

A Grammar of Aguaruna

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Summary

This thesis is a grammar of Aguaruna, a Jivaroan language of Northern Peru. Aguaruna is spoken in the Eastern foothills of the Andes, and has typological similarities to both Amazonian and Andean languages. The most salient typological features are AOV constituent order, nominative–accusative profile, combined head and dependent marking and highly hypotactic (clause-chaining) syntax.

The thesis consists of 13 chapters. The first is a general introduction to the Aguaruna language and people, the second covers phonology and the third word classes. Chapter 4 describes the morphology of nouns and adjectives, and Chapter 5 describes the composition of the noun phrase. Chapters 6 to 10 describe all aspects of verbal morphology, including relativised and nominalised verbs. Chapter 11 covers the structure of the clause, and Chapter 12 describes clause combining. Chapter 13 addresses some issues in discourse organisation. Two complete texts and extracts from a third are appended, fully glossed and translated.

This is the first grammar to address issues in Aguaruna morphology and syntax in detail, and also proposes a revised analysis of Proto-Jivaroan phonology.

Statement of Authorship

Except where reference is made in the text of the thesis, this thesis contains no material published elsewhere or extracted in whole or in part from a thesis or any other degree or diploma.

No other person's work has been used without due acknowledgment in the main text of the thesis.

This thesis has not been submitted for the award of any degree or diploma in any other tertiary institution.

Simon E. Overall

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Successful fieldwork is not only about collecting linguistic data. Coworkers, their families, and others in the communities became good friends during our time in Centro Wawik and Tundusa. Many people helped us in innumerable ways, and although it would be impossible to list them all, a few deserve particular mention. Apu Abel Namarai Nanchijam in Centro Wawik and Apu Rafael Akuts in Tundusa, as the chief elected officials, gave permission for me to live and work in their communities and happily provided all the assistance I required. Their personal interest in and support of my work was vital. The indigenous organisation ASODEINI (*Asociación de Desarrollo Integral Iiniá*) provided excellent accommodation for my entire time in Centro Wawik along with generous help in all logistic matters. Among the many friends we made, I would like to particularly acknowledge the generosity of the following people, in addition to those already mentioned: Doris Akintui, Prof Eduardo Cungumas, Prof Silvano Dati, Lucy Dekentai, Pedro Nanchijam and family.

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And big thanks as ever to my wife Jolene, who never wavered in her support and helpfulness in Amazonas and Melbourne.

Conventions followed

Examples in Chapters 2–4 and 6–10 have four lines:

- The first line represents the surface, phonetic form
- The second line represents the morphemic form
- The third line gives interlinear morphemic glosses
- The fourth line is a translation into idiomatic English

Chapters 5 and 11–13 deal primarily with syntax, and the first, phonetic, line is not included in examples. The following symbols are used in examples:

A hyphen (-) separates roots and affixes in examples and glosses: *atafu-na* (chicken-ACC).

An equals sign (=) separates enclitics in examples and glosses. Although they may appear as separate phonological words, they are always transcribed as enclitics to highlight the distinctive relationship (see §2.8.4): *muunta-a=nu* (big-COP:3=ANARel) ‘that which is big’.

A colon (:) separates semantically identifiable morphemes in a portmanteau, in glosses only. For example the suffix *-mĩ* represents recent past tense, third person subject and declarative mood. There is no way to identify underlying segmental markers in this suffix, and the three morphemes are glossed separated by colons: RECPAST:3:DECL

A plus sign (+) separates phonologically identifiable markers in fused forms, and is used in glosses only. There are two types: the first involves suprasegmental morphemes. For example, vocative is marked with suppression of apocope in the stem and accent shift. This is a regular and identifiable phonological process, but there is no way to transcribe it separately, as with segmental markers, so it is transcribed as fused: *simonka* (simonka+VOC) ‘hey Simon!’. The second type is when vowel sandhi occurs. For example, the imperfective suffix *-a* fuses with the final vowel of the verb root *buutu* ‘cry’: *buuta* (cry+IMPFV).

An underscore () separates the two elements of a compound, in examples only. Compounds are glossed as one grammatical word: *ikama_yawaã* ‘jaguar’ (literally *forest_dog*).

The full stop (.) represents a syllable boundary and hash (#) a word boundary. A single asterisk (*) marks hypothetical reconstructed segments and morphemes, while two asterisks (**) mark an ungrammatical or otherwise impossible form. Syntactic constituents (NP, clause) are enclosed in square brackets ‘[]’ in examples only where necessary for clarity. All speech reports in examples are underlined.

Examples are numbered consecutively within each chapter. Tables and diagrams are numbered consecutively and include the chapter number, so table 2.3 is the third table in Chapter 2. Cited examples come from three sources:

1. Texts that were recorded, translated and glossed in the field. These are cited as e.g. (2:3:4), which represents line 4 of the third story in notebook number 2. Examples listed from one of the three texts included as appendices are cited as e.g. “Text 1:2”, representing line 2 of the first text.
2. Personal observation. These examples are taken from conversations with or among native speakers that were noted down at the time and later double-checked with other native speakers for accuracy. These are marked “Obs”.
3. Elicitation. Any examples that are not marked for source are from elicitation. This was used to complete paradigms and to form and test hypotheses regarding less common grammatical phenomena. Although these are not natural data, they are useful in cases where I did not have relevant natural data, or where they exemplify the point more clearly than text examples.

Aguaruna words cited within the text are italicised and given in their underlying forms, without accent marking. First (and subsequent, if relevant) citations also include the surface form enclosed in square brackets: *anínta* [ánin] ‘magic song’.

Cross-references to whole chapters are given as e.g. ‘Chapter 2’, while references to sections within chapters are given in the form ‘§2.3’, which refers to section 3 in chapter 2.

All citations are in English, with the original text given in a footnote. Translations are mine unless otherwise noted.

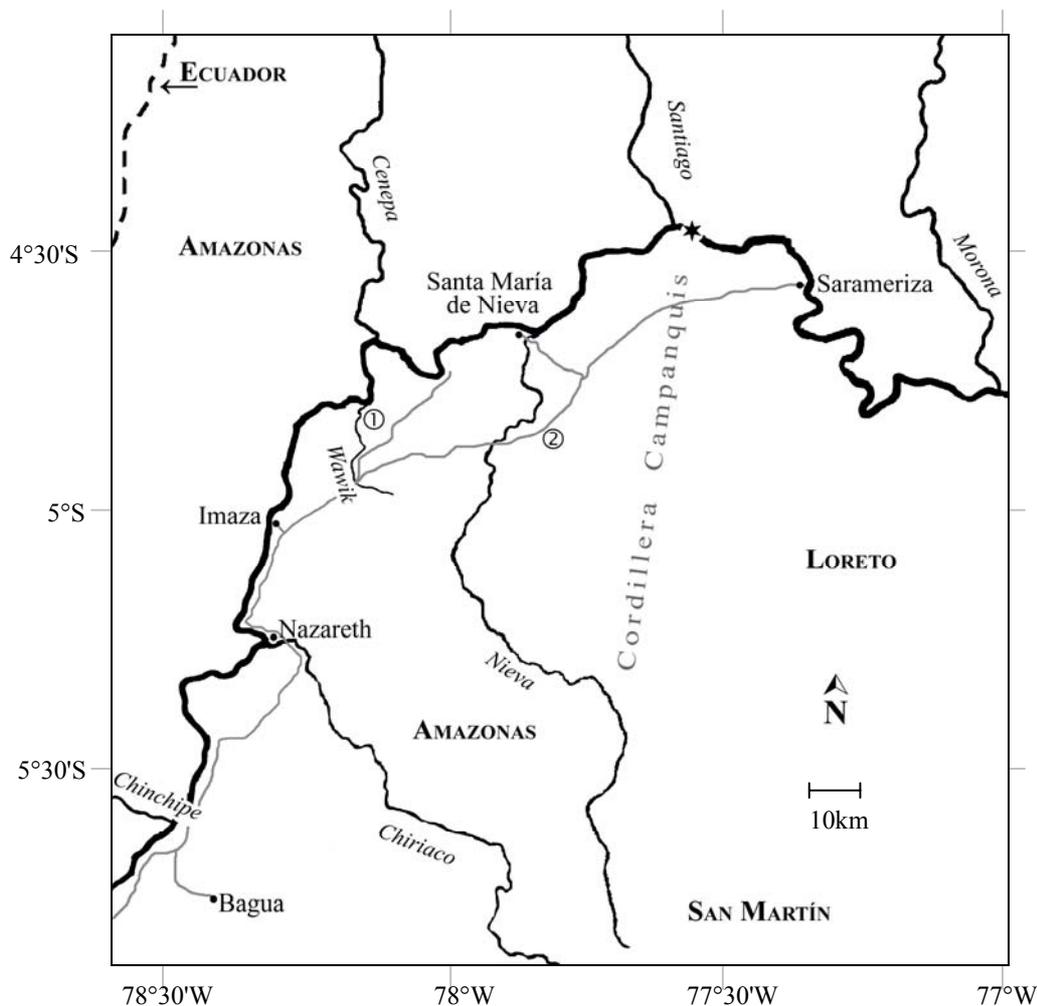
Abbreviations used

1, 2, 3	first person etc.	E	indirect object
1>2 etc.	first person subject/second person object etc.	EP	epenthetic glide
A	subject of transitive verb	EVEN	counter-expectational adverbialiser
A/S>O/E etc.	role in marked clause > role in controlling clause	EXCL	exclamative
ABL	abative	EXPL	expletive
ACC	accusative	FAM	familiar
ACTNR	action nominaliser	FIRST	'first' marker
ACU	Achuar-Shiwiar	FOC	focus
ADD	additive	FRUST	frustrative
Adj	adjective	FUT	future
ALL	allative	G	glide
ANA	anaphoric pronoun	GEN	genitive
APPLIC	applicative	HIAF	high affectedness <i>Aktionsart</i>
APPR	apprehensive	HORT	hortative
ATT	attenuative <i>Aktionsart</i>	HUB	Huambisa
ATTRIB	attributive	IFUT	immediate future
BRIDGE	bridging construction	IMP	imperative
CA	current addressee	IMPFV	imperfective
CAAAP	<i>Centro Amazónico de Antropología y Aplicación Práctica</i>	INSTR	instrumental
CAUS	causative	INT	interrogative
CC	copula complement	INTENS	intensifier
CNTR.EX	counter-expectation	INTENT	intentional
COMIT	comitative	INTPAST	intermediate past
COMP	comparative	INTS	intensive <i>Aktionsart</i>
COND	conditional	ITER	iterative
COP	copula	JUSS	jussive
CS	copula subject (only in glosses)	LOAF	low affectedness <i>Aktionsart</i>
CS	current speaker (only in text and translations)	LOC	locative
DECL	declarative	LONG	long form
DEM	demonstrative pronoun	M-AGR	Marañón Aguaruna
DETRNS	detransitiviser	MED	medial demonstrative
DIM	diminutive	N	noun (only in glosses)
DISTPAST	distant past	N	unspecified nasal (only in phonological transcription)
DISTRIB	distributive	N-AGR	Nieva Aguaruna
DR	diphthong reduction	NA	'placeholder' suffix <i>-na</i>
DS	different subject	NARR	narrative marker
DST	distal demonstrative	NARRNR	narrative past nominaliser
DUR	durative	NEG	negative
		NON.A/S:NR	non-subject nominaliser
		NONVIS	non-visual
		NORM	normative
		NP	noun phrase

NR	subject nominaliser	REPET	repetitive
O	direct object	RESTR	restrictive
OA	original addressee	S	subject of intransitive verb
OBJ	object (O/E)	SAP	speech act participant
OS	original speaker	SBD	non-temporal subordinator
PAST	past tense	SEQ	sequential
PERT	pertensive	SG	singular
PFV	perfective	SHU	Shuar
PJ	Proto-Jivaroan	SIM	simultaneous
PL	plural	SIMIL	similitive
PLU	pluractional <i>Aktionsart</i>	Sp.	Spanish
POLINT	polar interrogative	SPEC1	speculative marker 1
POSS	possessive	SPEC2	speculative marker 2
POT	potential	SS	same subject
PROHIB	prohibitive	SYM	sound-symbolic word
PRX	proximal demonstrative	TAG	tag question marker
Qu.	Quechua	TERM	terminative
RECIP	reciprocal	TIME	time adverbial marker
RECPAST	recent past	TRF	transferred action <i>Aktionsart</i>
REDUP	reduplicated material	UNCERT	uncertainty
REFL	reflexive	V	vowel
Rel	relativiser	VOC	vocative
REL	subject relativiser	VR	verbaliser
REMPAST	remote past		

Map

Based on *Amazon Basin* (2000), International Travel Maps, Vancouver, Canada and edition 1-IGN, sheets 1260, 1261 and 1361 from the Instituto Geográfico Nacional, Lima, Peru. All information is approximate.



Symbols used:

- ① = Centro Wawik
- ② = Tundusa
- ★ = Pongo de Manseriche

Fonts used:

- Cities and towns
- Rivers*
- COUNTRIES AND REGIONS

Rivers are represented by darker lines, roads by pale lines. The dotted line shows the national border with Ecuador. Elevation over the whole region is about 100 – 2,000m. The Cordillera Campanquis mountain range forms the boundary of Amazonas and Loreto regions, and where it meets the Marañón River it forms the Pongo de Manseriche gorge (★).

Chapter 1: Introduction

1.1 Linguistic profile

This work is a description of Aguaruna, a Jivaroan language spoken in the area of the upper Marañón River and its tributaries, on the Peruvian side of the border with Ecuador. The majority of the population lives in the department of Amazonas, and there are also communities in the neighbouring departments of Loreto, San Martín, and Cajamarca.

The Aguaruna population is estimated at 38,290 by Gordon (2005).¹ Wise (1999: 309) suggests a population of 39,000, and the following sociographic figures: 35% monolingual Aguaruna speakers; at least 80% literate in Aguaruna and perhaps 65% literate in Spanish.

Aguaruna is both head and dependent marking; agglutinating with some fusion; almost entirely suffixing and with a strong predicate final tendency, obligatory in subordinate clauses. It is strictly nominative–accusative.

There are 12 consonants, of which /r/ and /ʔ/ have extremely limited distribution, and vowel allophones [y], [u], [w] are treated as consonants for most phonological processes. [b], [d] can be analysed as allophones of /m/, /n/ but the conditioning is not strictly phonological and they could well be treated as nascent phonemes. There are four vowels, with contrastive nasality. Syllable structure is (C)V(N) at an underlying level; synchronic processes of synaeresis and vowel elision create many surface long vowels and diphthongs, a few triphthongs, and many consonant clusters. A contrastive pitch accent is assigned to one underlying syllable nucleus in every phonological word, and remains a property of that vowel; so a surface long vowel or diphthong may have a rising or falling pitch contour if one of its elements formed the nucleus of the underlying accented syllable.

Predicates are marked for subject, SAP object, aspect, tense and mood. The language is highly hypotactic. All subordinate clauses are marked for switch-reference, and most also mark the person of the subject.

¹ [http://www.ethnologue.org/show_language.asp?code=agr] retrieved 1 November 2007.

1.1.1 Autodenomination

The commonly used ethnonym in Spanish is *Aguaruna*, or the nativised form *Awajún*, which some prefer. When speaking Aguaruna, people typically use the word *iinia* [iiniá] (< *ii-nĩ-ia* ‘1PL-LOC-ABL’) ‘(one) of us’ to refer to Aguaruna people; this is contrasted with *apatfi* [apáf] ‘non-Aguaruna’ (< *apa-utfi* (father-DIM) ‘grandfather’). In earlier usage *apatfi* generally referred to *mestizos*, or mixed-race Peruvians, while the term *kistian* [kistián] (< Sp *cristiano* ‘Christian’) was used for Europeans or Euro-Peruvians – the latter term is no longer in common use. Non-Peruvians may also be referred to with the term *iriñku* [iriñku] from Spanish *gringo*. The Aguaruna language is referred to as *iinia tfitfama* [iiniá tʃitʃam] ‘our language’, contrasted with *apatfi tfitfama* [apáf tʃitʃam] ‘Spanish’.

As for the history of the word *Aguaruna*, there is no clear etymology to be found in the literature. Given that the final element *runa* is the Quechua word for ‘people’, naïve speculation suggests that the whole term means ‘water people’ < Sp. *agua* ‘water’ + Qu. *runa* ‘people’. More realistic analysts have sought a purely Quechua etymology, and a few possibilities have been suggested:

“The term *aguaruna* comes from Amazonian Quechua and means ‘people of the highlands’. *Awa* means ‘above’ in the Quechua dialect of the Pastaza River and *runa* means ‘people.’” (Uwarai et al. 1998: 3)²

“The name Aguaruna most likely comes from the Quechua words *awax* (weaving) *runa* (man) because the men are the weavers in this culture.” (Larson & Dodds 1985: 308)

Corbera (1994: 18-19) adds to these two suggestions the possibility that the first element comes from Quechua *háwa* ‘foreign, stranger’ (cf. *hawa runa* ‘foreigner’ in Hornberger & Hornberger 1977); and Gnerre (1976: 306) suggests a source in Quechua *auca-runá* ‘savage man’.

Essentially there are as many proposed etymologies as there are analysts, and the only clear conclusion to be drawn is that we simply do not know the etymology of *Aguaruna*;

² “El término «aguaruna» proviene del quichua amazónico y significa «gente de las alturas». «Awa» significa «arriba» en el dialecto quichua del río Pastaza y «runa» significa «gente».”

we do know, however, that hispanification or folk-etymological corruption of a Quechua term is a likely source. Even so, it is important to bear in mind that the name may not be of Quechua origin at all – like the ethnonym *Mayoruna*, which is probably a folk-etymological corruption of a Cocama word, and not Quechua *mayo* ‘river’ + *runa* ‘people’ as one might reasonably assume (D. Fleck pers.comm.).

It is not clear when the ethnonym *Aguaruna* was introduced into Spanish, but it appears to have been in the late 18th century, when Jesuit missions were established (Corbera 1994:19). Guallart (n.d.) tells us that:

“The first time that this name appeared in writing was in 1750 on a map published by Pedro Maldonado” (Guallart n.d.: 13)³

Prior to that time, the Jivaroan tribes as a group were labelled *Jivaro*, and smaller local groupings were given ad hoc “tribal” names based on the river or stream on which they lived. The origin of the ethnonym *Jivaro* (Sp. *Jívaro* or *Jibaro*) is better known; Gnerre (1973) shows that the term was introduced in the 16th century, and is a hispanification of the Proto-Jivaroan autodenomination **fiwar(a)*, the source of the modern ethnonyms *Shuar*, *Shiwiar* and *Achuar* (< *atfu* ‘swamp-palm’ + *fiwar* ‘people’), and present in modern *Aguaruna* as *fiwaha* ‘enemy’.

1.1.2 Varieties of *Aguaruna*

Native *Aguaruna* speakers I worked with recognise two major varieties of the language: one spoken on the Nieva river and its tributaries, the other spoken in the remainder of the territory, that is, on the Marañón and its tributaries, including the Cenepa, Santiago and Wawik rivers. The main shibboleth is that syllable-final /h/ generally surfaces as [h] in the Nieva variety, where Marañón *Aguaruna* has the allophone [ŋ]. The compilers of material for CAAAP (cf. Uwarai et al. 1998) have generally used information from speakers of the Nieva variety, while the dictionary published by SIL (Wipio 1996) reflects the Marañón variety; this explains differences in dictionary entries such as Nieva *ah#h* vs.

³ “La primera vez que apareció este nombre escrito fue en 1750 en un mapa publicado por Pedro Maldonado.”

Marañón *ahñj* ‘ginger’. Other differences include more retention of intervocalic glides in the Nieva variety and a few lexical differences. Overall, it seems that the Nieva variety is more conservative.

