

# Chapter 28

## Reflexive and reciprocal constructions 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. 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.<sup>1</sup> While the paper is largely descriptive in nature, it also aims to situate the description in the typological literature as much as possible.

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<sup>1</sup>I 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*.



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.<sup>2</sup> 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 Figure 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 narratives 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, and possessors are also marked (lexical nouns take a genitive form, pronominal

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<sup>2</sup>See Overall & Kohlberger (in preparation), for a more detailed description of the Chicham family

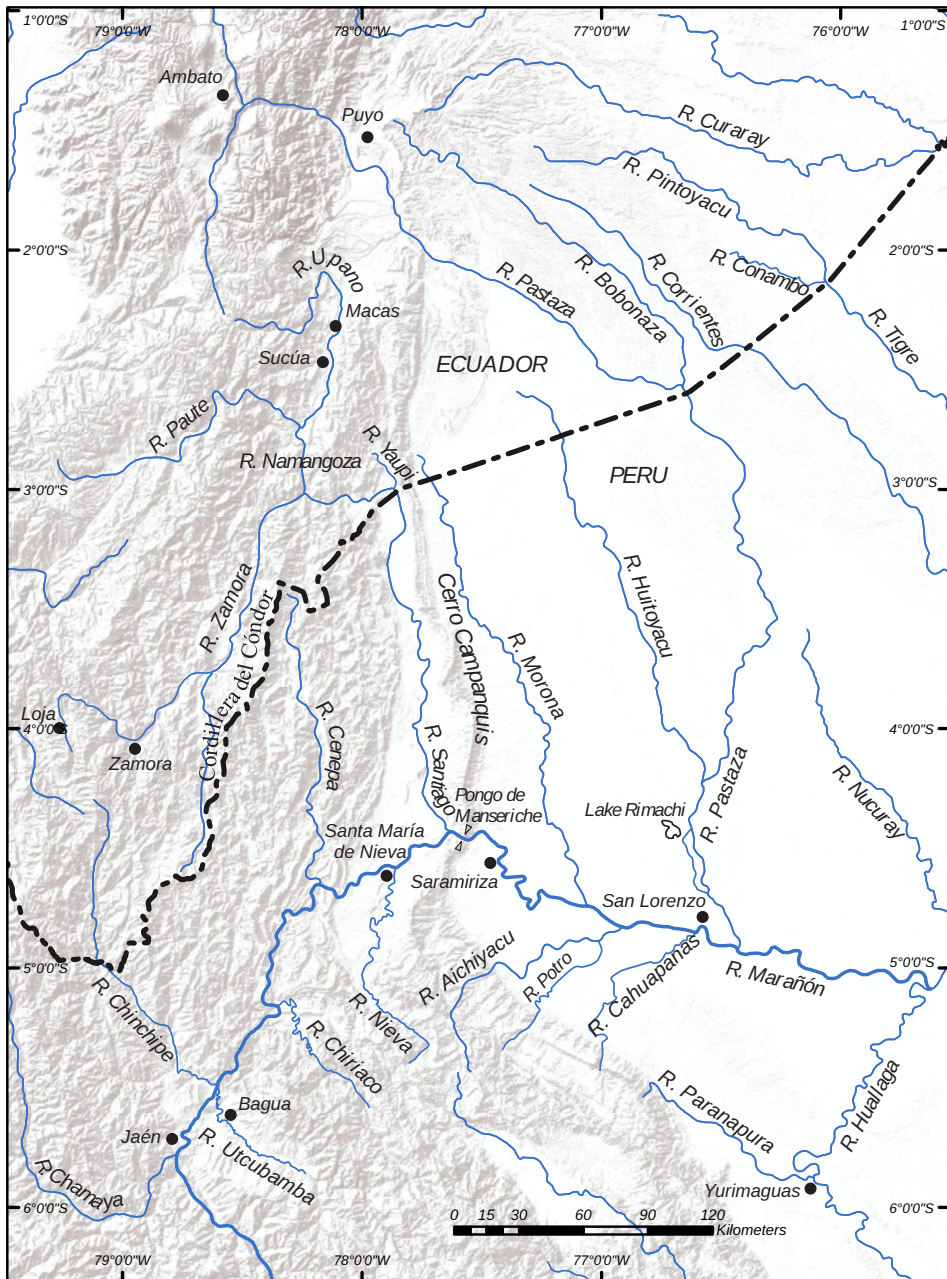


Figure 1: Map of Aguaruna

possessors take accusative case). Example (1) illustrates a possessive NP with lexical possessor. Note that there is no grammatical way to disambiguate 3<sup>rd</sup> person possessors (e.g. *she<sub>i</sub> cut her<sub>i/j</sub> hand*) – see §4.2 for examples.

