Gilbert, 393
- Lee, Felicia, 16, 601, 602
- Leeding, Velma, 483, 493
- Legate, Julie Anne, 551, 552
- Lehmann, Christian, 13, 20, 609, 618
- Leslau, Wolf, 150
- Leuschner, Torsten, 23
- Levin, Beth, 564
- Lichtenberk, Frantisek, 370
- Lindenfeld, Jacqueline, 656
- Lomtatidze Ketevan, Rauf Klychev, 220
- Loos, Eugene, 704
- Lounsbury, Floyd G., 641, 645
- Lüpke, Friederike, 209
- Macaulay, Monica, 23

Name index

- Macdonell, Arthur Anthony, 335
 Mailhammer, Robert, 544
 Malchukov, Andrej, 586
 Manfredi, Victor, 15
 Marlo, Michael R., 175, 186, 188
 Marmion Doug, Kazuko Obata, 479
 Marten, Lutz, 174
 Maslova, Elena, 19, 517, 597, 615
 Matić, Dejan, 38
 Matthews, P H, 390
 McConvell, Patrick, 548, 570, 575
 McGregor, William B., 508, 521
 McPherson, Laura, 186, 187
 Meakins, Felicity, 520, 548
 Mechling, William H., 583
 Meeussen, Achille E., 175
 Meierkord, Christiane, 174
 Merlan, Francesca C., 521
 Michelson, Karin, 634–637, 639, 648,
 650
 Mikhailov, Stepan, 248
 Mithun, Marianne, 360, 361
 Mitkov, Ruslan, 45
 Miyashita, Hiroyuki, 3, 245, 246, 273,
 581, 597, 599
 Mous, Maarten, 163
 Moyse-Faurie, Claire, 22, 214, 245, 246,
 273
 Mufwene, Salikoko S., 25
 Munro, Pamela, 602
 Murphy, John D., 184, 187, 188
 Mushin, Ilana, 550, 551
 Muysken, Pieter, 720
 Muyskin, Peter C., 684, 700
 Namyalo, Saudah, 174
 Nash, David, 550–552
 Nedjalkov, Igor, 32, 188
 Nedjalkov, Vladimir P., 288, 367, 517,
 518, 615, 737
 Newman, Paul, 23, 34, 74, 76, 78–80,
 82, 84, 86–88, 90–96, 98, 99,
 102, 103
 Nicholas, Evans, 489
 Nichols, Johanna, 26, 33, 507
 Nikitina, Tatiana, 197, 213
 Nikolaeva, Irina, 245–249, 251, 264–
 266, 270, 271, 585
 Nolan, Brian, 25
 Nolasco Ricardo M., Voltaire Q. Oy-
 zon, 473
 Noonan, Michael, 325
 Nordlinger, Rachel, 486, 510, 520, 535
 Oldenberg, Hermann O., 333
 Olson, Mike, 508
 Orqueda, Verónica, 339, 343, 346
 Overall, Simon E., 684–700
 Oyzon, Voltaire Q., 451, 452, 457, 459
 O’Grady, Geoffrey N., 479
 O’Herin, Brian, 220, 226, 229, 238
 O’Shannessy, Carmel, 548
 Palmer, Keeley, 521
 Panova, Anastasia B., 230, 234
 Park, Karen Elizabeth, 25
 Partee, Barbara H., 633
 Pawlak, Nina, 99
 Pawley, Andrew, 367
 Payne, Doris L., 699
 Payne, Thomas E., 451, 452, 457, 459
 Pensalfini, Rob, 510, 551
 Perkova, Natalia, 258
 Pesetsky, David, 29
 Pica, Pierre, 43
 Pinault, Georges-Jean, 339, 340
 Plank, Frans, 94, 386

Name index

- Plungian, Vladimir A., 692
Polak, Louise, 186, 188
Poletto, Robert, 175
Pollard, Carl J., 28
Pooth, Roland A., 334–338
Primus, Beatrice, 94
Privoznov, Dmitry, 249, 251, 270
Puddu, Nicoletta, 68

Ramos, Firie Jill T., 473
Ramos, Stefanie, 674
Rappaport Hovav, Malka, 21
Rasch, Jeffrey Walter, 602
Reesink, Ger, 356, 366
Reinhart, Tanya, 14, 16, 18, 21, 29, 30,
39, 45, 46, 273
Reinhart, Tanya Miriam, 16, 45
Rensch, Calvin Ross, 583
Reuland, Eric, 14, 30, 39, 45, 46, 246,
255, 273
Rizzi, Luigi, 29
Rodrigues, Aryon D., 699
Rose, Françoise, 720, 722, 723
Rose, Françoise (collector), 720
Rudnev, Pavel, 33, 34