A third variety of Aguaruna, spoken on the Chiriaco River in the Imaza district, was described to me by Wawik speakers as being more “sing-song”, with greater accentuation of the pitch-accent. I was unable to collect any data on this variety.

Although some data was collected in the Nieva area for comparison, the bulk of my data comes from speakers of the Marañón variety, as spoken on the Wawik river, and this work represents an analysis of Marañón Aguaruna.

Previous analysts have recognised two “dialects” that differ in their treatment of vowel elision, either devoicing or eliding completely. This is addressed in §2.5.6, and shown to be irrelevant to contemporary Wawik Aguaruna.

1.2 The Jivaroan languages

It is widely accepted that there are four members of the Jivaroan family: Shuar,⁴ Achuar-Shiwiar⁵, Huambisa (or Wambisa)⁶ and Aguaruna (Wise 1999). The precise details of the relationships between them are less clear. There is evidence for considerable mutual intelligibility; Aguaruna speakers claim mutual intelligibility with Huambisa. This suggests that Jivaroan may be better described as a group of dialects (or dialect continuum).

Aguaruna is described as the “most diverse” by Wise (1999: 312), and phonologically it clearly stands apart from the other three languages. This is based on the fact that Proto-Jivaroan */r/ merged with Proto-Jivaroan */h/ in Aguaruna, while the other languages retain both /r/ and /h/. Although it is clear that Aguaruna has innovated, we have no knowledge of the subgrouping otherwise. The traditional approach has placed Aguaruna in opposition to a

⁴ Population 46,669 (source: http://www.ethnologue.org/show_language.asp?code=jiv); 32,000 (Wise 1999:309).

⁵ Population 5,000 (http://www.ethnologue.org/show_language.asp?code=acu); 5,500 (Wise 1999:309). Two major dialects Achuar and Shiwiar-Maina (Fast et al. 1996).

⁶ Population 9,333 (source: http://www.ethnologue.org/show_language.asp?code=hub); 6,000 – 10,000 (Wise 1999:309).

Shuar subgroup comprising the other languages (Fabre 2005; Wise 1999: 309; Stark 1985), but this is based on an erroneous reconstruction of a PJ phoneme */ŋ/ from which the rhotic languages innovated their /r/ (Payne 1978, 1981). On that basis, Aguaruna is seen as the most conservative language, and therefore an earlier split of Aguaruna from the rest of the family is implicated – see figure 1.1.

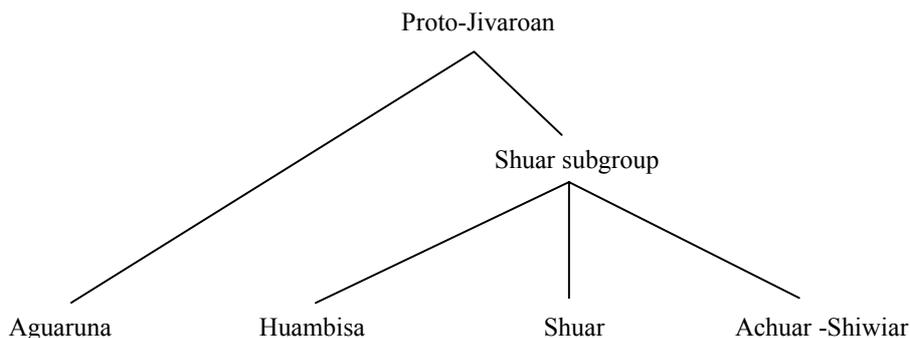


Figure 1.1: Jivaroan family tree including “Shuar subgroup” (after Stark 1985: 176)

A revised reconstruction of PJ */h/ and */r/ (see §2.2.4) shows that in fact Aguaruna has innovated, and the /r/ of the other languages is a shared *retention*. Without any shared *innovation*, then, there is no justification for the proposed Shuaran node, and indeed no evidence to support any internal subgrouping. Note also that Fast et al. (1996) say:

“In the Shiwiar-Maina dialect, spoken along the Corrientes and Macusari rivers, are found terms that are not common in the Achuar areas; terms that, incredible though it may sound, are also found in Aguaruna ... in spite of the fact that the Shiwiar-Maina live further from the Aguaruna than do the Achuar.” (Fast et al. 1996: 12)⁷

A major research goal, therefore, is to undertake a reconstruction of proto-Jivaroan and gain valuable insights into the subgroupings of the Jivaroan languages.

⁷ “[E]n el dialecto shiwiar-maina que se habla por los ríos Corrientes y Macusari se hallan términos poco comunes en las áreas achuar, términos que, por increíble que parezca, también se hallan en el aguaruna ... a pesar de que los shiwiar-maina viven más alejados de los aguaruna que los achuar.”

1.3 Jivaroan and related languages

A number of languages, both living and extinct, have been linked to Jivaroan in the literature, but only two had any reasonable evidence in their favour: Candoshi, an isolate spoken by about 3,000 people on the Morona and Pastaza rivers in Peru (Wise 1999) and Palta, an extinct language formerly spoken in the Ecuadorian province of Loja and the Peruvian *departamento* (administrative region) of Cajamarca (Adelaar 2004: 396, Loukotka 1968: 157).

1.3.1 Candoshi

Some works group Candoshi with the Jivaroan languages (e.g. Stark 1985). This is based on Payne's (1981) postulated relationship between Candoshi and Jivaroan, but Payne has since retracted the claim (Payne 1990a: 84). Wise (1999) makes no claim for a relationship. Taylor (1988: 16) includes Candoshi-Shapra in her "*bloque Jivaro*", but notes that this is a cultural grouping, and makes no claim for linguistic affiliation.

1.3.2 Palta

Palta was classified as a Jivaroan language by Loukotka (1968: 157-8), based on the following four Palta vocabulary items (in the forms given by Adelaar 2004: 396 and Taylor 1988: 80, both citing Jiménez de Espada 1965, III: 143):

(1) Palta

<i>yumé</i>	'water'
<i>let</i>	'firewood'
<i>xeme</i>	'corn'
<i>capal</i>	'fire'

The first of these is clearly a possible cognate of Aguaruna *yumi* 'water'. Of the others, there is no good Jivaroan match for *let* 'firewood', but Gnerre (1975) suggests that *xemé* 'corn' could be metaphorically related to Jivaroan *himp̃i* 'grey hairs' and that *capal* 'fire' may be related metonymically to Jivaroan *kapau* 'burn' > *kapantu* 'red'.

These lookalikes hint at a Jivaroan association, and many toponyms in the area support this view, as they end in *-namá*, *-numa* – compare the Jivaroan locative case-marker *-numa*, *-nama*; and other toponyms ending in *-sa* are reminiscent of Jivaroan

compounds with *ñntsa* ‘stream’, common in modern hydronyms (§2.8.2) (Adelaar 2004: 396-7).

1.3.3 Areal features

Dixon & Aikhenvald (1999: 8) give a list of areal features of Amazonian languages in contrast to Andean languages, and Aikhenvald (2007b: 193) gives an updated version. Of the latter list, Aguaruna appears to have more in common typologically with Andean than Amazonian languages. Dixon & Aikhenvald’s (1999: 9-10) list of typological features that distinguish Andean from Amazonian languages are also a good fit for Aguaruna. As the authors themselves point out:

“There is no sharp boundary between the Andean and Amazonian linguistic areas – they tend to flow into each other.” (Dixon & Aikhenvald 1999: 10)

This serves to highlight the important and underinvestigated linguistic area of the Eastern foothills of the Andes, and is particularly relevant to the Jivaroan languages in the light of the long history of contact between coast, highland and lowland Amazonia in precisely the geographic area inhabited by Jivaroan peoples.

“The upper Amazon was, during the Early Formative period, a very important focal point for cultural influences, diffused from East to West along the valleys that transverse the southern equatorial Andes.” (Taylor 1988: 32)⁸

Taylor & Descola (1981) suggest that Jivaroan languages were formerly spoken much further to the West than they currently are, perhaps into the coastal zone. In §3.12 I discuss a number of loanwords from Quechua and perhaps other indigenous languages. The details of contact between early Jivaroan and neighbouring languages are poorly understood, and require further investigation.

⁸ “(E)l Alto Amazonas ha sido, durante el período Formativo Temprano, un foco muy importante de influencias culturales, difundidas de este a oeste a lo largo de los valles transversales de los Andes ecuatoriales australes.” The Formative period referred to by Taylor is 3500 – 500 years before the Christian Era (Taylor 1988: 23).

1.4 Anthropological notes

The Jivaroan tribes are essentially unified in language and culture. Karsten (1935) says of his first encounter with Aguarunas, having already visited Shuar in Ecuador:

“I soon found that the material culture of the Aguarunas was essentially the same as that of the Ecuadorian Jibaros ... On the whole a great uniformity characterizes the Jibaro culture in spite of the enormous areas which it covers and the numerous sub-tribes into which the people is divided. The same seems to be true of their customs and religious beliefs, as far as I have been able to study them.” (Karsten 1935: 80)

The major anthropological works on Jivaroan culture are Karsten (1935), Stirling (1938) and Harner (1973), and the following brief overview represents a synthesis of the information in those three works.

Prior to Christian missionising the Jivaroans did not have a theistic religion. Their beliefs centred around a spirit world, which was visible only under the influence of psychotropic drugs. Young men spent a lot of time taking drugs in the hope of receiving a vision which would give them “spirit power” (*arutam* in Shuar (Harner 1973), *ahutapa* [ahútap] in Aguaruna). Once a man gained such spirit power, he was seized with a desire to kill, and began to take part in head-hunting raids and warfare. Prior to the widespread use of shotguns, warfare was carried out with lances and wooden shields. Much scholarly and popular attention has focused on the Jivaroan headhunting practices, particularly the subsequent shrinking of a slain enemy’s head to make a trophy called a *tsantsa*.⁹ It is enough to consider the titles of some works on Jivaroan culture to see how shrunken heads have piqued the interest of the reading public: *Head Hunters of the Amazon* (Up de Graff 1923); *Head-hunters of Western Amazonas* (Karsten 1935); *Off With Their Heads* (Von Hagen 1937); *Jivaro: Among the Headshrinkers of the Amazon* (Flornoy 1953); *Shrunken Heads* (Castner 2004). Details of the head-shrinking process and associated beliefs and rituals can be found in all the listed works, in particular Castner (2004).

⁹ Notably, the word *tsantsa* or *tzantza* is the only word in the Oxford English Dictionary with a Jivaroan etymology attributed to it, according to a search of the OED online (<http://www.oed.com/>, retrieved 10 November 2007).

Shamans would obtain their power not just through visions, but also by learning from an older shaman. Shamans were divided into two types: cursing and healing. As the names imply, the aid of the former was sought when a man wished to have a curse placed on an enemy, while the latter were employed to combat sickness. Rubenstein (2002) reports that among the Shuar, Quechua-speaking shamans are widely acknowledged to have superior shamanic skills, and most Shuar shamans studied with Quechua-speaking teachers.

The weapon of choice for hunting was the blowgun, firing poisoned darts – nowadays shotguns are preferred. Both fish traps and poison (barbasco, *Lonchocarpus urucu*) are used for fishing. Staple food crops are manioc and plantains, and corn, sweet potatoes, coconuts, and papaya are also cultivated. A large portion of the manioc is consumed in the form of *masato* (Aguaruna: *nihamantfi* [nīhamãf]~[nīhamantf]), a beer made from masticated and fermented manioc.

Family groups consist of a man and his wives (formerly typically 2 or 3 – nowadays monogamy is the most common pattern) and children, and in some cases elderly parents. Each household traditionally lived at a distance of at least a few hundred metres from the nearest neighbour.

In the early 1950's contact was made by missionaries working for SIL (Larson & Dodds 1985). Their efforts in conversion and education were very successful, resulting in a large number of bilingual schools, high literacy in both Aguaruna and Spanish, and widespread acceptance of Christianity.

Today the majority of Aguaruna people live in villages within areas of native title. The villages originally sprang up around schools, churches and health posts. The population has been expanding rapidly due to the introduction of modern health care and reduction in warfare. This growth, combined with the new village lifestyle, has led to a lack of resources, especially fish and game, in the more heavily-populated areas. As a result village leaders feel a strong motivation to find alternative forms of subsistence, such as raising livestock and growing new crops. Production of cash crops and artefacts for trade is also on the increase.

The Aguaruna are a very politically motivated people, and work actively to preserve their language, territory and (Christianised) culture. Many native political organisations in Peru have a large number of Aguaruna people in positions of power, and the Shuar are

recognised as having a similar political presence in Ecuador (Rubenstein 2002). Early accounts of contact with Jivaroan peoples typically mention the egalitarian and fiercely independent nature of the societies:

“The principal characteristic of these savages is an extraordinary love for their independence and freedom.” (Colini 1883: 339)¹⁰

1.4.1 History of contact

The first recorded contacts between Europeans and Jivaroans date from the middle of the 16th century (Taylor & Descola 1981, Stirling 1938). The Andes are at their lowest in the Cajamarca region, so this forms a natural area of contact between coast, highland and lowland zones.

Probably the most significant event in the early history of European contact was the Jivaroan uprising of 1599,¹¹ which resulted in the destruction of the city of Logroño and the murder of its citizens and the Governor of Cajamarca (Stirling 1938). This episode is frequently cited as an example of the potential for strategic alliance forming in traditional Jivaroan culture, and it effectively stopped all serious attempts at colonisation of the Jivaroan zone until the modern era.

1.5 This work in context

1.5.1 Previous work

Standard Aguaruna orthography was devised by the SIL missionary Mildred Larson. It is based on Spanish orthography, and is mostly phonemic except in a few respects.

Orthographic ⟨g⟩ represents both [u] and [ŋ]. This situation arises from an incorrect analysis by which the two were considered allophones of one phoneme. It is not a problem for the user, since the two phones are in fact in complementary distribution.

Nasality is not indicated in standard orthography, although publications by CAAAP have used the convention of underlining nasal vowels, thus for example *yawaã* [yãwãã]

¹⁰ “*Il carattere principale di questi selvaggi è un amore straordinario per la loro indipendenza e libertà.*”

¹¹ Guallart (n.d.) gives the year of the uprising as 1592; it is not clear what his sources are.

‘dog’ would be written ⟨yawáaa⟩. Written accents are included in reference works or other material intended for use by non-native speakers¹², however in normal usage they are only used where there is potential for ambiguity or where a word-final vowel is accented.

The most substantial modern works on Aguaruna are the following:

Larson (1963): a description of morphology, cast in the tagmemics format.

Pike & Larson (1964): a discussion of some issues in phonology.

Payne (1978): his MA thesis, on nasality.

Larson (1978): her PhD dissertation, on functions of reported speech in discourse.

Payne (1990b): on accent in nouns and adjectives.

Corbera (1994): his PhD dissertation. This work covers the whole grammar and is reasonably thorough, but does not provide detailed argumentation and relies heavily on elicited data. It describes the Marañón variety of Aguaruna, but not from Wawik (Corbera 1994: 23).

There are also two dictionaries, published Wipio (1996), and Uwarai et al. (1998).

There is some variation between these analyses, and not just in minor details; from the number of phonemes to the nature of apocope and syncope processes, it is clear that there are still a number of issues to be addressed. In addition, previous works have only lightly touched on morphophonology, and in many cases even the segmentation of morphs is erroneous. I shall discuss previous analyses in the body of this work only in cases where they present a viable alternative analysis to mine.

The following works on other Jivaroan languages were consulted:

Turner (1992): a sketch grammar of Shuar.

Gnerre (1999): a grammar of Shuar.

Pellizaro & Náwech (2005): a Shuar dictionary, with grammar notes.

Fast et al. (1996): a dictionary of Achuar-Shiwiari, with a grammar sketch.

¹² See for example the dictionaries Wipio (1996) and Uwarai et al. (1998), and CAAAP’s pedagogical grammar *Chichasájmi* (=‘Let’s speak’) (Regan et al. 1991).

Jakway et al. (1987): a dictionary of Huambisa

1.5.2 Present and future work

My primary goal in this grammar has been to provide a detailed and accurate description of Aguaruna. On the basis of that description, I had the second goal of providing explanations, both synchronic and diachronic, for the observed phenomena. Throughout the grammar I have tried to strike a balance between keeping the descriptions and explanations typologically informed while remaining within the ambit of language-internal justification.

Throughout the grammar I have noted many areas that require future research to get to the bottom of the mysteries that remain. The two major areas which I hope will come under analysis in future works are (a) discourse structure and (b) comparative reconstruction of Proto-Jivaroan.

In Chapter 13 I attempt to address some issues in discourse organisation based on the narratives I have analysed. There remains, however, much to be done. Participant tracking and source-of-information marking in particular are pervasive and subtle phenomena of which I have barely scratched the surface.

A second major area is an analysis of the varieties within Aguaruna, and the Jivaroan family as a whole. This study is based on the contemporary speech of the Wawik River, where the Marañón variety is spoken. Although some comparative data from the Nieva variety was collected and used, much further study is required. With the exception of Huambisa, the other languages of the Jivaroan family have had grammar sketches published, and I have made use of those and the published dictionaries to formulate hypothetical historical scenarios where I felt it could shed light on issues under discussion. A major project for future research will be to document and describe the rest of the Jivaroan family so that comparative work can be confidently undertaken.

1.6 Fieldwork methodology and language data

The fieldwork upon which this work is based was undertaken in two trips, the first in June 2004 to February 2005 and the second in June to August 2006. The bulk of that time

was spent living in Centro Wawik, a native community of about 420 people¹³ in the Imaza district, province of Bagua, northern Amazonas (about 4.77°S, 78.19°W – see map on page xxii).

The community is one of four on the Wawik river,¹⁴ a tributary of the Marañón. A further week was spent in Tundusa,¹⁵ a native community situated on the Mesones Muro – Sarameriza road, in the Nieva district of Bagua province (approximately 4.78°S, 77.87°W). There texts were recorded, transcribed and glossed, and data collected on the Nieva variety of Aguaruna.

The data used consists of about 10 hours' worth of texts, which were recorded, transcribed, translated and glossed in the field with the help of native speakers. The texts are mainly traditional stories, with some procedural texts and one autobiographical narrative. Three texts are included in the appendices: a traditional story, extracts from an autobiography and a procedural text. Some examples also come from observations of day-to-day interaction, which provided many linguistic contexts that do not arise in recorded texts. A good example is the familiar imperative (§8.3.5.4), which may never have come to my attention if I had not been immersed in the language during fieldwork.

Some elicitation was undertaken, in order to fill in paradigms and test hypotheses. The data used and cited in this work are almost all from texts, and elicited examples are labelled as such. The advantage of this approach is a more robust and natural data set, and a more confident analysis of the grammar. Two potential disadvantages are: firstly, some examples can be a little difficult to parse – natural sentences are never as tidy as elicited ones – and secondly, there are very few examples that were judged ungrammatical by native speakers. This is a genuine shortcoming: grammatical data can tell us a lot about a particular construction, but only by using ungrammatical data we clearly demarcate its limits.

¹³ Fabre (2005:8) gives the population as 289; the figure of 420 was provided to me by the Apu (Chief) Abel Namarai Nanchijam in 2004, and includes all people living within the area of his authority, including the outlying households.

¹⁴ Also spelled *Huahuico*.

¹⁵ Population 130 according to Fabre (2005: 9).

1.6.1 Language consultants

Stories were recorded from both male and female speakers, however the majority of consultants were male, due to cultural considerations. Natural data from conversational interactions and observations are from speakers of both sexes, and varying ages. Information on the speakers is given with the texts in the appendices.

1.7 Discourse genres

Aside from conversation, there are three major discourse types: narrative, traditional songs and oratory.

1.7.1 Narrative

As my data consists almost exclusively of narratives, it is difficult to contrast it with other styles. However here are some general principles.