- (1) *washí*            *yakahí*  
[washí        yaka-hí]<sub>NP</sub>  
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 nasality 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 Table 1.

Table 1: Morphological slots in the verbal word

	A	B	C	D	E	F	G
ROOT	Valency	Object	Aspect	Negation	Tense	Subject	Mood

Table 2 shows the slot F suffixes that mark subjects in finite verbs. For 2<sup>nd</sup> and 3<sup>rd</sup> person, there is some allomorphy triggered by tense. The distinction between singular and plural number is only consistently maintained in 1<sup>st</sup> person; 3<sup>rd</sup> person does not distinguish number and the 2<sup>nd</sup> 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.

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.

Table 2: Finite verbal subject markers

PERSON	TENSE	MARKER	
		SG	PL
1	all tenses	<i>-ha</i>	<i>-hi</i>
2	past tenses	<i>-umi</i>	<i>-uhumi</i>
	non-past tenses	<i>-mi</i>	<i>-humi</i>
3	present and definite future tenses	<i>-wa</i>	
	other tenses	portmanteau tense	person markers

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 *-tai* forms a nominal that may refer to the notional object (*yu-tai* [eat-NMLZ] ‘food’), instrument (*auqa-tai* [write-NMLZ] ‘pen’) or location (*kanu-tai* [sleep-NMLZ] ‘dormitory’) (Overall 2017: 267). The objects of underived ditransitive clauses, as well 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 1<sup>st</sup> person singular object suffix has the same form – but where applicative and 1<sup>st</sup> person singular object co-occur, they alternate *h/t* forms (as in 4 above). The 2<sup>nd</sup> person object suffix has the basic forms *-hama* or *-tama*, with a variant *-pa* that seems to be phonologically conditioned (Overall 2017: 244). 1<sup>st</sup> person plural object is generally marked identically to 2<sup>nd</sup> person, except that the form *-kahatu* can be used where 2<sup>nd</sup> person is specifically excluded, and is also used to mark generic human objects. Only SAP objects are indexed with verbal suffixes – 3<sup>rd</sup> 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 (2–4) above. Examples (5–6) illustrate simple SAP object marking, and (7) shows a SAP object added by the applicative derivation.

- (5) *ũỹũntusta*  
 ũyuna-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 miníthamkũish*  
 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 1<sup>st</sup> person A and 2<sup>nd</sup> person P does not involve object marking in slot B (Object), instead it is marked in slot F (Subject) with the suffix *-hami* if both arguments are singular (as in 8) or *-himi* if either or both of the arguments is plural. Although these forms are clearly based on 1<sup>st</sup> person markers *-ha* [SG]/-*hi* [PL] + 2<sup>nd</sup> 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 dikáhuahamí*  
 kami yabai wi=shakama dika-hu-a-hamí  
 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 9) or maleficiary (as in 7 above). In the case of a 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”), (10).

- (9) *minásh batái ukuithúhta*  
 mi=na=sha batai ukui-tu-hu-ka-ta  
 1SG=ACC=ADD chambira detach-APPL-1SG.OBJ-PFV-IMP  
 ‘get some chambira (fruit species) 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 they are 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 1): reflexive *-m(a)* or *-mam(a)*; and reciprocal *-n(a)i*, with denasalized form *-d(a)i*.<sup>3</sup>

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 (11a–11b) appear to form a paradigm with the reflexive marker in (11c). Similarly, compare the verb marked with the reciprocal suffix in (12) with the same verb marked for 2<sup>nd</sup> person object in (6) above – both the reciprocal and the object suffix appear directly following the root and preceding the aspect marker.