Sadowska, Iwona, 281, 282, 285, 291,
292, 298, 301
Safir, Ken, 39
Sag, Ivan A., 28, 39
Saint-Exupéry, Antoine de, 151–153,
155, 157, 162, 166, 168
Salaberri, Iker, 17, 241
San Roque, Lila, 720
Sande, Hannah, 213
Sands, Kristina, 483, 484
Sapir, David J., 137
Sapir, J. David, 107, 108, 121
Sarvasy, H., 414, 419, 424

Sarvasy, Hannah, 413–416, 419, 424
Say, Sergey, 188
Schachter, Paul, 457, 473
Schadeberg, Thilo C., 175, 186
Schladt, Mathias, 4, 37, 100, 150, 240,
241, 339, 716
Schlemmer, Grégoire, 310
Schlenker, Philippe, 273
Schneider-Blum, Gertrud, 150
Schoenbrun, David L., 173
Schoenbrun, David Lee, 173
Schultze-Berndt, Eva, 506–508, 511, 512,
515, 519
Shell, Olive A., 704
Shields, Jana K., 602
Shmelev, Aleksej, 364, 380
Siegel, Jeff, 25, 386
Siemund, Peter, 25, 37, 70, 92–94, 100,
127, 160, 273, 343, 408, 419,
519, 540, 597, 601
Siewierska, Anna, 33, 283, 289, 301,
304
Siloni, Tal, 18, 21, 46
Silva, Carlos, 660
Silverstein, Michael, 311
Simonenko, Alexandra, 248
Simons, Gary F., 655
Simpson, Jane, 550–552, 560, 563, 570,
571
Smith Stark, Thomas C., 583
Smith, Geoff P., 25
Steinitz, Wolfgang, 247
Stimm, Helmut, 290
Stoynova, Natalia M., 230
Sullivant, J. Ryan, 583
Sussex, Roland, 293, 296
Swan, Oscar E., 282, 292–294, 299,
300, 302–304
Swartz, Stephen, 550

Name index

- Tabulova, Nurya T., 220, 226, 236
 Tadesse Sibamo Garkebo, 150
 Talmy, Leonard, 728
 Tang, C.-C. Jane, 25
 Terrill, Angela, 521
 Tessmann, Günter, 704
 Testelec, Jakov G., 22
 Testelets, Yakov G., 212, 213, 235
 The Bible Society of Ethiopia, 153
 Thompson, Sandra A., 613
 Toldova, Svetlana Ju., 22
 Toldova, Svetlana Yu., 212, 213
 Treis, Yvonne, 144, 146, 149, 151
 Troy, Jakelin, 479
 Truswell, Robert, 16
 Tsunoda, Tasaku, 520, 521
 Tubino, Mercedes, 658
 Tugov, Vladimir B., 240
 Tuller, Laurice A., 84
 Uwarai Yagkug, Abel, 695
 Valenzuela, Pilar, 704, 710
 Valenzuela, Pilar M., 709, 712
 Vallduví, Enric, 271
 Van de Velde, Mark, 174
 van Driem, George, 313
 Van Egmond, Marie-Elaine, 480, 483,
 489, 496
 van Gijn, Rik, 38
 van Steenbergen, Marlies, 37
 Van Valin Jr, Robert D., 608
 Van Valin Jr., Robert D., 28, 33, 608
 Van Valin, Robert D. Jr, 664
 Verstraete, Jean-Christophe, 487
 Vezzosi, Letizia, 15, 30, 42, 177, 202
 Vine, Brent, 345
 Voegelin, Carl F., 479
 Volkova, Anna, 13, 45, 246, 255
 Vuillermet, Marine, 731
 Vydrin, Valentin, 205
 Weiss, Henri, 107
 White-Kaba, Mary, 96
 Wichmann, SÃžren, 516, 517
 Wiemer, Björn, 284, 286, 292
 Will, Izabela, 76, 96, 100
 Wiltschko, Martina, 20, 37, 39, 46
 Witzel, Michael, 331–333
 Wolff, H. Ekkehard, 76, 95, 100, 102,
 104
 Woodbury, Anthony C., 583
 Woodbury, Hanni, 645
 Worsley, Peter, 480
 Wurm, Steven A., 479
 Yallop, Collin, 480
 Z'graggen, John, 354, 367
 Zaliznjak, Anna, 364, 380
 Zariquiey, Roberto, 704–708, 710–712
 Zribi-Hertz, Anne, 30, 273
 Zuñiga, F., 3, 4
 Zúñiga, Fernando, 667
 Zylstra, Carol F., 602

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