1. Interruptions are not common
2. Well-known stories often repeated, so listeners generally know the plot in advance¹⁶
3. Some discourse level parasyntactic phenomena (see §13.2)
4. Certain stylistic devices used only in traditional stories (eg narrative modality marked with *tuwahamā*) (§8.7.8)
5. Frequent use of *-u* relativised verbs as finite verbs, a ‘non-firsthand’ evidentiality strategy (§13.6)
6. Longer sentences (more subordinate clauses) than conversation

Narrative as a whole can be divided into two broad categories, which are formally distinct: personal and reported. Personal narrative is presented as the speaker’s firsthand experience, and implies that the speaker witnessed the events described; reported narrative by contrast implies that the speaker is relating information that they heard from elsewhere (§13.6).

¹⁶ One man I worked with doing transcription and translation would often comment along the lines of “my father used to say it like this: ...”

Another tendency is for reported narrative to have considerably longer clause chains than those of personal narrative, and to make use of a greater variety of techniques for linking those clauses. Personal narrative has more finite verbs, and consequently a higher proportion of bridging constructions (described in §12.4).

1.7.2 Songs

There are two traditional song types: *namp#a* [namp#t], sung while drinking and dancing, and *an#ta* [ánin], magic songs. Since the introduction of Christianity, religious songs (with the borrowed Spanish name *himno* ‘hymn’) have been added as a third song type. The religious songs use European tunes and the words follow the same patterns as everyday language. Some general characteristics of native song types are:

1. Addition of syllables for scansion
2. Repetition
3. Metaphor

A detailed study of Jivaroan songs and music would be a wonderful addition to the world’s knowledge, but is outside of the scope of this grammar. I will limit myself below to sketching a few details of the two types. Taylor & Chau (1983) give a fuller description of song types.

1.7.2.1 *namp#a* ‘drinking songs’

The verb *namp#i* means ‘drink *masato* (manioc beer), dance and sing’, all at the same time, the three activities being closely associated in Jivaroan culture. A traditional drinking party would involve a group of people dancing and each singing their own song, to the same simple rhythm, with time kept by a drum. The words are typically largely improvised on the spot, and the tune is based on a general template. The subject-matter of a *namp#a* is typically flirtatious, as they are addressed to a dancing partner of the opposite sex.

A nonsensical refrain [hanuyamayaa yamayaaduu] is common to all *namp#a*; it is sung to state the tune at the beginning of the song and as a kind of chorus between verses – the gap also allows the singer to think up the next verse.

In spite of the introduction of cassette players and modern pop music, *namp#a* remain an important part of contemporary Aguaruna culture.

1.7.2.2 *an#nta* ‘magic songs’

Magic songs were traditionally sung on many occasions, by both men and women, as invocations to spirits. They were not intended to be performed for an audience, and may be hummed or performed entirely in the “singer’s” head. *an#nta* are much more formalised than *namp#a*, and are passed on from generation to generation. They may contain archaisms, for example *biku#ka* [biku#] ‘food’, where the modern word is *yutaĩ* < *yu-taĩ* (eat-NON.A/S:NR). Converts to Christianity generally avoid singing *an#nta* as spells, but many still know the songs; Christian consultants were happy to find people to sing such songs for me to record. The tunes are similar to *namp#a*, but instead of the nonsensical refrain of *namp#a*, *an#nta* typically begin with a refrain of [wiyaa wiyaa] ‘I, I’ < *wi* (1SG) plus an epenthetic syllable.

1.7.3 Oratory

Oratorical ability is highly valued in Jivaroan culture, and is probably the second most remarked upon cultural trait after the head-hunting practices. Most anthropological studies devote some space to a description of the length and forcefulness that are characteristic of Jivaroan public speaking. Stirling describes one man’s oratorical efforts as consisting of:

“...shouting in a rhythmic manner, stamping his feet and making warlike gestures with his lance, which he brandished in his right hand.” (Stirling 1938: 98)

And he goes on to describe the following speaker:

“He likewise talked for more than half an hour while various of the seated men interjected occasional remarks, creating a terrific uproar; not unlike the effect produced by an evangelist haranguing his congregation, punctuated with the Amens and Hallelujahs of his listeners.” (Stirling 1938: 98)

Ability in public speaking is much admired in Aguaruna men – women traditionally did not speak in public, and rarely do now. Speeches are expected to be off-the-cuff, and the longer the better.

In a more modern setting, Larson & Dodds (1985) report etiquette relating to invitations to speak: in any gathering or discussion, all of the men will expect to be given an opportunity to give a speech, and not to be invited to speak is considered an insult. When schools were first being established in the early 1960's, after the first generation of Aguaruna teachers had been trained, meetings were held to which delegations came from Aguaruna communities to request that a school be set up in their community.

“Each member of each delegation insisted on giving a speech, Aguaruna style. If there were eight men in a delegation, their request was repeated eight times – in a loud oration, punctuated appropriately with spitting and foot stomping.” (Larson & Dodds 1985:85)

Harner (1973: 139) reports that a man who had received spirit power “tends to speak with great forcefulness” as a result of the increased strength, intelligence and self-confidence furnished by the *ahutap* spirit. A desire to advertise ones possession of spirit power probably lies behind the tradition of forcefulness in oratory.

A linguistic feature that is characteristic of long improvised speeches is the use of bridging constructions as a floor-holding strategy.

Accounts of visitors to Jivaroan communities commonly describe a particular oratorical tradition of elaborate greeting rituals. When a visitor arrives at a house, the host will sit in silence for a few minutes while the visitors are served *masato* (manioc beer). Then he will begin a long shouted conversation with each visitor in turn. The conversation combines a formulaic element, asking after the health of family members, and a more “free-form” element, in which important news is related. Larson & Dodds (1985) describe a traditional greeting ritual in about 1970; an Aguaruna man named Dantuchu visits the house of another Aguaruna man in the company of non-Aguaruna road workers. The host soon realises that Dantuchu is Aguaruna:

“Immediately his host began the formal Aguaruna greeting process. Dantuchu and he exchanged names and the names of all their relatives.” (Larson & Dodds 1985: 152)

This ritual with strangers has its roots in the long-standing Jivaroan culture of feuding, with the aim of discovering some shared ancestry, so that the interlocutors could

consider each other as family and so establish a friendly relationship. At the same time, it was important to find out whether the two were linked to feuding groups.

I have no recordings of such conversations, and the people of the Wawik River no longer carry on the tradition. There are of course a number of formulaic questions used in greetings. In the examples below (all from personal observation), (a) is the question and (b) the appropriate response. They are used when: (2) meeting someone after some time; (3) visiting a house; (4) meeting someone in the path.

- | | | | | |
|-----|----|---|----|--|
| (2) | a. | amíkáitam
ami-ka-ita-mi
2SG-POLINT-COP-2SG
‘are you you?’ | b. | wíthai
wi-ita-ha-i
1SG-COP-1SG-DECL
‘I am I’ |
| (3) | a. | puhámiik
puha-mi-ka
live+IMPFV-2SG-POLINT
‘are you living?’ | b. | puháhai
puha-ha-i
live+IMPFV-1SG-DECL
‘I am living’ |
| (4) | a. | wikáimik
wikaiuqa-a-mi-ka
walk-IMPFV-2SG-POLINT
‘are you walking?’ | b. | wikáihai
wikaiuqa-a-ha-i
walk-IMPFV-1SG-DECL
‘I am walking’ |

Chapter 2: Phonology

2.1 Introduction

Aguaruna phonology appears at first glance to be relatively straightforward: the phoneme inventory is not large, and allophony is limited. There are, however, some issues that are still not fully resolved. Nasality gives rise to analytical difficulties: nasal spreading and denasalisation are widespread and pose challenges for the phonologist. The unusual velar nasal allophone of the phoneme /h/ requires some discussion, and has given rise to some odd analyses in previous works. The major difficulty in a description comes from the morphophonology, where morpheme junctures trigger a variety of different behaviours, specific to each suffix. Finally, the motivation underlying accent placement in a phonological word is often not at all transparent, and is not yet fully understood.

2.1.1 Notes on transcription

All transcriptions use standard IPA notation, except that I follow the usual Americanist practice in using <y> rather than <j> for the palatal glide. In the morphological representation I do not transcribe predictable allophonic variants. Allomorphs that are not phonologically conditioned are transcribed differently. The full stop (.) is used to indicate syllable boundaries, where relevant, in phonetic representations. Chapters 2 to 10 deal with phonology and morphology, and all examples are given as surface forms and underlying morphemic forms. In the remaining three chapters I only provide morphemic forms.

Some important further points are discussed below.

2.1.1.1 Nasal vowels and continuants

Nasality spreads across contiguous sequences of vowels and continuants. Where one vowel can be identified (by comparison with other forms) as the underlying locus of nasality, I transcribe just that vowel as nasal. Elsewhere I follow Payne (1990b) in simply transcribing nasality on the rightmost constituent with which it can be associated, except where a closer phonetic representation is required for the example.

2.1.1.2 Nasal vs. oral obstruents

I transcribe nasal obstruents /m/ and /n/ as such. The rules for denasalisation are presented below (§2.4.3), so the reader can readily ascertain whether a phone transcribed <m> or <n> may be denasalised. There are some occurrences of /m/ and /n/ that are compulsorily denasalised at the lexical level, and I transcribe these using and <d>. In phonetic transcriptions I use the symbols and <d> without transcribing the prenasalisation, except where a closer transcription is required.

2.1.1.3 Vowel elision

Vowel elision is a synchronic process, and as a general rule all morphological transcriptions and cited words and affixes are given in the underlying, pre-elision form. An exception is when discussing surface phenomena such as minimal pairs and phonotactics, in which case the surface syllable structure is cited, as it is the relevant form.

2.2 Consonants

The consonant system of Aguaruna is presented in table 2.1. Of the 12 consonants listed, the glottal stop /ʔ/ and the rhotic /r/ have extremely limited distribution. The nasal obstruents /m/ and /n/ have oral allophones [b] and [d], of which some examples could be considered nascent phonemes, as their distribution is to some extent lexically conditioned and there are apparent examples of surface minimal pairs. However, evidence is presented in §2.4 to show that [b] and [d] remain allophones of /m/ and /n/. Three glides [y], [w] and [ɥ] arise as positional allophones of the vowels /i/, /u/ and /ɨ/ respectively, and are treated as consonants for most phonological processes (§2.5).

c. [tsu.pík.ta]

‘cut it!’

d. [pi.ɯák]

‘bed’

Voiceless obstruents are unreleased when they surface word-finally:

(4) [tʃaahíp̚]

‘lightning’

(5) [takáf̚]

‘work’

(6) [píʃak̚]

‘bird’

The glottal stop is also unreleased in word-final position:

(7) [waʔ̚]

‘oh! (interjection)’

Voiceless obstruents **optionally** exhibit the following asymmetric pattern of allophonic variation when vowel elision allows them to surface in syllable-final position preceding /h/:

A. /p/ → [ɸ] / _ h

/p/ is fricativised when followed by the glottal fricative /h/.

(8) [akuɸhúk]

akupi-hu-kã

let.go-APPLIC-INTS:SEQ+3:SS

‘having let go’ (7:2:99)

B. /t/ → [ɾ] / _ h

/t/ is realised as an alveolar flap when followed by /h/. The /h/ typically fails to surface, and the flap [ɾ] may then be realised as [l], as is usual for the phoneme /r/ (see §2.2.7).

(9) [yuwárhai]~[yuwárai]~[yuwálai]

yu-a-ta-ha-i

eat-HIAF-IFUT-1SG-DECL

‘I will eat (this)’ (Obs)

C. /k/ → [x] / _h

Similarly to /p/, the velar obstruent /k/ may be fricativised and surface as [x] when followed by /h/.

(10) [ukúxhai]

uku-ka-ha-i

leave-INTS-1SG-DECL

‘I left’ (7:2:57)

Rules A and C (fricativisation of /p/ and /k/) are rarely applied in my data. The most frequent examples are in traditional stories, suggesting that these processes are archaisms¹⁸. Rule B (change of /th/ to [r]~[l]) is more common, and is typically encountered in casual (especially children’s) speech. This process is considered incorrect by most speakers.

Previous analysts have mentioned a voicing of obstruents when they form part of an NC cluster:

D. C → [+voice] / N._

There is no evidence in my data for such devoicing as a synchronic process, but hispanified forms of some Aguaruna personal names (e.g. *Cungumas*, pronounced [kuŋkúmas] in the contemporary language) and toponyms (e.g. *Tundusa*, a community in Nieva district – pronounced [tuntús] in contemporary Aguaruna) show that it must have been productive at some point. Karsten (1935) consistently transcribes voiced consonants following nasals, such as *kúndu* ‘arm’ (p. 561); *núnga* ‘earth, country’ (p. 566), where my data show *kúntu* and *núnka* respectively.

¹⁸ Pike & Larson (1964) mention the fricativisation processes, but do not consider them to be optional. The fact that they are optional now strongly supports the analysis as archaisms rather than innovations.

Some positional restrictions apply to obstruents following vowel elision: the only sequences of identical consonants permitted are the dentals /tt/ and /nn/ (realised as delayed release – see §2.5.5). Any other identical sequence arising from vowel elision is simplified: CC → C.¹⁹ Where an obstruent preceded by a homorganic nasal ends up in syllable-final position after the application of apocope or syncope, the obstruent is deleted: NC → N /_ .{C, #} (examples of both processes are in §2.5.5).

2.2.2 Glottal stop

The glottal stop /ʔ/ only appears intervocalically, and only in three lexemes in my corpus, listed in the following table.

WORD	GLOSS
ãĩʔãĩ	‘bee species’
ãĩʔaiŋku	‘mammal species (<i>zorrillo</i>)’
aiʔait	‘midnight’

Table 2.2: Lexemes with glottal stop

The glottal stop also shows up in some interjectional items (see also §3.8.2):

- (11) a. waʔ
 ‘oh!’
- b. hĩʔĩ
 ‘yes’²⁰

Although it may appear word-finally in interjections, these fall outside of the regular phonological system and such examples cannot be considered phonemic.

There are also examples of apparently epenthetic glottal stops following accented word-final vowels:

¹⁹ But see §2.5.5.2 for a single exception.

²⁰ This is very close to Parker’s (1996) universal template for ‘yes’: /he□e/. Sadock & Zwicky (1985:191) note that “[a]n interesting recurrent phenomenon in question-answering systems is that they are often peculiar with respect to their phonology; that is, they are often more like paralinguistic utterances than like ordinary morphemes.”

- (12) a. [dukuʃáʔ]
 duku-ʃa
 mother:PERT:2-UNCERT
 ‘(where is/what about) your mother?’
- b. [apawáʔ]
 apa-wa
 father-VOC
 ‘father!’

Pike & Larson (1964: 60) treat the examples of glottal stop in (12) as phonemic, and translate them as (a) ‘(where is) your mother?’ and (b) ‘father (form used for calling)’, without indicating any morpheme boundaries. In my data there are examples of these forms without the glottal stops, therefore I analyse the stops as epenthetic, arising from the final accented short vowel. There are other clear examples of epenthetic glottal-stop insertion, discussed in §2.2.2.1 below.

The only other environment where the phone [ʔ] may occur is in a particular morphological environment. When polar interrogative *-ka* is combined with third-person copula to give a question of the type “is it x?”, the copula suffix with underlying form *-ita* loses its final vowel, and the final /t/ surfaces as an unreleased dental, velar or glottal obstruent, apparently in free variation.

- (13) [pɨŋkɨŋkaɪʔ]~[pɨŋkɨŋkaɪk̚]~[pɨŋkɨŋkaɪʔ]
 pɨŋkɨŋa-ka-ita
 good-POLINT-COP:3:INT
 ‘is it good?’

There is no consensus between speakers on the precise nature of the phone, nor as to whether it should be represented orthographically as <t>, <k> or <h>=[ʔ]. I transcribe the phone as [t], taking account of the underlying source.

The limited distribution of the glottal stop suggests it is effectively extrasystematic, but there is no satisfactory explanation for its presence in a few lexemes. No minimal pairs exist, but it is contrastive inasmuch as it cannot be omitted or replaced with any other phone. The three lexical items in table 2.2, share a similar structure which looks as if it may have arisen from reduplication. This could also be the case with the interjectional form *hɨŋʔ*

‘yes’ – then the distribution of /ʔ/ could be neatly described as appearing only word-finally, or following the first element of a reduplicated construction. The fact that Aguaruna presents other examples of glottal stop insertion as a pause phenomenon suggests that these words may not in fact contain glottal stops *per se*, but pauses.

When transcribing a story, one consultant told me to write *aĩʔaiŋku* [ãĩʔaiŋ] ‘mammal species (*zorrillo*)’ as <ai aig>, that is, as two words with no orthographic representation of the glottal stop, which is normally written with orthographic <h>. This strongly suggests that he treated this word as being composed of two phonological words.

None of the consulted works on the other Jivaroan languages mentions the existence of a glottal stop phoneme. The only word that is potentially cognate with one of the Aguaruna forms is Shuar *aíai* ‘beetle’ (*escarabajo*) in Pellizaro & Náwech (2005: 115). It is not clear precisely how this word should be pronounced – the grammar notes given (pp.15-16) suggest that it does not fit into the standard phonology, as <i> should appear as <y> before a vowel. For Achuar-Shiwiari, Fast et al. (1996: 136) give *ja ai* (<j>=/h/) ‘yes’ (*sí*) – perhaps the orthographic space here represents a glottal stop. This evidence suggests that a few marginal glottal stops may occur in the other languages, but not to the extent that they do in Aguaruna.

2.2.2.1 Glottal stop insertion

A glottal stop can optionally be inserted between a vowel and a word boundary. This can be seen in interjections consisting of only one phonological syllable (example 11a). It is also optionally used to break up a word-final and a word-initial vowel; compare (14a) and (b).

- (14) a. [datimáʔíkin]
 datima íkinã
 ayahuasca+ACC prepare:PFV:SEQ+3:SS
 ‘having prepared *ayahuasca*’ (1:1:5)
- b. [datimán íkin]
 datima-na íkinã
 ayahuasca-ACC prepare:PFV:SEQ+3:SS
 ‘having prepared *ayahuasca*’ (6:3:9)

Word-internally various strategies are used to break up unacceptable vowel clusters, such as epenthetic glides – but never glottal stops (see §2.6.1 for full details).

2.2.3 Affricates and fricatives

The affricates and fricatives contrast on the two dimensions of place and manner of articulation:

	AFFRICATE	FRICATIVE
ALVEOLAR	ts	s
PALATO-ALVEOLAR	tʃ	ʃ

Table 2.3: Place and manner distinctions between affricates and fricatives

The manner distinction is neutralised when fricatives and affricates surface syllable-finally or following a consonant.

Environment Underlying form	Word initial / between vowels	Syllable-final	Following consonant
/s/	s	s	ts
/ts/	ts	s	ts
/ʃ/	ʃ	ʃ	tʃ
/tʃ/	tʃ	ʃ	tʃ

Table 2.1: Manner neutralisation in affricates and fricatives

All affricates and fricatives are realised as fricatives [s, ʃ] when they surface syllable-finally following vowel elision:

(15) a. [tí.kiʃ]

tikitʃi

‘another’

b. [ti.kí.tʃin]

tikitʃi-na

another-ACC

‘ibid.’

c. [ti.kíʃ.nak]
tikitʃi-na-ka
another-ACC-FOC
‘ibid.’

(16) a. [t̪in.t̪ís]
t̪int̪itsa
‘*Tentets* (proper name)’

b. [t̪in.t̪i.tsá]
t̪int̪itsa
Tentets+VOC
‘*Tentets!*’

And as affricates following obstruents:

(17) [aántʃakam]
aan-ʃakama
MED-ADD
‘that one too’

(18) [piʃáktʃakam]
piʃaka-ʃakama
bird-ADD
‘also a bird’

(19) [suhuttsáta]
su-hu-tu-sa-ta
give-APPLIC-1SG.OBJ-ATT-IMP
‘give (it) (to someone) for me!’