<sup>3</sup>The bracketed vowels are elided in phonologically predictable environments. The selection of *-ma* or *-mama* appears to be lexically conditioned.



- (11) a. *áu tsupíŋkamĩ*  
au tsupi-hu-ka-mĩ  
DEM.DIST cut-1SG.OBJ-PFV-RECPST.3.DECL  
‘s/he cut me’ (Overall 2017: 247)
- b. *tsupíŋmakmĩ*  
tsupi-hama-ka-mĩ  
cut-2.OBJ-PFV-RECPST.3.DECL  
‘he has cut you’ (Overall 2017: 307)
- c. *tsupímakmĩ*  
tsupi-ma-ka-mĩ  
cut-REFL-PFV-RECPST.3.DECL  
‘he has cut himself’ (Overall 2017: 307)
- (12) *āhúm wainiámi*  
āhum 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 Haspelmath 2023: §5.2–§5.3 [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)
- (15) *amína apahui tuki puhuwa nuu yaimpakti*  
ami=na [apahui tuki puhu-wa nu] yaĩ-pa-ka-ti  
2SG=ACC God always live-3 ANA help-2.OBJ-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)<sup>4</sup> 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) *nĩki*      *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<sub>i</sub> saw that he<sub>j</sub> was eating himself’ [agr040720\_22]

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 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’.<sup>5</sup>

Lexicalized reciprocal forms include *ĩnki-ni-* ‘hold hands’ < *ĩnki-* ‘put away, keep safe, load gun’; and *maa-ni-* [kill-RECP-] ‘fight’.<sup>6</sup> In order to express the 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 *wiııa amunıkbau* (17), the site of a historic battle with many casualties.

<sup>4</sup>The 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: §13.6).

<sup>5</sup>Yanua Atamain, personal communication and Eduardo Cungumas, personal communication.

<sup>6</sup>The verb ‘kill’ shows some variation, surfacing as /ma/, /maa/, or /mã/ (cf. 18) depending on its morphological context.

- (17) *wiɪqɑ*     *amunɪkbau*  
*wiɪqɑ*     *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 2023: §5.2 [this volume]), I note that “the traditional division into derivational and inflectional morphology is not a very useful one for Aguaruna verbs” (cf. Plungian 2001; Overall 2017: 233).

### 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)<sup>7</sup> where the applicativized stem *mã-tu-* [kill-APPL-] ‘kill for someone’ is reflexivized to give the sense ‘kill for oneself’; similarly in (19).

- (18) *wikaiɪqák*                      *wiɪuwai*                      *kuntínun*  
*wikaiɪqɑ-kũ*                      *wi-u=ai*                      [kuntinu=na  
 walk.IPFV-SIM.3.SS go.PFV-NMLZ=COP.3.DECL animal=ACC  
*mantumaátatus*  
*mã-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)

<sup>7</sup>Note that the main verb in this example (‘he went’) is nominalized and formally marked as the complement of the copula enclitic (see detailed discussion of this construction in Overall 2018).

- (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 1<sup>st</sup> person singular subject, and no other participant is mentioned.

- (20) *kashín wii 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<sub>SUBJECT</sub> 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 3<sup>rd</sup> 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.

- (21) *aíshihāĩ*                      *maá*    *maániakũã*                      *nuwanúĩ*  
 [aishĩ=haĩ                      maa    maa-nai-a-kawã]                      nuwanu=ĩ  
 husband.PSSD.3=COM REDUP    kill-RECP-IPFV-REPET.3.SS ANA=LOC  
*chicháman*    *ipĩŋkã*                      *huwáku*                      *túwahamĩ*  
 [chichama=na ipĩŋki-kã]                      huwa-ka-u                      tuwahamĩ  
 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 *tsupĩ*- ‘cut’ in (11a–11c) in §3 above. Similarly, *iti*- ‘beat with nettle’ (? <*iti* ‘wasp’), forms the reflexive as *iti-ma*- [beat.with.nettle-REFL-] ‘beat oneself with nettle’. The extroverted verb *ma*- ‘kill’ is illustrated in (22).