Syllable-final fricativisation may precede the development of NC clusters, so that /VNtʃ/ surfaces as /Ṽʃ/, as in (b) below:

(20) a. [kuhántʃam]
kuhantʃama
‘opossum’

- b. [kuhántʃman]~[kuháʃman]
 kuhantʃama-na
 opossum-ACC

This can allow elision of the nasalised vowel of the third syllable (§2.5.2), as in (b) below:

- (21) a. [nihamántʃ]~[nihamáʃ]
 nihamantʃi
 ‘masato (manioc beer)’

- b. [nihámtʃin]
 nihamantʃi-na
 masato-ACC

Morphological alternations show that the underlying distinction remains in such cases.

For the non-neutralised environment, that is, word-initially or intervocalically, the minimal pairs and near-minimal pairs presented below demonstrate the phonemic status of both fricatives and affricates:

- | | |
|--|--|
| (22) a. kútʃi
‘pig’ ²¹ | b. kúʃi
‘coati’ |
| c. tʃúwi
‘bird sp. (<i>páucar</i>)’ | d. júwi
‘small fish sp. (<i>carachama</i>)’ |
| (23) a. tsíma > [tsíim]
‘monkey sp. (<i>mono fraile</i>)’ | b. síima
‘sweat (v.)’ |
| c. itsá
‘peel (v.)’ | d. isá
‘bite (v.)’ |

2.2.4 Glottal fricative

In the Marañón variety of Aguaruna, upon which this study is based, the phoneme /h/ surfaces as a glottal fricative [h] syllable-initially and a velar nasal [ŋ] syllable-finally. That

²¹ < Qu. *kutʃi* ‘pig’, ultimately from Sp. *cochino* ‘pig’.

this typologically rather unusual distribution is genuine allophony rather than two phonemes with complementary phonotactic restrictions (as English /h/ and /ŋ/) is readily demonstrated by morphological alternations:

- | | | | |
|---------|--|----|--|
| (24) a. | [píŋkiŋ]
piŋkiha

'good' | b. | [píŋkihai]
piŋkiha-i
good-COP:3:DECL

'it is good' |
| (25) a. | [yatsúŋ]
yatsu-hu
brother-PERT:1SG

'my brother' | b. | [yatsuhú]
yatsu-hu
brother-PERT:1SG+VOC

'my brother!' |

This complementary distribution is not quite perfect: [ŋ] never appears in syllable-initial position, but I have encountered just one verb root that has [h] in syllable-final position: *auhuma* 'study' may surface after vowel elision as [auhma]. This pronunciation is not stable: different speakers pronounce the word [auŋma] or [auma]. I shall leave this exception aside and assume for the time being that Marañón Aguaruna [h] and [ŋ] are in complementary distribution, representing an underlying phoneme /h/.

Of course, it is not obvious that the underlying phoneme should be /h/: the other option is that the underlying form is /ŋ/, with a syllable-initial allophone [h]. Either option appears equally plausible *a priori* (cf. Matisoff 1975), and in fact it has been traditionally assumed among Jivaroanists (Corbera 1994, Payne 1978, 1981, 1990b and cf. Wise 1999; all apparently following Pike & Larson 1964) that the underlying phoneme is /ŋ/, with syllable-initial allophone [h] or [h̃] (Payne 1978, 1981, 1990b and Corbera 1994), and that this phoneme is inherited from a PJ phoneme */ŋ/. This analysis is irremediably flawed, as comparative analysis in §2.2.4.1 shows. Evidence from a partial reconstruction of the PJ phoneme system and from the Nieva variety of Aguaruna shows that PJ */h/ and */r/ have merged in Aguaruna to produce a phoneme /h/, and that Marañón Aguaruna then innovated the syllable-final allophone [ŋ]. There is also good evidence for an intermediate stage where a distinction was made between plain [h] from PJ */h/ and nasalised [h̃] from PJ */r/, as hinted at by Payne (1990b) and Pike & Larson (1964). This is discussed in §2.2.4.2 and shown to be untenable as a synchronic analysis, but a likely historical scenario.

A widely remarked-upon shibboleth for Aguaruna speakers is that syllable-final [ŋ] in Marañón Aguaruna corresponds to syllable-final [h] in Nieva Aguaruna. Table 2.4 shows some correspondences (the abbreviations M-AGR and N-AGR represent Marañón and Nieva Aguaruna respectively):

M-AGR	N-AGR	UNDERLYING FORM	TRANSLATION
pɨŋkiŋ	pɨŋkih	pɨŋkiha	‘good’
dukúŋ	dukúh	duku-hu mother-PERT:1SG	‘my mother’
tʃitʃasáŋmi	tʃitʃasáhmi	tʃitʃa-sa-aha-mi converse-ATT-PL-HORT	‘let’s converse’

Table 2.4: Syllable-final [ŋ] and [h] in Aguaruna varieties

The [ŋ] allophone surfaces in N-AGR only when /h/ is directly followed by a second /h/, as in the following example:

(26) Nieva Aguaruna

mína dukúŋhãĩ puhúyahai

mi-na duku-hu-haĩ puhu-ia-ha-i
1SG-ACC mother-PERT:1SG-COMIT live-REMPAST-1SG-DECL

‘I lived with my mother’

In Marañón Aguaruna, the /hh/ cluster is simplified to [h] (see §2.5.5.2).

The Marañón Aguaruna pattern must be the more innovative, because of the recency of vowel elision (see below). The syllable-final environment was the last to be created, so the syllable-final allophone must be the most recent. This suggests that the exceptional surface form [auhma] from *auhuma* ‘study’ in Marañón Aguaruna is an archaism or, more likely, was introduced via the Nieva variety in the context of formal education.

/h/ is closely associated with nasality in adjacent vowels. Comparative data are crucial here: Aguaruna /h/ has arisen from a merger of PJ */h/ and */t/, and there is strong evidence that the two proto phonemes gave rise at an intermediate stage of development to */h/ and */h̃/ respectively, with only the nasal form triggering nasality in adjacent vowels.

In the discussion that follows, the allophony represented in the Marañón variety is used to represent Aguaruna as a whole in comparison with the other Jivaroan languages.

2.2.4.1 Comparative analysis

As has been noted, the major phonological difference between Aguaruna and the other Jivaroan languages is that Aguaruna [h]/[ŋ] often corresponds to a rhotic²² in the other languages. Table 2.5 shows some examples of correspondences; the languages represented are Shuar (SHU), Achuar-Shiwiari (ACU), Huambisa (HUB), Marañón Aguaruna (AGR) and reconstructed Proto-Jivaroan (PJ). For the contemporary languages, surface forms are represented, while the reconstructed proto-forms include the final vowels that are underlyingly present in all the daughter languages.

	SHU	ACU	HUB	AGR	PJ	GLOSS
V_V	ara	ara	ara	ãha	*ara	‘sow seeds’
_C	utʃirtin	utʃirtin	no data	utʃiŋtin	*utʃirintinu	‘parent’
_#	piŋkir	piŋkir	piŋkir	piŋkiŋ	*piŋkira	‘good’

Table 2.5: Partial reconstruction of PJ lexemes containing */r/

From these correspondences we can reconstruct a PJ phoneme */r/, as shown in table 2.6.

	SHU	ACU	HUB	AGR	PJ
V_V	r	r	r	h	*r
_C, #	r	r	r	ŋ	*r

Table 2.6: Correspondence sets for PJ */r/

PJ */r/ never appeared word-initially; in all the Jivaroan languages that have retained PJ /r/, word-initial occurrences are restricted to recent borrowings and onomatopoeia, and are not cognate with word-initial /h/ in Aguaruna.

Not all instances of Aguaruna /h/ correspond to /r/ in the other languages, however. Table 2.7 shows some morphologically simple examples in which Aguaruna /h/ corresponds to /h/ in the other languages.

²² The precise phonetic nature of the rhotic is unclear. Recordings I have had access to suggest that it may surface as a flap or a trill. I transcribe it simply as /r/ in the absence of reliable field data.

	SHU	ACU	HUB	AGR	PJ	GLOSS
#_	hĩa	hĩa	hĩa	hĩʉa	*hĩa	‘house’
V_V	aha	aha	aha	aha	*aha	‘garden’
_#	ahih	ahih	ahih	ahij	*ahiha	‘ginger’

Table 2.7: Partial reconstruction of PJ lexemes containing */h/

Word-final instances (after apocope) of PJ */h/ are rather rare, and a high proportion are borrowings from Spanish (e.g. **nawaha* ‘knife’ < Sp. *navaja*) or plant names, which are highly susceptible to borrowing.²³ It may be that PJ did not have any word-final */h/.²⁴ In any case, the instances of word-final [h] in the rhotic languages all correspond to [ŋ] in Aguaruna, and evidence from morphological alternations confirms that this applies equally to word-internal, syllable-final */h/. For example, the verbal first-person singular subject suffix is *-ha* in all languages, so must have had that form in PJ:

SHU	ACU	HUB	AGR	PJ	GLOSS
-ha	-ha	-ha	-ha	*-ha	first person singular subject

Table 2.8: Reconstruction of PJ 1SG subject suffix

In some positions the suffix has its vowel elided; it then surfaces as [h] in ACU and SHU (no data were available for HUB):

(27) Achuar-Shiwiar

[tuní kanúrtah]

tu-ni kanu-ra-ta-ha
 where-LOC sleep-PLU-IFUT-1SG

‘where will I sleep?’²⁵ (Fast et al. 1996: 51)

²³ A number of plant names appear to be borrowed from Quechua.

²⁴ Or rather, had no examples of */h/ in the final syllable of a root, assuming that apocope had not yet applied in PJ.

²⁵ ‘¿Dónde voy a dormir?’

(28) Shuar

[takastah tukaman umiktʃamhai]

taka-sa-ta-ha tu-kama-nu umi-ka-tʃa-ma-ha-i
 work-ATT-IFUT-1SG say-TERM-1SG:SS complete-INTS-NEG-RECPAST-1SG-DECL

‘Although I wanted to work, I did not complete it’²⁶ (Turner 1992: 83)

Compare (29) from Aguaruna, where the same suffix *-ha* surfaces as [ŋ] when its vowel is elided:

(29) [piʃáknaŋ wainkámaŋtai]

piʃaka-na-tsu waina-ka-ma-ha-tai
 bird-ACC-SPEC1 see-INTS-RECPAST-1SG-SPEC2

‘I probably saw a bird’

So from the correspondences in table 2.7 and examples (27) to (29), PJ */h/ can be reconstructed.

	SHU	ACU	HUB	AGR	PJ
<u>_V</u>	h	h	h	h	*h
<u>_C, #</u>	h	h	h	ŋ	*h

Table 2.9: Correspondence sets for PJ */h/

It can now be seen from tables 2.6 and 2.9 that PJ */r/ and */h/ have merged in Aguaruna: the reflexes of both are identical and show the same pattern of allophonic variation. Meanwhile both proto phonemes have continued into SHU, ACU and HUB unchanged. Note that evidence for phonotactic restrictions on PJ */r/, which does not appear word-initially, and */h/, which rarely appears word-finally, suggest that there may already have been some kind of neutralisation in word-initial and word-final syllables in PJ.

It is clear that AGR, and particularly the Marañón variety, is the most innovative member of the family with respect to phonological development of PJ */h/ and */r/. That the syllable-final allophone is the most recent development is apparent from the historical facts of vowel elision, as mentioned above: any synchronic positional allophony must postdate vowel elision, otherwise the prevocalic allophone would be universal.

A new syllable-final allophone [ŋ] has developed in M-AGR. Word-final devoicing of vowels must have had its beginnings in PJ, since it is attested in all the modern

²⁶ ‘A pesar de haber deseado trabajar, no cumplí’

languages, but this also means that the next step, complete elision of affected vowels, must be relatively recent. Given that, it must be the case that the syllable-final allophone is the most recent innovation, since the syllable-final environment did not exist for consonants until vowel elision was fully established.

2.2.4.2 Nasality associated with /h/

The nasal quality of the syllable-final allophone [ɲ] suggests a nasal component to AGR /h/, and it frequently surfaces as [h̃], with a preceding vowel also surfacing as nasal. Matisoff (1975) shows that association of nasality with a glottal fricative is not uncommon, and such an association is also described for the Amazonian languages Warekena (Aikhenvald 1996: 498-9) and Jarawara (Dixon 2004b: 18). In the vast majority of examples, the nasalised /h/ corresponds to /r/ in the other Jivaroan languages, while the plain version corresponds to /h/ in those languages (the [ɲ] allophone does not trigger nasality). So perhaps in these examples the locus of nasality is not vowels but /h/ itself. However, while there is a high degree of coincidence between nasalising /h/ and PJ */r/, comparison with Shuar data from Pellizaro & Náwech (2005) shows that this is not always the case. On the one hand, nasal vowels may surface in Aguaruna adjacent to /h/ that has arisen from PJ */h/; in that case, the Shuar cognates show no nasality:

AGR	SHU	GLOSS
hãã	haa	‘tear (cloth etc.)’
ũhutu	uhutu	‘cough’
ãha	aha	‘cook greens’

Table 2.10: Nasality triggered by AGR /h/ < PJ */h/

On the other hand, although Aguaruna /h/ from PJ */r/ shows more consistent effects, there are at least two examples of /h/ < */r/ where no nasalisation appears on adjacent vowels:

AGR	SHU	GLOSS
kakaham	kakaram	‘powerful man’
ahutap	arutam	‘spirit’

Table 2.11: Lack of nasality in vowels adjacent to AGR /h/ < PJ */r/

Many Aguaruna speakers preserve a distinction in nasality in reflexes of PJ minimal pairs distinguished by */h/ versus */r/, such as the following:

AGR	SHU	PJ	GLOSS
aha	aha	*aha	‘fell (trees)’
ãha	ara	*ara	‘sow seeds’
uha	uha	*uha	‘tell’
ũha	ura	*ura	‘open’

Table 2.12: Reflexes of PJ minimal pairs

It is possible that these pairs are distinguished by the presence of /h/ vs. /h̃/, but equally plausible that the first vowel is the locus of nasality, and is synchronically phonologically nasal. The latter option has the distinct advantage that it does not require positing a new phonemic distinction, given that vowel nasality is independently shown to be phonemically contrastive.²⁷

While discussing nasality, a native speaker told me that some speakers do nasalise the vowels of *uha* ‘tell’, so that for example *uha-ka-ta-ham-i* (tell-INTS-IFUT-1SG>2SG.OBJ-DECL) ‘I will tell you’ surfaces as [ũhãktáhamĩ]. Other speakers, who preserve the distinction, then laugh and say “you’re going to *open* me?” (*ũha* ‘open’) – but this is considered an idiolectal variation rather than an error.²⁸

2.2.4.3 Summary

To summarise, while PJ */h/ and */r/ continued into the rest of the Jivaroan languages unchanged, they have undergone a gradual merger in Aguaruna. At first */r/ became */h̃/ in Aguaruna, giving rise to minimal pairs distinguished only by nasality of the glottal fricative. This must have quickly been interpreted as vowel nasality, as an already existing phonemic distinction. The development of a new allophone [ŋ] neutralises the already small contrast between */h/ and */h̃/, and evidence shows that many Aguaruna speakers either do not recognise the distinction, or ascribe it to vowel nasality. Based on evidence from the

²⁷ Blust (1998) posits a remarkably similar historical scenario for Seimat, with two glottal phonemes: /h/ arising from earlier */p/ and nasal /h̃/ arising from earlier */r/. Blust provides evidence that the glottal fricative, rather than the vowel, is the underlying locus of nasality in Seimat.

²⁸ Further anecdotal evidence that this distinction is eroding comes from Larson & Dodds (1985), in which Larson relates confusing a minimal pair *iãa* ‘visit’ (< PJ **ira*) and *iha* ‘have diarrhoea’. When I asked consultants about this possibility, however, I was told that the two verbs are homophonous.

Nieva variety, in which syllable-final /h/ surfaces as [h] unless followed by another /h/, we can hypothesise that the [ŋ] allophone originally arose in this environment as a dissimilation to avoid an illegal identical /CC/ cluster, and has spread in the Marañón variety to all syllable-final /h/.

For a synchronic description of Aguaruna it is sufficient to posit just one phoneme /h/, which may phonetically nasalise adjacent vowels. Minimal pairs can be explained by assuming that the phonetic nasalisation has given rise to phonemic vowel nasality for some speakers, and the instability of such minimal pairs only serves to strengthen the claim that they are not due to phonemically contrastive glottal fricatives. Future comparative work within Jivaroan will certainly shed more light on the historical scenario outlined above.

2.2.5 Glides

The glides [y, ɥ, w] are positional allophones of the vowels /i, i, u/. [y] is a voiced palatal approximant, [ɥ] a voiced velar approximant and [w] typically a voiced labiovelar approximant, although the velar quality may be absent, that is, it may surface as [β]. [ɥ] and [w] therefore always contrast in the presence of labial articulation, and may further contrast in the presence of velar articulation. Note that [w] always surfaces as a voiced bilabial fricative [β], with no velar quality, when followed by /i/ (see examples in §2.3.2.3).

Glides arise from vowels at an early stage of the derivation, and are treated thereafter as consonants: they are ignored for the purposes of accent assignment and they count as syllable onsets for the purposes of vowel syncope. As allophones of vowels, glides are described fully in §2.3.2 below. Note that glides that never alternate with vowels are transcribed as glides in phonemic transcriptions, while potentially alternating forms are transcribed as vowels.

2.2.6 Nasal obstruents

The nasal obstruents are bilabial /m/ and dental /n/. They are denasalised to [b, d] when they appear in non-nasal environments. Although this process is for the most part phonologically conditioned and optional, there are some morphological and lexical environments in which it is compulsory. The phenomenon is discussed at length in §2.4, in

the wider context of nasal versus non-nasal articulations. There is no phoneme /ŋ/ in Aguaruna, although the phone does surface syllable-finally (see below).

Nasal obstruents [m, n, ŋ] appear preceding a homorganic voiceless obstruent. Morphological evidence shows that they alternate with vowel nasality, and could be analysed as reflexes of an underlying underspecified syllable-final nasal /N/ – see discussion in §2.4.2.

The phone [ŋ] also arises as a syllable-final allophone of /h/, as discussed in §2.2.4.

2.2.6.1 Word-final loss of nasals

The nasal obstruents /m, n/ are optionally elided in word-final position. The loss only happens in rapid speech, and does not appear to be conditioned by the initial phoneme of the following word.

(30) [wíʃakam] ~ [wíʃaka]

wi-ʃakama

1SG-ADD

‘I too’

(31) [datimán] ~ [datimá]

datima-na

ayahuasca-ACC

Loss of the [n] reflex of the accusative suffix *-na* has led to the development of a new genitive nominal form – this is described in §§4.6.2.1 ff.

The loss of nasal segments does not leave any nasal quality in the preceding vowel, in keeping with the general observation that the nasal phonemes /m, n/ are not associated with vowel nasality.

2.2.7 Rhotic

Aguaruna has been described as lacking liquids (Wise 1999: 314), and neither Corbera (1994) nor Wise (1999) includes a liquid phoneme in their inventories. In fact, both [r] and [l] are in common use in loans from Spanish²⁹, including most proper names,

²⁹ Spanish [rr] in loanwords is simplified to [r] by all monolingual, and most bilingual, Aguaruna speakers.

for example *Chela*, *Trifena*, *Arias*, *Doris*. These names are thoroughly integrated into the language. Although most speakers preserve the Spanish distinction of /r/ versus /l/, for those who know less Spanish, especially children, both sounds surface as [l]: [álias], [dólis].

There is also a native phoneme /r/, which typically surfaces as a voiced alveolar flap. It too varies freely with a lateral [l], but the [r] pronunciation is considered by native speakers to be more correct. The [l] pronunciation is typical in children's speech and only appears in very casual adult speech.³⁰

(32) [piría]~[pilía]

‘variety of banana (*plátano guineo*)’

Although it is relatively common in names and other borrowings from Spanish, there are just four words in my corpus that contain a liquid phoneme and are *not* of Spanish origin:

(33) a. piría

‘type of small banana (Sp. *plátano guineo*)’

b. suwákaraipa

‘frog species’ (where the noise made by the frog is said to be [karáip])³¹

c. jaráʃama

‘tree frog species’

d. duríntsiu

‘conehead katydid’

Example (b) is apparently onomatopoeic, and (c) may also be. Examples (a) and (d) are of uncertain provenance. No apparent cognates appear in the dictionaries of other Jivaroan languages.

³⁰ Occasional spelling errors in Spanish also point to a confounding of [r] and [l], for example <picaflor> for *picaflor* ‘hummingbird’.

³¹ It is not clear what the initial element of this word, /suwa/, is.

There is also at least one Aguaruna personal name with a liquid phoneme: *Námarai*. I have no information on the origin of this name, and it may have been introduced from another language through marriage.

No minimal pairs exist, but other consonant phonemes are potentially contrastive in intervocalic position. Based on this evidence, it must be accepted that Aguaruna has a liquid phoneme /r/ (varying freely with [l]), but with extremely limited distribution – much like the glottal stop (§2.2.2). Furthermore, this rhotic is not descended from the rhotic phoneme of Proto-Jivaroan.

2.2.8 Other consonantal allophony

When the vowel /i/ follows one of the bilabial consonants /p/ and /m/, phonetic postlabialisation typically occurs, as the vowel /i/ requires spread lips.

- (34) [tʰip^wɨt]
 tʰipɨ-ta
 lie.down-ACTNR
 ‘lying down’

- (35) [ám^wɨ]
 amɨ
 ‘you (sg)’

2.3 Vowels

There are four vowels as shown in table 2.13, each with oral and nasal forms. Vowels therefore vary on three parameters: a two-way height distinction, a two-way nasal distinction, and a three-way front-back distinction in the high vowels. A fourth parameter is rounding: only /u/ is rounded.

	Oral			Nasal		
	Front	Central	Back	Front	Central	Back
High	i	ɨ	u	ĩ	ĩ̃	ũ
Low	a			ã		

Table 2.13: Aguaruna vowel phonemes

The three high vowels often show lowered allophones [ɪ], [ə] and [ʊ] respectively when unaccented, and the central high vowel /i/ is typically less high than the front and back high vowels.

The low vowel /a/ assimilates to immediately following high vowels as follows:

- a. Raised and fronted when followed by /i/
- b. Raised when followed by /ɪ/
- c. Raised, backed and rounded when followed by /u/

The assimilations are exemplified below:

A. /a/ → [ɛ] / _ i

(36) [wɛinát]
waina-ta
see-ACTNR
'seeing'

B. /a/ → [ə] / _ i

(37) [ə́ints]
aíntsu
'person'

C. /a/ → [o] / _ u

(38) [idóuk]
inauka
'sweet potato'

This assimilation is obligatory in all speech registers, and can only be suppressed when pronouncing phonemes separately for the benefit of a linguist making a transcription.³²

³² Because the allophony of /a/ is completely predictable and obligatory, I transcribe all underlying /a/ as <a> except where illustrating the allophones.

Vowel nasality is phonemically contrastive, and spreads within a phonologically defined nasal domain: see §2.4 for full description of nasality.

2.3.1 Vowel sequences

Any two-vowel sequence except ***/iɪ/** and ***/ii/** may form a surface long vowel or diphthong, and two-vowel sequences are frequent in underived forms. In morphologically complex words triphthongs may be formed: the second vowel must be /a/ and the final vowel must be a vowel other than /a/.

(39) [dʰi.ka.piau]
dɪkapi-a-u
realise-IMPFV-REL
‘one who realises’

(40) [taáu.mik]
ta-a-umi-ka
come-HIAF-2SG:PAST-POLINT
‘have you arrived?’ (typical greeting)

Triphthongs are uncommon, as the requisite morphological environment only rarely arises. The vast majority are word-final, as in example (39); example (40) is the only word-internal triphthong in my corpus. See §2.5 for a detailed discussion of syllable structure.

Where morphological processes bring vowels together at morpheme junctures various sandhi rules are applied depending on the morphemes involved. Typically one of the vowels is deleted or an epenthetic glide is inserted. In addition, some morphemes have allomorphs involving consonants that surface where illegal vowel clusters would otherwise result. The various outcomes of vowel sandhi at morpheme boundaries are discussed in §2.6 on morphophonology.

A glide appears between the first and second vowel in a word when (i) they are contiguous and (ii) the first is not /a/ and the second is /a/. This glide can be dropped in rapid speech, but native speakers consider it more correct to pronounce the glide, thereby putting the two vowels into separate phonetic syllables. This ensures that there are no *Va* diphthongs in initial syllables in careful speech.

Accent is assigned to one underlying syllable nucleus (=vowel) in every phonological word. Sequences of vowels later collapse into complex syllable nuclei (see §2.5.1), and an

accented long vowel or diphthong will surface with a rising or falling pitch contour, reflecting the underlying accent position (§2.7). The formation of complex syllable nuclei must precede vowel elision, as the elision rules make reference to syllable weight, and treat complex nuclei as heavy (§2.5).

In transcription, I write long vowels, diphthongs and triphthongs as sequences of vowels and mark the underlying accent position. So for example an underlying trisyllabic /ka.á.pí/ ‘vine’ after the application of apocope and synaeresis surfaces as a monosyllable, whose nucleus is a long vowel with a rising pitch contour: [kǎ:p]. I transcribe the surface form as [kaáp], as this makes the phonology more transparent. There is no possibility of ambiguity in this transcription, because there are no word-internal heterosyllabic vowel sequences: a surface disyllable of the form **[ka.áp] is not possible in Aguaruna.

The nature of the final vowel in a triphthong is difficult to ascertain; there is little phonological evidence to suggest that it is treated as a consonantal off-glide, but analysing it as such can simplify the description of syllable structure to some extent – see §2.5.

2.3.2 Positional allophones of /i/, /i/ and /u/

The vowels /i/, /i/ and /u/ become glides [y], [ɥ] and [w] in intervocalic position.

- (41) a. /ai-a-/ → [aya]
exist.PL-IMPFV
- b. /mai-a-/ → [maɥa]
become.slimy-IMPFV
- c. /huu-a/ → [huwa]
gather-IMPFV

In (42), the ablative suffix *-ia* surfaces as [ya] when it follows a vowel (a), and as [ia] when it follows a consonant due to elision of the preceding vowel (b). (See §2.5 for details of vowel elision processes.)

- (42) a. [hǎũãnmaya]
hǎũã-uma-ia
house-LOC-ABL
‘from the house’

- cf. b. [wawiknúmia]
 wawiku-numa-ia
Wawik-LOC-ABL
 ‘from Wawik (river)’

And the vowels /i/ and /u/ become glides [y] and [w] respectively in word-initial position when followed by a non-identical vowel:

- (43) a. /iu/ → [yu]

‘eat’

- b. /ua/ → [wa]

‘go up’

This process must *follow* intervocalic glide creation, as for example /iuantʃi/ ‘devil’ surfaces as [iwantʃ] and not *[yuantʃ].

Glide creation applies at all stages of derivation, and once a glide is created it is thereafter treated as a consonant. So /iu/ ‘eat’ becomes [yu], and when the high affectedness Aktionsart suffix *-a(w)* is added, the stem surfaces as [yu(w)a], not *[iwa], as we would expect if the input for glide creation were /iua/. Compare the morphologically simple word /iua/ → [íwa], the name of a mythological cannibal.

Glides are treated as consonants in triggering syncope, but not apocope. The final /ia/ in (42a), although it surfaces as [ya], is not treated as a CV syllable; if it were, we would expect apocope to elide the final vowel, giving a surface form *[híũǎnmai]. Compare example (44), in which the intermediate past suffix *-ma...ia* loses its final vowel to surface as [mai]. The intermediate form [ma.ya] is treated as two light syllables CV.CV, and the second of them ([ya]) loses its vowel. Because the glide [y] is placed into syllable-final position, it reverts to the vocalic form.

- (44) [tsupíkmaihai]

tsupi-ka-maia-ha-i

cut-INTS-INTPAST-1SG-DECL

‘I cut it’

Glides never appear syllable-finally except where preceded by /Va/, forming a triphthong – in that case they can be analysed as off-glides; see discussion in §2.5.4. Where vowel elision puts a glide into syllable-final position it reverts to a vowel.

2.3.2.1 Phonotactic restrictions on glides and vowels

Glides have limited distribution: [y] and [w] only appear word-initially or intervocalically. [ɥ] only appears intervocalically, and morphophonological alternations show that it is lost between some vowels. The following table summarises the restrictions:

	#_V	V_V	_C, _#
y	✓	✓	–
ɥ	–	some	–
w	✓	✓	–

Table 2.14: Phonotactic restrictions on glides

Table 2.15 shows the complementary phonotactic restrictions on vowels. /a/ has no restrictions, as it never becomes a glide.

	#_C	#_V	V_V	_C, _#
i	✓	–	–	✓
ɪ	✓	–	–	✓
u	✓	–	–	✓
a	✓	✓	✓	✓

Table 2.15: Phonotactic restrictions on vowels

The velar glide [ɥ] only appears in the environments /ɪ_u/, /ɪ_a/ and /a_a/. There is evidence from morphologically-conditioned vowel alternations that underlying [ɥ] is lost in the environments /u_u/ and /ɪ_ɪ/, and that it is realised as [y] when followed by /i/. There is no evidence for its underlying presence in any other environment.

2nd V \ 1st V	i	ĩ	u	a
i	–	–	–	–
ĩ	–	∅	ɥ ~ ∅	ɥ ~ ∅
u	–	–	–	ɥ
a	y	–	∅	ɥ

Table 2.16: Realisations of [ɥ] (empty cell = no evidence for underlying presence of ɥ)

The following examples demonstrate the loss of [ɥ] in the two environments /i_ĩ/ and /a_u/. In the first example the final vowel /a/ changes to /ã/ to mark first plural or third person possessor, and the glide is lost.

(45) a. [hĩũã]

‘house’

b. /hĩũĩ/ → [hĩ]

house:PERT:1PL/3

(46) a. /kauɥ/ → [kau]

‘rot’

b. /kauɥ-a/ → [kaua]

rot-IMPFV

The following example demonstrates the change of [ɥ] to [y] in the environment /a_i/ – the initial /i/ of the subject nominaliser *-inu* replaces the final vowel of the root:

(47) /wikaiɥa-inu/ → [wikaiyin] NOT **[wikaiɥin]

walk-NR

‘a walker’

2.3.2.2 Consonantal properties of glides

Glides do not count as moras for the purposes of the minimal word requirement. For example, the first person singular pronoun *wi* = /ui/ is monomoraic and must have its vowel lengthened to form a valid independent phonological word: [wíi]. The underlying

monovocalic root surfaces when suffixed, e.g. *wi-ka* (1SG-FOC). By contrast, the distal demonstrative *au* is bimoraic and thus a valid phonological word [áu].

Glides count as consonants for accent shift, so they are skipped and not counted as moras. Example (48b) illustrates accent shift triggered by the accusative case marker *-na*. The shift is always one syllable rightward, and in this example the glide [y] is skipped in favour of the following vowel, so must count as a consonant rather than a syllable nucleus (see §2.7.2 for details of nominal accent shift).

(48) a. [táyu]

tayu

‘oilbird’

b. [tayún]

tayu-na

oilbird-ACC

2.3.2.3 Allophony of [w]

[w] is realised as a voiced bilabial fricative when preceding the high front vowel /i/:

(49) a. /ui-ka/ → [βí.ka]

1SG-FOC

b. /kiiui/ → [kíi.βi]

‘centipede’

2.3.2.4 Loss of intervocalic glides

The glides [w] and [ɥ] may optionally be elided in some environments:

A. w → Ø /u_a

(50) a. [puwántʃiŋ] ~ [puántʃiŋ]

puwantʃiha

Puanchig (proper name)

b. [yuwámi] ~ [yuámi]

yu-a-mi

eat-HIAF-HORT

‘let’s eat’

B. $\text{ɥ} \rightarrow \emptyset / \text{i_a}$

(51) a. [pɪɥák] ~ [piák]

piɥaka

‘bed’

b. [wɪɥahai] ~ [wíahai]

wi-a-ha-i

go-IMPFV-1SG-DECL

‘I’m going’

Note that in both examples, the loss of the glide allows the two vowels to fuse into a single syllable nucleus, reducing the words from tri- to disyllables:

(52) /yu.wá.mi/ → [yuá.mi] ‘let’s eat’

This process does not apply to glides in other positions.

It will be noted that the glides in the above examples were inserted epenthetically between morphemes; however, within underived roots the same glide-dropping can apply:

(53) [piák]

piɥaka

‘bed’

In all cases native speakers agree that the form with the glide is correct, and the form without it is a feature of rapid or casual speech.

2.3.2.5 Alternative analysis

Given the consonantal properties of glides described above, it could be considered better to analyse them as phonemes /y/, /ɥ/ and /w/. The evidence in favour of such an analysis is the following:

1. Treated as consonants for accent assignment
2. Treated as consonants for syncope (although not for apocope)
3. Particular phonological processes for each glide

The major point against the phonemic analysis is the fact that glides and vowels are in complementary distribution. Although this is not necessarily proof of non-phonemic

status, the fact that morphological alternations can readily cause the same segment to surface as a vowel or consonant depending on its position strongly supports the allophone hypothesis. In addition, the fact that the vowel /a/, with no associated glide, lacks the phonotactic restrictions of the other vowels (§2.3.2.1) shows that those restrictions apply not to the vowel phonemes as a class, but to the specific subset of vowel phonemes that have corresponding glides.

2.3.3 Elision and devoicing of vowels

Processes of apocope and syncope may operate on vowels according to their position in a phonological word. Vowel elision correlates with an earlier process of devoicing, attested by previous analysts of Aguaruna and other Jivaroan languages, but absent from contemporary Marañón Aguaruna. Elision and devoicing are described in detail in the context of syllable structure in §2.5.2.

2.4 Nasal and oral prosodies

Nasal vowels contrast phonemically with oral vowels in roots and suffixes. The following four observations form the basis of the analysis of nasality:

- A. Nasality is associated as a property of a phonological domain defined as a contiguous sequence of vowels and continuants (i.e. glides, nasals and /h/), within a single phonological word. Morphophonological alternations show that nasality originating in a root or suffix spreads within the domain.
- B. Nasal vowels alternate with syllable-final nasal consonants which take their place of articulation from a following obstruent.
- C. Nasal obstruents have oral counterparts that are for the most part phonologically conditioned allophones, but there is evidence that they are phonologising.
- D. There is evidence to suggest that in addition to nasal articulation, oral articulation may also be treated as a marked feature of a nasal domain, and that in addition to nasal spreading there is a complementary oral spreading phenomenon.

These phenomena are described in the following sections.

A second morpheme marked only with nasalisation is first-person plural and third-person possessor in some vowel-changing nouns. Example (60a) shows third person possession marked with nasality, while the unpossessed root in (b) has no nasal vowel, allowing the initial /n/ to be denasalised (§2.4.3; and see §4.4 for discussion of nominal possession marking).

- | | |
|------------------------|-----------|
| (60) a. [nãwĩ] | b. [dãwi] |
| nawĩ + nasalisation | nawĩ |
| foot-PERT:1PL/3 | foot |
| ‘his foot’, ‘our feet’ | ‘a foot’ |

Nasality spreads to contiguous vowels and glides, but spreading is blocked by any non-glide consonant or a word boundary. The domain of nasality is thus a sequence of contiguous vowels and continuants within a single phonological word. So in example (59) above, the domain of nasalisation does not extend beyond the final vowel as it is blocked by the obstruent /k/. Nasal spreading is bidirectional – compare example (61), in which nasality spreads leftwards and rightwards from the underlyingly nasal locative suffix *-(n)ĩ*:

- (61) [tũwĩyã]
- tu-ĩ-ia
 where-LOC-ABL
 ‘from where?’

Nasal spreading is noted as a potential areal feature of Amazonia (Doris Payne 2001: 595, Aikhenvald 2002a: 45-6, 2006: 13 for Tucanoan and neighbouring Arawak languages), and Aguaruna can be added to the list of languages displaying this feature.

2.4.2 Alternation of *ĩ* with VN

One could analyse all nasal vowels as arising from underlying syllable-final syllable-final nasal segments which are unspecified for place of articulation (cf. Payne 1978), and support for such an analysis comes from alternations as in (62):

- | | |
|----------------|--------------|
| (62) a. [ĩtsã] | b. [ĩtsantú] |
| ĩtsaN | ĩtsaN-tu |
| | sun-VR |
| ‘sun’ | ‘shine’ |

- (63) a. [yútãĩ]
 yu-taiN
 eat-NON.A/S:NR
 ‘food’
- b. [yútaiŋkait]
 yu-taiN-ka-aita
 eat-NON.A/S:NR-POLINT-COP
 ‘is it food?’

The alternation can be explained with a rule which assimilates an underlying syllable-final nasal into a homorganic cluster with a following voiceless obstruent. Prior to the application of vowel elision rules, the only permissible consonant coda is a nasal in a homorganic cluster with a following obstruent. Many roots contain such homorganic NC clusters that never alternate with vowel nasalisation:

- (64) [kámpa]
 kaNpa
 ‘ant sp. (*pucacuro*)’

- (65) [tsúntsu]
 tsuNtsu
 ‘snail sp.’

- (66) [tʃíŋki]
 tʃiNki
 ‘game bird (in general)’

But many more examples of morphophonological alternations can be adduced. The one apparent exception is the action nominaliser *-ta*, which does not trigger NC formation:

- (67) a. [yãĩt]
 yaiN-ta
 help-ACTNR
 ‘helping’
- b. [yaimpákti]
 yaiN-pa-ka-ti
 help-2.OBJ-INTS-JUSS
 ‘may (God) help you’

2.4.3 Denasalisation

The nasal consonants /m, n/ are partially or fully denasalised in non-nasal environments, that is a following sequence of contiguous oral vowels and sonorants that is not followed by a nasal consonant.

- (68) a. /míʃu/ → [bíʃu]~[^mbíʃu] ‘cat’
 b. /nǐka/ → [dǐka]~[ⁿdǐka] ‘know’
- (69) a. /yamái/ → [ya^mbái] ‘now, today’
 b. /ináuk/ → [iⁿdáuk] ‘camote (sweet potato)’

The denasalisation is partial when word-internal, producing prenasalised obstruents as in (69), but may be partial or full word-initially, producing prenasalised or fully oral obstruents (68).

The actual likelihood of denasalisation also depends on the quality of the immediately following vowels and position in the word of the nasal obstruent. Denasalisation typically does not occur when the nasal obstruent is followed by single word-final /a/. This predicts such alternations as:

- | | |
|----------------|--------------------------|
| (70) a. [mamá] | b. [ma ^m báu] |
| mama | mama-u |
| mother | mother+VOC-FAM |
| ‘mother’ | ‘mummy!’ |
-
- | | |
|----------------|--------------------------|
| (71) a. [mína] | b. [mí ⁿ dau] |
| mi-na | mi-nau |
| 1SG-ACC | 1SG-POSS |
| ‘me’ | ‘mine’ |

The examples in (70b) and (71b) also show that only the environment **following** a nasal obstruent is relevant. Thus the forms above can be denasalised, even though the preceding syllable contains a nasal. The word-initial nasals cannot be denasalised because in both examples they are followed by nasal obstruents within the domain of nasal spreading.