- (22) *áwĩ*                      *dakáka*                      *maámi*  
 au=ĩ                      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]

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.<sup>8</sup>

- (23) <Nunitai Pablo senchi untsuká: –Maamawaipa, jutiik  
nuni-taĩ Pablo sinchi untsu-kā 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 1<sup>st</sup> person singular object; and in (26)<sup>9</sup> 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) “*ikámỹãwã tukúhui, ayamhútkata!*”  
[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 táma nuni áyamhumak...*  
[yu-a-ta-ha ta-ma] nuni ayamhu-ma-kā  
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)

<sup>8</sup>The relevant passage is Acts 16:28, translated in the *New International Version* as: “But Paul shouted, ‘Don’t harm yourself! We are all here!’”.

<sup>9</sup>Note that the verb ‘say’ in the bracketed clause is marked for switch-reference indicating that a non-subject participant (the object, in this example) is the subject of the controlling clause (see Overall 2017: §13.6).

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) *wii timáshmahai*  
 wi timashi-ma-ha-i  
 1SG comb-REFL.IPFV-1SG-DECL  
 ‘I am combing my hair’ (cf. Overall 2017: 306)

The verb *ikiŋ-ma-* ‘wash one’s hands’ is also reflexive, the stem *ikihi-* means ‘wash someone’s hands’.<sup>10</sup> 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: 803–808). 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: *iŋku-ni-* [meet-RECP-] ‘meet each other’, *kumpam-dai-* ‘greet each other’,<sup>11</sup> 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 verb with the possessor of the body part (not the body part itself) as object. These

<sup>10</sup>This 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*.

<sup>11</sup>The /kumpa/ element is from Spanish *compadre* ‘close friend’.

introverted verbs can be reflexivized with the standard reflexive construction (as in 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 the possessor of the object, the possessed noun *katĩ* ‘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-hĩ* [thigh.PSSD-DIM-PSSD.3] ‘his little thigh’. As noted in §2 above, there is no way to disambiguate 3<sup>rd</sup> person possessors (‘his’ vs ‘his own’) other than by adding a lexical possessor NP: the same suffix *-hĩ* (-PSSD.3) 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) *katĩ*                      *uwihĩn*                      *húkĩ*  
katĩ=na                      uwi-hĩ=nĩ                      hu-kĩ  
penis.PSSD.3=ACC hand-PSSD.3=LOC take-PFV.3.SS  
‘[the devil] having taken his (own) penis in his hand...’ [agr040723\_29]
- (29) *núna*                      *yachiuchiĩhin*                      *bakuichiĩhin*  
nu=na                      yachi-uchi-hĩ=na                      bakui-chi-hĩ=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, examples 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).



- (30) *nuwanúi sudáisauwai*  
 nuwanu=ĩ 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 haáanchin sumáŋkathami*  
 wi haanchi=na su-ma-hu-ka-ta-hami  
 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<sub>i</sub> thought that she<sub>i/j</sub> 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).

(34) *She<sub>i</sub> thought saying “she<sub>j</sub> has enough money.”*

(35) *She<sub>i</sub> thought saying “I<sub>i</sub> 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 1<sup>st</sup> 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 3<sup>rd</sup> person.

(36) *áimak*                      *imamkimas*                      “*intáhaih*”                      *tus*  
 aima-a-kũ                      imamkima-sã                      [inta-ha-i-ha                      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) *iwiýahi*                                      “*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 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 Conclusions

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.

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## Abbreviations

This chapter follows the Leipzig Glossing Rules (Comrie et al. 2008). Additional abbreviations used are:

ADD	additive	NORM	normative
ANA	anaphoric pronoun	NSBJ	non-subject
APPR	apprehensive	PSSD	possessed form of noun
CNTR.EX	counter expectation	RECPST	recent past
CONCES	concessive	REDUP	reduplication
DIM	diminutive	REMPST	remote past
DS	different subject	REPET	repetitive
EP	epenthetic segment	RESTR	restrictive
HORT	hortative	SAP	speech act participant
IDEO	ideophone	SBD	subordinate
IFUT	immediate future	SIM	simultaneous
INTENT	intentional	SR	switch-reference
JUSS	jussive	SS	same subject
NARR	narrative modality		

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