Denasalisation is more likely when preceding a high vowel, or when the nasal obstruent is word-initial and followed by a single vowel, as in (68) and the following examples:

- (72) a. /núsi/ → [dúsi]~[ⁿdúsi] ‘peanut’
 b. /nátsa/ → [dát^sa]~[ⁿdát^sa] ‘youth’

But some words that appear to fulfil the criteria are typically not denasalised:

(73) [núwa] NOT **[dúwa]

‘woman’

(74) [númi] NOT **[núbi]

‘wood’

And some words are always associated with an oral obstruent: *dii* ‘see’; *duku* ‘mother’; *d#ka* ‘know’; *dapa* ‘bee’. Such words never surface with nasal obstruents in my data, unlike other forms, and literate native speakers prefer to write them using orthographic , <d>. Here it is worth quoting Payne (1978: 54) at length:

“Pike and Larson state that the words [baku] ‘thigh’ and [duku] ‘mother’ do not alternate with nasal consonants. A number of my informants would use [maku] ‘thigh’. Although none of them used [nuku] ‘mother’, I heard this often in children’s speech. Furthermore, in Ray Wakelin’s³³ data [duku] ‘mother’ appears in fluctuation with [nuku] ‘mother’. However, it appears that, as Pike and Larson indicate, there are some words with initial voiced obstruents in oral environments, for which speakers rarely, if ever, use nasal consonants, except in children’s speech.”³⁴

There are some lexical items in which denasalisation is compulsory, while it remains optional in the rest of the lexicon. On the basis of this phenomenon, Corbera (1994) takes the position that [b] and [d] are recently established phonemes:

“The voiced plosives /b/, /d/ did not form part of the Aguaruna phonological system diachronically, however at the synchronic level they must be considered phonemes, since these

³³ Payne here refers to Pike & Larson (1964). Ray Wakelin was an SIL missionary who worked with the Aguaruna before Larson. No bibliographical reference is given for the data attributed to Wakelin.

³⁴ “Pike y Larson manifiestan que las palabras [baku] ‘muslo’ y [duku] ‘madre’ no varían con las consonantes nasales. Varios de mis informantes usaban [maku] ‘muslo’. Pese a que ninguno de ellos usaba [nuku] ‘madre’, escuché esto a menudo en el lenguaje infantil. Además, en los datos de Ray Wakelin [duku] ‘madre’ aparece en fluctuación con [nuku] ‘madre’. Sin embargo, parece que, como Pike y Larson indicaron, hay algunas palabras con oclusivas sonoras iniciales en ambientes orales, para las cuales los hablantes rara vez, si alguna, usan consonantes nasales, excepto en el lenguaje infantil.”

segments are undergoing an accelerated process of phonologisation, especially in the speech of bilinguals.” (Corbera 1994:31)³⁵

So Corbera interprets this as a case of a change in progress: [b] and [d] are in the process of becoming phonemes, and the phonologisation is diffusing through the lexicon, in the sense of Chen & Wang (1975). Corbera (1994) also mentions the influence of Spanish, and it is important to note that the alphabet of Aguaruna itself includes the letters <b, d> in addition to <m, n>. The majority of Aguaruna speakers are literate in Aguaruna, so the forced choice between nasal and non-nasal orthographic representation may play some standardising role for the more stable occurrences of [b] and [d].

For the majority of cases, however, [b] and [d] remain purely phonologically-conditioned allophones of /m/ and /n/, and native speakers are generally accepting of nasal pronunciations even where they would not use such a form themselves, and vice versa.³⁶ Only two surface minimal pairs appear in my data:

- | | |
|------------------|---------------------------|
| (75) a. [yuwámi] | b. [yuwá ^m bi] |
| yu-a-mi | yu-a-mayi |
| eat-HIAF-HORT | eat-HIAF-INTPAST:3:DECL |
| ‘let’s eat’ | ‘he ate’ |
| | |
| (76) a. [númi] | b. [nú ^m bi] |
| numi | numi-i |
| ‘wood’ | wood-INSTR |
| ‘wood’ | ‘with a (piece of) wood’ |

³⁵ “As plosivas sonoras /b/, /d/ diacronicamente não faziam parte do sistema fonológico do Aguaruna, porém no nível sincrônico elas podem ser consideradas como fonemas, pois esses segmentos sofrem um processo acelerado de fonologização, sobretudo na fala dos bilingües.”

³⁶ This view is supported by Payne’s observation (1978: 53): “A number of informants who were quite vocal in correcting my mistakes affirmed that I was saying a word correctly if I used [m] where they consistently used [b].” If these words did in fact contain oral obstruents, in phonemic contrast to nasals, it is unlikely that a native speaker would accept the substitution as Payne describes. (The original text reads: “Varios informantes que eran bastante elocuentes para corregir mis errores afirmaban que yo estaba diciendo una palabra correctamente si usaba una [m] allí donde ellos usaban de manera consistente [b].”)

But both oppositions arise from an underlying length distinction in the final syllable: the underlying form of the intermediate past third person form is /mayi/ – the /a/ is lost to syncope, giving an intermediate form /yuwamii/, which surfaces as [yuwábi]. Similarly the instrumental suffix *-(a)i* fuses with the preceding /i/, but the denasalisation appears to have had effect prior to that. So both minimal pairs can be explained by appealing to underlying phonological differences that trigger denasalisation in one form but not the other.

Given the lack of minimal pairs and the unstable realisations, I do not consider [b] and [d] to be phonemes. Instead, I treat all examples as allophones of /m/ and /n/ that surface in non-nasal environments.

The oral allophones may be preferred in a few lexical items; those words where the nasal allophone is preferred all alternate morphologically with oral forms, giving rise to partial minimal pairs:

- | | |
|----------------|----------------|
| (77) a. [núwa] | b. [duwán] |
| nuwa | nuwa-hu |
| | woman-PERT:1SG |
| ‘a woman’ | ‘my wife’ |

Also compare *numi* ‘wood, tree’ (example 76 above) where the nominative form is not denasalised, and contrasts with the denasalised instrumental form. The converse phenomenon can explain some (but not all) of the compulsorily denasalised forms too:

- | | |
|----------------|--------------------------|
| (78) a. [dáwi] | b. [návĩ] |
| | foot:PERT:1PL/3 |
| ‘a foot’ | ‘our/his/her/their feet’ |

These examples cannot be adduced as evidence of phonologisation, as the alternation in all cases is still phonologically conditioned. What is unusual about them is the apparent lack of optionality in applying the denasalisation rule, and this must be motivated by the alternation with denasalised or nasalised forms in the paradigm.

In my transcription of underlying forms, I transcribe the nasal form where the alternation is predictable from the rules, and the oral form where native speakers consistently pronounce and write the oral allophone. In surface forms, I use the symbols and <d> to transcribe the denasalised segments.

A further perplexing phenomenon is the obligatory denasalisation triggered by two /h/-initial suffixes. The first person singular possessor suffix *-hu* and pluractional

Aktionsart *-ha* denasalise a preceding nasal domain of the stem to which they are attached, and if the consonant preceding the nasal domain is /m/ or /n/, it is also denasalised to [b] or [d] respectively.

(79) [hĩuáŋ]
 hĩuqa-hu
 house-PERT:1SG
 ‘my house’

(80) [ubáŋ]
 uma-hu
 sibling-PERT:1SG
 ‘my sibling of the opposite sex’

(81) [diháŋtahi]
 niha-ha-ta-ha-i
 wash-PLU-IFUT-1SG-DECL
 ‘I’ll wash (it)’

Both of these suffixes have cognates with initial /r/ in the other Jivaroan languages; elsewhere reflexes of PJ */r/ tend to *nasalise* the preceding vowel, making this phenomenon all the more mysterious. This is an issue that future comparative work may be able to explain.

Finally, some verbs that have final /u/ in the unmarked stem show nasal vowels when derivational morphology is added.³⁷

(82) a. [máu]	b. [mántu]
mau	mã-tu
	kill-APPLIC
‘kill’	‘kill (game) for someone’

This phenomenon, together with the loss of final /u/ in the derived form, suggest that the /u/ of these verbs may have originated as a verbal suffix. The /u/ is also lost in the perfective and imperfective stems (see discussion of verb conjugations in §6.3).

³⁷ Also compare *kapau* ‘burn’, *kapantu* ‘red’.

2.5 Syllable structure and vowel elision

Syllable structure on the surface can be rather complex: consonant clusters are common and nuclei may consist of short vowels, long vowels, diphthongs and some triphthongs. Morphological alternations show that the complexity arises from synchronic processes of synaeresis (collapse of adjacent vowels into a single syllable nucleus) and vowel elision, and there is a much simpler **phonological** syllable underlying the surface **phonetic** syllable structure. Note however that there is not simply a phonological versus phonetic distinction; rather, there are two levels of phonological syllable, as is demonstrated by the fact that the phonological rules of vowel elision are sensitive to syllable weight, which is a property of the surface syllable.

The underlying phonological syllable has the structure (C)V(N), where N represents an unspecified nasal segment that surfaces as a nasal obstruent in a homorganic cluster or vowel nasality. The following processes apply in order to the phonological syllable to produce the phonetic syllable:

1. High vowels become glides, forming syllable onsets
2. One syllable in every phonological word is assigned a pitch accent, manifested as a higher pitch than the other syllables
3. Adjacent vowels coalesce into phonetic syllable nuclei, forming diphthongs and long vowels
4. Vowel elision processes operate on some vowels in light (CV) syllables

Because the pitch accent is assigned prior to the formation of the phonetic syllable, an accented syllable containing a diphthong or long vowel will have a falling or rising pitch contour, depending on whether the first or second element was accented underlyingly (see §2.7).

In the sections that follow I first describe the underlying syllable structure, then give a detailed description of vowel elision and associated phonological processes, concluding with a description of the resultant surface structure.

2.5.1 Glide formation and synaeresis

At an early stage of the derivation, high vowels become glides, and are thereafter treated as consonants for the purposes of phonological rules. The following ordered rules apply to produce glides:

1. VVaV → V.GaV (there are no /aaV/ sequences except at morpheme juncture)
 - /ma.i.a.i/ ‘breath’ → /ma.ya.i/
 - /i.u.a.i.na/ ‘show’ → /i.wa.i.na/

2. (V)VVV → (V)V.GV where G is the corresponding glide allophone (there are no morpheme-internal VaV sequences at all)
 - /pa.i.a.ta/ ‘sugarcane’ → /pa.ɥa.ta/
 - /ta.i.u/ ‘oilbird’ → /ta.yu/
 - /wi.ka.i.i.a/ ‘walk’ → /wi.ka.i.ɥa/

3. Word-initial /i, u/ are realised as [y, w] when preceding a non-identical vowel ([ɥ] never appears in word-initial position)
 - /i.a/ ‘who’ → /ya/
 - /i.u.mi/ ‘water’ → /yu.mi/

4. Vowel combinations other than /V₁V₁/ and /aV/ in the first two syllables are separated by a glide
 - /i.a/ ‘search’ → /i.ɥa/
 - /ku.i.tʃi.ki/ ‘money’ → /ku.wi.tʃi.ki/

Accent is assigned following glide formation – glides are treated as consonants for the purposes of accent. Accent assignment must precede long vowel and diphthong formation, because complex nuclei affect accent shift in the same way as vowels that are heterosyllabic in the surface form. Pitch contours in accented complex nuclei indicate that the first or second vowel of such sequences carries the accent at an underlying level.

All remaining vowel sequences form complex nuclei; at this stage then the syllable template is (C)V(V)(N) word-initially and CV(V)(N) word-internally in morphologically simple forms, with the only restriction being that [ɥ] may not appear in the word-initial C position. In morphologically complex forms the structure CVVG is possible (§2.5.4). The scene is now set for vowel elision to apply.

2.5.2 Vowel elision

There are three processes of vowel elision: apocope, syncope³⁸ and diphthong reduction. That these are distinct and ordered processes can be seen from the fact that syncope is affected by the output of apocope. Vowel elision can freely apply to both oral and nasal vowels. Accented vowels may be elided, and the repositioning of accent follows different rules in nouns and verbs (§2.7).

Apocope operates first, eliding the nucleus of a final light (CV) syllable (throughout the discussion of elision, vowels in **bold** type are those that are subject to elision):

- (83) [na.há.nat]
na.ha.na.-**ta**
create-ACTNR
'to create'

- (84) [pi.níŋ]
pi.ni.**ha**
'ceramic bowl'

Apocope does not apply to CV syllables where C is a glide:

- (85) [hĩũãnmaya]
hĩ.ũa-**nu**.ma-i.**a**
house-LOC-ABL
'from the house'

Syncope elides the third and every alternate nucleus of light syllables.

- (86) [máit.hai]
ma.i-**ta**-ha-i
bathe+LOAF-IFUT-1SG-DECL
'I'm about to bathe'

³⁸ I follow Payne (1990b) in using the term **syncope** slightly differently from the traditional definition of e.g. Matthews (1997: 367: "the loss of unstressed vowels in the middle of a word"). Accent position in Aguaruna is not a conditioning factor in the application of syncope.

- (87) [ti.máʃ.mak]
 ti.ma.ʃi-ma-kũ
 comb-REFL+IMPFV-SIM+3:SS
 ‘as she was combing (her hair)’ (6:1:53)

Note that in example (83) above, the third syllable from the left fulfils the criteria for syncope to apply in the underlying representation, but after apocope of the final vowel the /t/ must be resyllabified, closing the third syllable. As the third is now heavy, it is not subject to syncope: the surface form is not **[na.hánt]. This effect demonstrates that apocope must operate prior to syncope.

Nasal vowels may be freely elided, but the syllable-final nasal of an NC cluster forms a heavy syllable and blocks elision:

- (88) [yu.mí.saŋ.kin] NOT **[yumískin]
 yu.mi.saŋ.ki.-na
 corn.cob-ACC

- (89) [yu.ku.kun.tun] NOT **[yukuktun]
 yu.ku.kun.tu.-na
 sandy-ACC

2.5.2.1 Syllable weight and minimal word

Syllable weight is determined by the number of moras: a light syllable is monovocalic and open (CV), and a heavy syllable has either a complex nucleus (long vowel, diphthong or triphthong) or a coda, or both: CVV(V)(C) or CVC.

There is also a minimal word requirement of two phonological syllables – only interjections can have fewer than two surface moras. The first two vowels of a word are never subject to elision, and CV roots have their vowels lengthened when they appear unsuffixed.

- b. [i.kím.sa.ta]
 i.ki.ma.-sa.-**ta**
 sit.down-ATT-IMP
 ‘sit down!’

In example (b), the final vowel (in bold) fulfils the criteria to undergo apocope – but it appears in the surface form. The output as predicted by the apocope rule should be **[ikímsat].

There is no optionality to elision or non-elision: any given vowel in a particular root or suffix will either always undergo elision (when in the correct environment), or it never will. This indicates that such vowels are lexically marked as non-eliding.

If the third vowel of a form is marked as non-eliding, then the fourth becomes the potential target of syncope. The process then moves to the sixth vowel and every alternate following vowel, as in the following example where the third vowel of the root *ikíma* ‘light (a fire)’ is marked as non-eliding.

- (94) [i.ki.mák.tat.hai]
 i.ki.ma.-ka.-ta.ta.-ha.-i
 light.fire-INTS-FUT-1SG-DECL
 ‘I will light a fire’

Non-eliding vowels also appear within lexical roots, as in the following example:

- (95) /pa.ám.pa/ → [paámpa]
 ‘plantain’

Note that *paampa* ‘plantain’ also does not undergo the accent shift expected in a nominal of three phonological syllables when the accusative suffix is added:

- (96) [paámpan yuwámhai]
 paampa-na yu-a-ma-ha-i
 plantain-ACC eat-HIAF-RECPAST-DECL
 ‘I ate plantains’

The best explanation for non-eliding vowels is that they arise from underlying or historic heavy syllables. Evidence from two sources supports this hypothesis:

1. Cognates in other Jivaroan languages suggest that some non-eliding vowels may have originated in longer words. For example, we have seen that *paampa* ‘plantain’ undergoes

neither apocope nor accent shift. The word for plantain in the other Jivaroan languages is *paantama*. Also comparative data show that the frustrative suffix *-takama* and intentional *-tata* historically had consonantal codas in their first syllables (see §9.3). And we see a potential beginning for the process when *-miti(ka)* surfaces as [mika] instead of expected [mitka] (§7.4.2).

2. There is evidence from morphophonological alternations that long vowels can be shortened, but are still treated as heavy syllables for elision purposes. This shows that the surface form does not necessarily reflect the input for vowel elision rules.

The existence of lexically defined exceptions to vowel elision shows that the processes are not purely phonologically conditioned synchronically. To capture the regularities of morphology, however, I use underlying representations in all examples.

2.5.3 Diphthong reduction

A process related to syncope is diphthong reduction (DR), whereby a sequence /CaV/ is reduced to /CV/, where V = {i, ī, u}.

- (97) a. ami-nau → [áminu]
 2SG-POSS
 ‘yours’
- b. tsawa-ha-ĩ → [tsawáhĩ]
 dawn-PLU-3:PFV
 ‘(day) has dawned’
- c. maa-nai-a-mi → [máaniami]
 kill-RECIP-HIAF-HORT
 ‘let’s fight’

In all instances of DR, the vowel /a/ is elided when it would be in a position to be syncopated if it were in an open syllable. So in example (98), DR does not occur because the vowel /a/ is the second vowel in the word:

- (98) [mínau]
 mi-nau
 1SG-POSS
 ‘mine’

In effect, the sequence is treated as two syllables: /Ca.V/. DR is not purely phonologically conditioned, being limited to a few morphological environments. The relativiser *-u* and the third-person immediate past suffix *-ř* trigger DR when suffixed to a perfective stem that terminates in /Ca/, and a small set of suffixes shows internal DR (§2.5.3.2).

2.5.3.1 DR with relativiser *-u* and immediate past *-ř*

Perfective stems in combination with the relativiser *-u* show diphthong reduction.

(99) a. [tʰipisú]
 tʰipɪ-sa-u
 lie.down-ATT-REL
 ‘lain down’ (6:2:50)

b. [itʃiŋkú]
 itʃĩ-ka-u
 grab-INTS-REL
 ‘grabbed’ (6:2:65)

(100) [kuwáʃat wíuʔahui]
 kuwáʃata wi-aha-u-i
 many go:PFV-PL-REL-COP:3:DECL
 ‘many people went’ (6:4:16)

As noted above, DR only happens if the first vowel would be in a position to be syncopated. In the following examples the /a/ is the fourth vowel in each case and could not be syncopated; so DR also does not apply:

(101) a. [aĩpsáú]
 aipɪ-sa-u
 leave-ATT-REL
 ‘left’ (6:2:68)

b. [akupkáú]
 akupɪ-ka-u
 release-INTS-REL
 ‘released’ (6:2:74)

The preceding examples also show that DR cannot be explained by assuming that apocope has applied before the relativiser *-u* is added – if that were the case, we would expect the surface forms to be ****[aipisu]** and ****[akupiku]** respectively. The phenomenon of morpheme-internal DR (§2.5.3.2) also argues against such a hypothesis.

Following DR the short *-i* allomorph of the copula suffix appears, which only follows single vowels (see §2.6.1.16):

- (102) [atʃikuí]
 atʃi-ka-u-i
 grab-INTS-REL-COP:3:DECL
 ‘grabbed’ (Text 1:9)

Stems in which the high affectedness Aktionsart *-a(w)* has fused with a root-final /a/ do not undergo DR, in keeping with the general observation that such forms always block elision:

- (103) [ahápauwai]
 ahapa-a-u-ai
 discard-HIAF-REL-COP:3:DECL
 ‘he threw (it) out’

But unaffixed perfective stems do:

- (104) [pĩmpĩnũnũn]
 pĩmpĩna-u-na
 turn.around:PFV-REL-ACC
 ‘(one who) turned around’ (6:1:47).

Perfective stems terminating in /Ca/ and followed by the third-person perfective past suffix *-ĩ* are reduced in the same way to /Cĩ/.

- (105) [tsawáhĩ]
 tsawa-ha-ĩ
 dawn-PLU-3:PFV
 ‘(day) has dawned’

Imperfective stems do not undergo DR when *-u* is added, presumably because of the presence of the imperfective suffix *-a*:

(106) [tupikáu] NOT **[tupikú]

tupika-a-u

run-IMPV-REL

‘running’ (6:2:43)

And *-ina-u* (PL:IMPV-REL) typically surfaces as [inau] not **[inu], although in rapid speech we do occasionally encounter DR:

(107) [ibáthuinu]

imatu-hu-ina-u

insist-APPLIC-PL:IMPV-REL

‘(those who) were insisting’ (6:4:51)

Some apparently exceptional applications of DR arise from non-eliding vowels, as in the following example:

(108) [apútusui]

apu-tu-sa-u-ai

put-APPLIC-ATT-REL-COP:3:DECL

‘(he) put (it)’ (6:5:70)

Normally we would expect the third vowel to be elided by syncope, blocking the application of DR and giving the surface form **[apútsauwai]. But the third vowel of the root *aputu* ‘put’ is never elided in any part of the paradigm, so this must be a lexically marked non-eliding vowel.

2.5.3.2 Suffix-internal DR

Four suffixes, listed in the table below, show the same diphthong reducing behaviour morpheme-internally.

UNDERLYING FORM	POST DR FORM	GLOSS
<i>-mau</i>	<i>-mu</i>	non A/S relativiser
<i>-tʃau</i>	<i>-tʃu</i>	negative relativiser
<i>-nau</i>	<i>-nu</i>	possessor
<i>-nai</i>	<i>-ni</i>	reciprocal

Table 2.17: Diphthong reducing suffixes

The examples below demonstrate the forms where DR has applied:

- (109) a. [yúwamu]
 yu-a-mau
 eat-IMPFV-NON.A/S:REL
 ‘what is eaten’
- b. [ỹãwããt̚suiθai]
 yawaã-t̚sau-ita-ha-i
 dog-NEG:REL-COP-1SG-DECL
 ‘I am not a dog’
- c. [íinu]
 ii-nau
 1PL-POSS
 ‘ours’
- d. [máanit]
 maa-nai-ta
 kill-RECIP-ACTNR
 ‘fighting’

The three *-Cau* forms (*-mau*, *-t̚sau* and *-nau*) are almost certainly historically derived from /Ca/ suffixes combined with the relativiser *-u*: *-ma* marks a switch of non-subject to subject (see §9.5.2), *-t̚sa* marks negative (see §7.7), and accusative *-na* marks possessors (see §4.6.2). So their DR effects are historically motivated, inasmuch as other applications of DR are triggered by the relativiser *-u*. There is no evidence, however, for historical morphological complexity to the reciprocal suffix *-nai*. Note also that I am not postulating synchronic morphological complexity in the *-Cau* forms. That this is not the case is demonstrated by the negative relativiser *-t̚sau*: the negative suffix *-t̚sa* only appears with verb roots, but the negative relativiser *-t̚sau* appears with verbal, nominal and adjectival roots, so it must be a synchronically independent suffix.

2.5.4 The syllable following vowel elision

Three elision processes – apocope, syncope and diphthong reduction – have been described above. After the application of these processes, the surface-level syllable is minimally V word-initially and CV word-internally. The nucleus may consist of any long

vowel or diphthong, or a triphthong which must be /V₁aV₂/, where V₁ represents any vowel and V₂ represents any vowel other than /a/. Triphthongs are extremely rare, appearing only in morphologically complex words and limited morphological environments. All consonants except glides can appear in the coda. So the maximum surface syllable is:

$$(C)V(V)\left\{ \begin{array}{l} C \\ NC_{\text{Affricate}} \end{array} \right\}$$

Where the initial C is obligatory word-internally. This analysis assumes that the final element of a triphthong is a glide that fills the C slot; the alternative is to say that the final slot can also be filled by a vowel.

The appearance of allophony conditioned by position within the phonetic syllable demonstrates its phonological reality. Resyllabification apparently applies recursively throughout the processes of affixation and vowel elision. A summary of the process for deriving well-formed phonetic syllables follows:

1. A consonant forms the onset of a syllable if it is followed by a vowel. No branching is permitted in the onset.
2. A consonant which is not followed by a vowel moves into the coda of the preceding syllable – see below for further processes affecting consonants.
3. Sequences of two vowels fuse into the nucleus of a single syllable:

- a. Identical vowels form a long vowel:

/ʃu.u.ta/ → [ʃuut] ‘cockroach’

- b. Non-identical vowels form a diphthong:

/ka.i/ → [kai] ‘avocado’

Note that reduplicated material may terminate with a diphthong, but not a consonant, showing that the second element of a diphthong is part of the nucleus, not the coda (see §2.8.1).

- c. Triphthongs may be formed in morphologically complex words only if the second element is /a/ and the third /i/, /ɪ/ or /u/:

/di.ka.pi.-a.-u/ → [di.ka.piau]

realise-IMPFV-REL

‘one who realises’

An illustration of the phonetic syllable comes from the reduplication rule, which copies the first phonetic syllable, plus the second phonetic syllable minus any coda, of the word to which it applies, as in the following example:

(110) [pampái pampáinakũã]

pampai pampa-ina-kawã

REDUP discuss-PL:IMPFV-REPET+3:SS

‘(as they were) discussing and discussing...’ (1:7:9)

The verb root is disyllabic /pampa/, but the /i/ of the plural imperfective suffix /ina/ is included in the reduplicated element. This shows that the /i/ has been syllabified into the nucleus of the second phonetic syllable of the word.

A further example is given by the resyllabification of a consonant after the application of apocope, closing the preceding syllable and blocking syncope (§2.5.2).

2.5.5 Syllable-position-conditioned consonantal effects

As shown above, vowel elision moves consonants into coda position in many syllables. In general these consonants form valid clusters, but there are some important effects arising from consonants being put into syllable-final position.

2.5.5.1 Elision of obstruents

At an underlying level, the only codas permitted are underspecified nasals. Vowel elision places other consonants into coda position, which gives rise to the possibility of having both members of an NC cluster in the same coda. There is, however, a restriction prohibiting an obstruent from being the second element in a coda. So any obstruent that loses its syllable nucleus to elision, and cannot be resyllabified into a preceding coda, must be deleted.

(111) a. /u.kúm.pi/ → *[u.kúmp] → [u.kúm]

‘blackfly (*manta blanca*)’

b. /mú.un.ta/ → *[múunt] → [múun]

‘big’, ‘adult’

c. /wám.paŋ.ku/ → *[wám.paŋk] → [wám.paŋ]

‘morpho butterfly’

The same restriction applies word-internally:

(112) a. /ti.hiŋ.ka.sá.-na/ → *[ti.hiŋk.sán] → [ti.hiŋ.sán]

ribbon-ACC

But it does not apply to affricates in the same environment:

(113) a. /a.ín.tsu/ → [aíns]

‘person’

b. /a.ín.tsu.-na.-ka/ → [aíns.nak]

person-ACC-FOC

2.5.5.2 Simplification of CC

The only identical CC clusters permitted at surface level are the dentals [tt] and [nn], as in the following examples:

(114) [yuwáttahai]

yu-a-tata-ha-i

eat-HIAF-FUT-1SG-DECL

‘I will eat’

(115) [muúnnak]

muunta-na-ka

adult-ACC-FOC

The phonetic realisation of such clusters is with a delayed release. Since obstruents are always unreleased in syllable-final position (§2.2.1), the delayed release is essentially a manifestation of the same process: /t.t/ → [t̚.t̚]; /n.n/ → [n̚.n̚].

Where other CC clusters are formed through vowel elision they are simplified to C:

(116) [tupikámtikiu] NOT **[tupikámtikkiu]

tupika-mitika-ki-u

run-CAUS-TRF-REL

‘(he) made (him) run’

In the following example intermediate *[pɪŋkɪh-hu-n] surfaces as [pɪŋkɪhun].³⁹

(117) [mína pɪŋkɪhun iwáintuktahai]

mi-na pɪŋkɪha-hu-na iwaina-tu-ka-ta-ha-i

1SG-ACC good-PERT:1SG-ACC CAUS+see-APPLIC-INTS-IFUT-1SG-DECL

‘I’ll show my goodness’

And intermediate /ais.sa.ta.tus/ → [ai.sa.ta.tus]:

(118) [aísatatus]

aisi-sa-tatus

CAUS+bite-ATT-INTENT+3:SS

‘so as to cause to bite’

The one exception to CC simplification in my data is with the word *piŋaka* ‘bird’, which when suffixed with a /k/ initial suffix (as in the following example) surfaces with geminate /k/, in defiance of the usual rule of cluster simplification:

(119) [pɪŋakkait] NOT **[pɪŋakait]

piŋaka-ka-ita

bird-POLINT-COP:3:INT

‘Is it a bird?’

Of possible relevance is the fact that the word *piŋaka* is probably a borrowing from Quechua *pishcu* ‘bird’ (see table 3.42), and there are other examples of phonologically unusual behaviour in borrowed words (§2.9). This is the only example I have of any double consonant other than the dentals, so it must remain, for the present at least, a mystery.

³⁹ In Nieva Aguaruna a rule /h/ → [ŋ] /_h operates, presumably also to avoid an illegal [hh] cluster (§2.2.4).

2.5.5.3 Other allophony

Two further allophonic variants determined by position within the syllable have already been mentioned above: /h/ is realised as [ŋ] syllable-finally (§2.2.4), and the affricates /ts/ and /tʃ/ surface as fricatives [s], [ʃ] respectively (§2.2.3). The distinction is conversely neutralised in syllable-initial position following a nasal obstruent, where the fricatives /s/ and /ʃ/ surface as affricates [ts], [tʃ].

2.5.6 Excursus

In this section I briefly mention two phonological phenomena, namely devoicing of vowels and metathesis, that are mentioned by previous analysts but for which there is no evidence in my data.

2.5.6.1 Devoicing of vowels

Pike & Larson (1964) refer to two “dialects” within Aguaruna, which differ in their apocope effects. “Dialect A” loses vowels to apocope, while in “Dialect B” the same vowels are not lost, but devoiced. The distribution of the two dialects is not clear:

“Dialect B is spoken by a minority in the same household, with no predictable basis for determining which speaker will utilize Dialect A or B.” (Pike & Larson 1964: 56)

It seems likely that dialect B reflects an intermediate stage in the apocope process, in which the vowels are weakened but not entirely lost. Devoicing of word-final vowels is attested for Achuar-Shiwiar (Fast et al. 1996) and Shuar (Pellizaro & Náwech 2005). Amongst the speakers who provided the data for the present work, there was none who consistently devoiced word-final vowels: they either elide them completely or pronounce them fully, and the choice is morphologically conditioned, not free variation; this supports the hypothesis that devoicing was an archaism or regionalism at the time Larson collected her data, and has now been lost.

2.5.6.2 “Metathesis” and “vowel harmony”

It has been stated that metathesis is common in morphophonological alternations (cf. Adelaar 2004: 435; Turner 1992: 28-29); but as we have seen, this is simply a product of

two identical underlying vowels.⁴⁰ The stem alternation in (120) looks as if metathesis applies to the final /VC/ of the stem when the accusative suffix is added. In fact, however, the alternation arises from the elision of different vowels (the fourth in (a), the third in (b)), giving the appearance of metathesis in this example because the final two syllables of the root happen to have identical vowels.

- | | |
|----------------------|-----------------|
| (120) a. [kuhántʃam] | b. [kuhántʃman] |
| kuhantʃama | kuhantʃama-na |
| ‘possum’ | possum-ACC |

In example (121), the final two syllables of the root have different vowels, and it is clear that the stem alternation is not metathesis of stem-final VC – if it were, we would expect the surface form of (121b) to be **[yuŋkípkan].

- | | |
|---------------------|----------------|
| (121) a. [yúŋkipak] | b. [yuŋkípkin] |
| yuŋkipaki | yuŋkipaki-na |
| ‘peccary’ | peccary-ACC |

There *is* a kind of sporadic vowel harmony that arises in words of a particular phonological shape, such that only one of the last two vowels surfaces at a time. In such words the tendency is for the final two vowels to be identical. For example, in /muɦuʃinimi/ ‘tree species’ the final /nimi/ must have come historically from the noun *numi* ‘wood, tree’, which appears frequently as the second element of compound plant names (e.g. *tsampaunumi* ‘manioc plant’ – see §2.8.2 and §3.3.7 for a description of nominal compounding). In almost all surface forms, one of the final two syllables has its nucleus elided – compare (122a) and (b):

- | | |
|----------------------|-----------------|
| (122) a. [muɦúʃinim] | b. [muɦúʃinmin] |
| muɦuʃinimi | muɦuʃinimi-na |
| ‘tree species’ | tree.sp-ACC |

⁴⁰ All apparent cases of metathesis are CV~VC, so Gnerre’s historical reconstructions involving metathesis of $C_1VC_2 \rightarrow C_2C_1V$, namely *fiwar* → *firwa* (1973:203) and *patal* → *palta* (1976:307) are completely unjustified.

Presumably this lack of co-occurrence has allowed the “vowel harmony” to occur. Note that this process is not at all regular, occurring in only a few noun roots of more than four underlying syllables.

2.6 Morphophonological processes

Certain phonological processes only occur in morphologically complex words, either because the phonological conditions for the processes are only met in morphologically complex words, or because of the presence of a particular suffix. At first glance Aguaruna morphology presents the appearance of “an agglomeration of simple words and roots in a violent state of fusion and apocope”, as Farrar (1860:73) vividly describes Iroquois polysynthesis; however there are some common processes and the rules can be divided into three general groups:

A: Vowel sandhi, a plethora of rules regarding whether the initial vowel of a vowel-initial suffix replaces the preceding vowel, forms a long vowel, diphthong, or triphthong, or triggers insertion of an epenthetic glide.

B: Alternation of allomorphs: some suffixes have alternating long and short forms, and different combinations of phonological and morphological environments condition the choice of allomorph.

C: “Other processes”, effectively idiosyncratic properties of some suffixes.

There is one process of encliticisation, whereby a predicate and postposed relativiser can form a single phonological word (§2.8.3).

2.6.1 Vowel sandhi and alternation of allomorphs

The majority of suffixes are consonant-initial, but there are some vowel-initial suffixes, and when added to a stem (always vowel-final) they bring two or more vowels together. Each suffix follows its own rules for combining with the stem to which it is attached. The most common scenario is fusion of the stem-final and suffix-initial vowels. Fusion follows the rule $V_1V_2 \rightarrow V_2$, except that when the initial /u/ of the diminutive suffix *-utʃi* fuses with a preceding vowel the resulting vowel has the quality of V_1 ; and if the

sequence /i:/ fuses, the resulting vowel is /i/, i.e. V₁. Similarly, if the sequence /i:/ does *not* fuse, it surfaces as [i:].

Two verbal suffixes (relativiser *-u* and third person immediate past *-ɛ̃*) trigger diphthong reduction – DR is unlike fusion, as its occurrence is conditioned by syllable structure, the same conditions as syncope (see §2.5.3), while fusion is conditioned only by the immediate morphological and phonological environment. The following table summarise the rules.

SUFFIX	GLOSS	EFFECTS	SECTION
A. Verbal suffixes			
<i>-inu</i>	subject nominaliser	fuses with any preceding vowel	2.6.1.1
<i>-a(w)</i>	‘high affectedness’ Aktionsart	fuses with preceding /a/, then blocks further fusion and syncope	2.6.1.2
<i>-i(ni)</i>	‘low affectedness’ Aktionsart	fuses with any preceding vowel in stems of more than two phonological syllables	2.6.1.3
<i>-a</i>	imperfective	fuses with preceding /u/ in morphologically complex stems; optionally fuses with preceding /a/; other effects determined by verb conjugation	2.6.1.5
<i>-ina</i>	plural imperfective	fuses with stem-final /i/ or /ī/, and the resulting vowel has the quality of V ₁	2.6.1.6
<i>-aha</i>	plural	fuses with preceding /a/	2.6.1.7
<i>-ama...ia</i>	distant past	fuses with preceding /a/	2.6.1.8
<i>-ḟ</i>	third person, perfective stem	triggers DR; triggers long forms of ‘low affectedness’ <i>-i(ni)</i> and ‘transferred action’ <i>-ki(ni)</i>	2.6.1.9
<i>-u</i>	subject relativiser	fuses with preceding /u/; triggers DR	2.6.1.10
<i>-(a)i</i>	apprehensive	never fuses; surfaces as [ī] following /i/	2.6.1.11
<i>-umḟ</i>	second person singular, past tense	fuses with any preceding vowel in stems of more than two phonological syllables; triggers long form of <i>-i(ni)</i>	2.6.1.12
<i>-uhumḟ</i>	second person plural, past tense	as above	2.6.1.12
<i>-i</i>	declarative	fuses with preceding /ī/ or /i/	2.6.1.14
B. Nominal suffixes			
<i>-utḟi</i>	diminutive	may fuse with a preceding single vowel, and the resulting vowel has the quality of V ₁	2.6.1.15
<i>-(y)a</i>	exclamative copula, third person	never fuses	2.6.1.17
<i>-ḟ</i>	non-visible copula, third person	never fuses, requires an epenthetic glide when preceded by a vowel other than /a/	2.6.1.18

SUFFIX	GLOSS	EFFECTS	SECTION
<i>-(a)i(ta)</i>	copula	long form always requires epenthetic glide; short form fuses with stem-final /i/ or /ĩ/, and the resulting vowel has the quality of V ₁	2.6.1.16
<i>-(y)a</i>	exclamative copula	never fuses	2.6.1.17
<i>-(a)i</i>	instrumental	short form fuses with preceding /i/	2.6.1.19
<i>-(n)ĩ</i>	locative/DS	never fuses	2.6.1.20

Table 2.18: Vowel-initial suffixes and their effects

Some suffixes alternate between short and long allomorphs depending on the phonological and/or morphological environment. In all cases the short allomorph cannot be derived from the long allomorph by application of phonological rules, and the long allomorph cannot be derived from the short by appealing to euphonic epenthesis.

SHORT FORM	LONG FORM	GLOSS	CONDITIONING ON LONG FORM	SECTION
<i>-a</i>	<i>-aw</i>	‘high affectedness’ Aktionsart	preceding /a/	2.6.1.2
<i>-i</i>	<i>-ini</i>	‘low affectedness’ Aktionsart	preceding a vowel, with some exceptions	2.6.1.3
<i>-ki</i>	<i>-kini</i>	‘transferred action’ Aktionsart	preceding ‘immediate past, third person’ <i>-ḟ</i>	2.6.1.4
<i>-u</i>	<i>-wa</i>	third person	following a vowel	2.6.1.13
<i>-i</i>	<i>-ai</i>	apprehensive	following ‘high affectedness’ <i>-a(w)</i>	2.6.1.11
<i>-ĩ</i>	<i>-nĩ</i>	locative/different subject	following /i/ or /ĩ/	2.6.1.20
<i>-i</i>	<i>-ai</i>	instrumental	following a diphthong	2.6.1.19
<i>-i, -ita</i>	<i>-ai, -aita</i>	copula	following disyllabic stem except that short form always appears following /a/	2.6.1.16
<i>-a</i>	<i>-ya</i>	exclamative copula, third person	following /a/	2.6.1.17

Table 2.19: Short and long allomorphs

The phonological conditioning for the alternations is rather different in each case. Below brief details are given for each suffix from tables 2.18 and 2.19, roughly ordered

along the following lines: verbal suffixes are described first, in the order in which they are affixed to the stem, then nominal suffixes also ordered as they appear in the stem.

2.6.1.1 Subject nominaliser *-inu*

The initial /i/ of the subject nominaliser *-inu* always fuses with the final vowel of the stem, regardless of the vowel's quality or the length of the stem:

- (123) a. *hintínkaŋtin*
hintina-kahatu-inu
 teach-1PL.OBJ-NR
 'teacher'
- b. *tínu*
tu-inu
 say-NR
 'a speaker'

In the following example the velar glide [w] surfaces as [y] because of the following [i].

- (124) *wakíyin*
wakiŋya-inu
 want-NR
 'one who wants'

And the final /u/ of *-inu* surfaces as [a] when the copula suffix follows – the copula suffix takes the postvocalic allomorph *-i(ta)*:

- (125) *hápak sántʃi tupikáinai*
 [hapa-ka] [sántʃi tupikau-inu-i]
 [deer-FOC]CS [strongly run-NR-COP:3:DECL]CC
 'the deer is a strong runner'(6:15:4)

An alternative analysis would be loss of the final /u/ and addition of the postconsonantal allomorph *-ai(ta)* of the copula suffix. This would be exceptional, however, as no other stems drop their final vowels prior to the addition of the copula suffix.

2.6.1.2 High affectedness Aktionsart *-a(w)*

Fuses with a stem-final /a/, but then blocks further fusion or syncope:

- (132) a. isátnĩ
 isa-tu-ini-ĩ
 bite-1SG.OBJ-LOAF(LONG)-3:PFV
 ‘it bit me’
- b. táiniabiahai
 ta-ini-amaia-ha-i
 dig-LOAF(LONG)-DISTPAST-1SG-DECL
 ‘he dug’

- (133) ihaphúkbau hiṽąṽtinĩ
 ihaphu-ka-mau hĩṽąṽ-hu-tu-ini-ĩ
 give.birth-INTS-NON.A/S:REL arrive-APPLIC-1SG.OBJ-LOAF(LONG)-3:PFV
 ‘the day of my giving birth has arrived’ (6:6:28)

Conditioning is slightly different with the past tense second person suffixes *-umĩ* (singular) and *-uhumĩ* (plural): the long form appears only when a vowel precedes *-i(ni)*, that is, to avoid the illegal vowel sequence /Viu/ that would arise if the short form were used. So example (a) below takes the long form, but (b) takes the short form (unlike (132b) above).

- (134) a. máinumik
 maini-umi-ka
 bathe+LOAF(LONG)-2-POLINT
 ‘have you bathed?’
- b. isátiumĩ
 isa-tu-i-umi-i
 bite-1SG.OBJ-LOAF-2:PAST-DECL
 ‘you bit me’

2.6.1.4 Transferred action Aktionsart *-ki(ni)*

The long form of the ‘transferred action’ suffix *-kini* surfaces when followed by the immediate past third person suffix *-ĩ*.

(135) hukínĩ

hu-kini-ĩ

take-TRF(LONG)-3:PFV

‘he’s taken (it)’

2.6.1.5 Imperfective *-a*

Imperfective *-a* always fuses with final /u/ in morphologically complex stems:

(136) [miníthawai]

mini-tu-hu-a-wa-i

arrive-APPLIC-1SG.OBJ-IMPFV-3-DECL

‘it’s coming towards me’

Following a stem-final /a/ the resulting /aa/ is *optionally* fused to /a/. The fused form seems to be more common when the syllable is not accented, although this is not a strict rule as the following example shows.

(137) [takáawai]~[takáwai]

taka-a-wa-i

work-IMPFV-3-DECL

‘he/she is working’

In morphologically simple verb stems ending in vowels other than /a/, imperfective *-a* fuses with a stem final vowel in the second and third conjugations, but not in the first conjugation. Details of stem allomorphy conditioned by conjugation membership are in §6.3.

2.6.1.6 Plural imperfective *-ina*

Plural imperfective *-ina* always fuses with stem-final /i/ or /ĩ/, and the resulting vowel has the quality of V₁.

(138) [tsupínawai]

tsupi-ina-wa-i

cut-PL:IMPFV-3-DECL

‘they are cutting’

(139) [wɪnawai]

wi-ina-wa-i
go-PL:IMPFV-3-DECL

‘they are going’

2.6.1.7 Plural *-aha*

Fuses with stem-final /a/, but note that ‘high affectedness’ Aktionsart *-a(w)* takes the long form when followed by /a/, so never triggers fusion with *-aha*. The fused /a/ then blocks syncope:

(140) [tsupikáŋtatui]

tsupi-ka-aha-tata-wa-i
cut-INTS-PL-FUT-3-DECL

‘they will cut’

-aha never fuses with other vowels:

(141) [isápiaŋmĩ]

isa-pa-i-aha-mĩ
bite-1PL.OBJ-LOAF-PL-RECPAST:3-DECL

‘they bit us’

2.6.1.8 Distant past *-ama...ia*

As with plural *-aha*, distant past *-ama...ia* fuses with stem-final /a/, and the resulting /a/ blocks syncope.

(142) [takasábiahai]

taka-sa-amaia-ha-i
work-ATT-DISTPAST-1SG-DECL

‘I worked’

2.6.1.9 Third person perfective *-ĩ*

The suffix *-ĩ* marks third person subject perfective stems. It triggers diphthong reduction when suffixed to a perfective stem terminating in /Ca/:

(143) [pĩŋkiŋ tsawán tsawáhĩ]

pĩŋkiha tsawanta tsawa-ha-ĩ
good day dawn-PLU-3:PFV

‘a fine day has dawned’

And triggers long forms of ‘low affectedness’ *-i(ni)* and ‘transferred action’ *-ki(ni)* – see examples in §§2.6.1.3 and 2.6.1.4.

2.6.1.10 Relativiser *-u*

Fuses with a stem-final /u/:

(144) [ikítu]

iki-tu-u

sit:PFV-APPLIC-REL

‘sitting near (him)’ (6:4:155)

There is no fusion with /i/ final stems, nor with /i/ final stems.

(145) [tsampáunumin wihák utʃín batsakíu túahamĩ]

[tsampaunumi-na wi-hu-a-kũ] utʃi-na batsa-ki-u tuahamĩ
 [manioc.leaf-ACC go-APPLIC-IMPV-SIM+3:SS] child-ACC leave-TRF-REL NARR

‘going to get manioc leaves, they left the children behind, so the story goes’ (6:2:17)

(146) [hiinkíu]

hiina-ki-u

go.out-TRF-REL

‘(she) went out’ (6:1:1)

Triggers DR with perfective /Ca/ final stems, except where the /a/ arises from fusion of ‘high affectedness’ *-a(w)* with a root final vowel /a/ (§2.5.3).

2.6.1.11 Apprehensive *-(a)i*

Apprehensive *-(a)i* never fuses with a preceding single vowel:

(147) [hukíipa]

hu-ki-i-pa

take-TRF-APPR-2:INT/PROHIB

‘don’t take it!’

It surfaces as [i] following stem-final /i/:

(148) [wíipa]

wi-i-pa

go:PFV-APPR-2:INT/PROHIB

‘don’t go!’

Note the difference between this example and example (139) with plural imperfective *-ina*, which does fuse with preceding /i/ so *wiina* (go-PL:IMPFV) surfaces as [wina].

The short form does fuse with a preceding diphthong /ai/, as in the following example:

(149) [isáipa]

isa-i-i-pa
get.burned-LOAF-APPR-2:INT/PROHIB

‘don’t burn yourself!’ (Obs)

The long form *-ai* appears following ‘high affectedness’ *-a(w)*, which also takes its long form *-aw*:

(150) [yuwáwaipa]

yu-aw-ai-pa
eat-HIAF(LONG)-APPR(LONG)-2:INT/PROHIB

‘don’t eat (it)!’ (Obs)

2.6.1.12 Second person subject, past tense *-umí*, *-uhumí*

Both singular and plural forms fuse with a stem-final vowel in stems of more than two phonological syllables.

(151) [untsúkumí]

untsu-ka-ma-umi-i
call-INTS-RECPAST-2SG:PAST-DECL

‘you called’

Note that this is not DR, as shown by the fact that the /a/ of *-ma* ‘recent past’ in the preceding example is in the fourth syllable and would not be in a position to be syncopated.

The second person past tense suffixes also trigger the long form of *-i(ni)*, but only when this is necessary to break up an unacceptable vowel cluster (§2.6.1.3).

2.6.1.13 Third person subject suffix *-wa* / *-u*

Third person subject in present and future declarative, exclamative and interrogative verbs is marked with a suffix *-wa*, with short form *-u* that appears when the preceding vowel is syncopated as in (152b).

- (152) a. [dʰkawai]
 dʰka-a-wa-i
 know-IMPV-3-DECL
 ‘he/she knows’
- b. [búutui]
 buuta-u-i
 cry+IMPV-3-DECL
 ‘he/she is crying’

2.6.1.14 Declarative *-i*

Always fuses with stem-final /i/ or /i/, and the resulting vowel has the quality of V₁.

- (153) [puhámi]
 puhu-a-mi-i
 live-IMPV-2-DECL
 ‘you live’

- (154) [puháhi]
 puhu-a-hi-i
 live-IMPV-1PL-DECL
 ‘we live’

The fused vowel blocks apocope. In non-declarative clauses, the person suffixes can undergo apocope because the declarative suffix is absent:

- (155) [amiká wáʉqam]
 ami-ka wi-a-mi
 2SG-POLINT go-IMPV-2
 ‘are *you* going?’

2.6.1.15 Diminutive *-utʃi*

The diminutive suffix may fuse with a preceding vowel, and the resulting vowel has the quality of V₁:

- (156) [apáʃ]
 apa-utʃi
 father-DIM
 ‘grandfather’

But other instances do not show fusion:

- (157) [datsáuʃ]
datsa-utʃi
youth-DIM
‘youngster’

For some nouns consultants did not agree as to the correct formation of diminutive forms, that is, whether or not fusion should apply:

- (158) [katípiuʃ] OR [katípiʃ]
katipi-utʃi
rat.sp-DIM
‘a little rat’

The diminutive suffix is prototypically derivational, as it changes the semantics of the root. It is likely therefore that diminutive-marked nouns are more lexicalised – note the semantic unpredictability of example (156) – and this may lead to the non-regularity of its phonological effects.

2.6.1.16 Copula

The copula suffix has long form *-aita* and short form *-ita*. Third person declarative copula is marked with a portmanteau suffix with long form *-ai* and short form *-i* (see §4.10 for a full description of copula suffixes). Both suffixes show the same pattern of allomorphy. Stems ending in a single vowel /a/ always take the short form and stems ending in a diphthong always take the long form. With stems ending in a single vowel other than /a/, the long form appears following a disyllabic stem and the short form appears elsewhere, that is, following a single vowel in a stem of more than two phonological syllables. The following table exemplifies the various combinations of stem shape and stem-final vowel with the third-person declarative copula.

STEM-FINAL VOWEL	2 SYLLABLE STEM	>2 SYLLABLE STEM	DIPHTHONG STEM
i	[númiyai] numi-ai wood-COP:3:DECL 'it's a tree'	[ápatʃi] apatʃi-i grandfather-COP:3:DECL 'he's a grandfather'	[naŋkáiyai] naŋká-i-ai fruit-COP:3:DECL 'it's a fruit'
i	[húkɪuqai] hu-ki-ai PRX-RESTR-COP:3:DECL 'it's only this'	[wakámpɪ] wakampi-i fruit.sp-COP:3:DECL 'it's a fruit (<i>macambo</i>)'	[páũãĩỹãĩ] pauãã-ai rib:PERT:1PL/3-COP:3:DECL 'it's his rib'
u	[wisúwai] wisu-ai naked-COP:3:DECL 'he's naked'	[áiʃmaŋkui] aiʃmaŋku-i man-COP:3:DECL 'he's a man'	[mídauwai] mi-nau-ai 1SG-POSS-COP:3:DECL 'it's mine'
a	[káyai] kaya-i stone-COP:3:DECL 'it's a stone'	[idáukai] idáuka-i sweet.potato-COP:3:DECL 'it's a sweet potato'	[aŋsáyai] aŋsia-ai fishhook-COP:3:DECL 'it's a fishhook' ⁴¹

Table 2.20: Copula forms

The long form is always preceded by an epenthetic glide, so forms a separate syllable. Epenthetic glides following single vowels take their place of articulation from the preceding vowel: [y] following /i/; [u] following /i/; [w] following /u/. Following a diphthong the glide is [y] following all vowels except /u/, in which case it is [w].

Two exceptions to the rules are the singular SAP pronouns, which take the short form although first person singular has only one phonological syllable, and second singular only two:

⁴¹ *aŋsia* 'fishhook' < Sp. *anzuelo*.

(159) [wíthai]

wi-ita-ha-i
1SG-COP-1SG-DECL

‘I am I’ (response to greeting “are you you?”)

(160) [ámítmí]

ami-ita-mi-i
2SG-COP-2SG-DECL

‘you are you’ (used in games of tag, “you’re it!”)

The copula suffix is added after the application of diphthong reduction, so the short form is selected in following example:

(161) [típisuí]

típi-sa-u-i
lie.down-ATT-REL-COP:3:DECL

‘he lay down’

2.6.1.17 Third person exclamative copula *-(y)a*

The portmanteau suffix *-(y)a* combines copula, third person and exclamative mood. Historically it has arisen from the long form of the third person declarative copula *-ai* with the final /i/ interpreted as declarative and dropped. In all environments where the long form of declarative copula is used, the exclamative copula takes the same form, including preceding epenthetic glides, but without the final /i/.

(162) a. húkiɯai

hu-ki-ai
PRX-RESTR-COP:3:DECL

‘it’s only this’

b. húkiɯa

hu-ki-a
PRX-RESTR-COP:3:EXCL

‘it’s only this!’

Stems of more than two phonological syllables with final vowel other than /a/, which take the short form of the declarative copula, are treated the same as stems of less than two syllables by exclamative copula, except that stem-final /u/ does not trigger an epenthetic glide. Compare the following examples:

(163) a. [aíntsui]

aíntsu-i
person-COP:3:DECL

‘it’s a person’

b. [aíntsua]

aíntsu-a
person-COP:3:EXCL

‘it’s a person!’

Following stem final /a/, the long form *-ya* always appears. Compare the following examples:

- | | |
|----------------------|----------------------|
| (164) a. [túnai] | b. [túnaya] |
| tuna-i | tuna-a |
| waterfall-COP:3:DECL | waterfall-COP:3:EXCL |
| ‘it’s a waterfall’ | ‘it’s a waterfall!’ |

2.6.1.18 Non-visible, third person copula *-ř*

The non-visible copula *-ř* is another portmanteau, combining third-person subject and non-visible (that is, either out of sight or past). It is not clear whether this form has declarative or exclamative mood. There is no non-third form. Non-visible copula never fuses, and triggers an epenthetic glide when following a vowel other than /a/.

- (165) [ařntsuwř]
- ařntsu-ř
- person-NONVIS.COP:3
- ‘it was a person’

2.6.1.19 Instrumental *-(a)i*

The instrumental suffix *-(a)i* takes the long form *-ai* following a diphthong (166), and the short form *-i* elsewhere (167).

- (166) a. [řkřmtařřãř]
- řkřma-tař-ai
- sit.down-NON.A/S:NR-INSTR(LONG)
- ‘with a stool’
- b. [apahuřyai]
- apahui-ai
- god-INSTR(LONG)
- ‘with God’ (as complement of verb *suhumana* ‘convert to’ – see §4.6.5)
- (167) a. [mabãi]
- mama-i
- manioc-INSTR
- ‘with manioc’

- b. [nahánamui]
 nahana-mau-i
 make-NON.A/S:REL-INSTR
 ‘with the thing (you) made’

There are no examples of instrumental following stem-final /i/ in my corpus. The short form fuses with a preceding /i/.

- (168) [nubí]
 numi-i
 wood-INSTR
 ‘with a piece of wood’

- (169) [uúbi]
 uumi-i
 blowgun-INSTR
 ‘with a blowgun’

I have encountered one exception:

- (170) [kutʃíyai]
 kutʃi-ai
 knife-INSTR(LONG)
 ‘with a knife’

Perhaps this has something to do with the fact that the noun *kutʃí* ‘knife’ is a borrowing from Sp. *cuchillo* ‘knife’.

The denasalisation of preceding nasal obstruents associated with the short form is because of the underlying intermediate form ending in /ii/ (§2.4).

2.6.1.20 Locative/DS -(n)ĩ

Nominal locative / verbal different subject suffix *-ĩ* surfaces as *-nĩ* following /i/ or /i/:

- (171) [ámina híimin]
 ami-na híi-mi-nĩ
 2SG-ACC house:PERT-2-LOC
 ‘at your house’

(172) [íi áidauti húwahin ámi wímumĩ]

[ii a-ina-u-ti huwa-a-hi-nĩ]
[1PL COP-PL:IMPFV-REL-SAP stay-IMPFV-1PL-DS]

ami wi-ma-umi-i
2SG go:PFV-RECPAST-2:PAST-DECL

‘while we stayed, you went away’

The allomorphs are identical for both the locative and DS suffixes, strongly suggesting a common origin – this is discussed further in §9.4.2.6.

2.6.2 Other processes

There are a few idiosyncratic processes that must be considered properties of the particular morphemes involved. The conditioning may have no phonological motivation at all.

2.6.2.1 Immunity to apocope

-ki(ni) ‘transferred action’ Aktionsart and *-i(ni)* ‘low affectedness’ Aktionsart are immune to apocope, but not to syncope. So we find that the /i/ surfaces when word-final, but is elided word-internally.

(173) [pikamtĩ]

pikama-tu-ĩ
sit:PL-APPLIC-LOAF:SEQ+3:SS

‘(they) having sat’

(174) [hápi-kĩ]

hapi-kĩ
pull-TRF:SEQ+3:SS

‘having pulled’

This is unlike the non-eliding vowels discussed in §2.5.2.2, as such vowels never elide. Compare the following example where syncope affects *-ki(ni)* ‘transferred action’ when it is word-internal:

(175) [hapiktá]

hapi-ki-ta
pull-TRF-IMP
'pull it!'

2.6.2.2 Vowel mutation triggered by *-ki(ni)*

The 'transferred action' Aktionsart suffix *-ki(ni)* triggers vowel mutation of /i/ > /i/ in the verb root:

(176) [naŋkáiikĩ]

naŋkai-kĩ
pass-TRF:SEQ+3:SS
'having passed' (6:15:32)

(177) [wakítkithai]

wakítu-ki-ta-ha-i
return-TRF-IFUT-1SG-DECL
'I'm going to go back'

2.6.2.3 Vowel lengthening triggered by durative *-ma*

The durative suffix *-ma* triggers lengthening of the final vowel in verb roots to which it is attached:

(178) puhuumatá

puhu-ma-ta
live-DUR-IMP
'keep on living!' (leave-taking formula)

Further examples are in §7.3.4.

2.6.2.4 Action nominaliser *-ta*

The action nominaliser *-ta* does not trigger NC creation when suffixed to a verb root with a nasal vowel (§2.4.2).

2.6.2.5 Vowel harmony in restrictive *-kI*

The nominal restrictive suffix *-kI* appears as [ki] when the preceding vowel is /i/ and as [kĩ] elsewhere, that is, when the preceding vowel is /ĩ, u, a/.

(179) [wíki]
wi-ki
1SG-RESTR
'I alone'

(180) [núkĩ]
nu-kĩ
ANA-RESTR
'just that'

This vowel harmony is unique among suffixes, although rather similar to the vowel change in roots conditioned by the presence of the suffix *-ki(ni)* as described above.

2.6.2.6 Combining form of SAP pronominal roots

The first person pronoun has the form *wi*, which is lengthened to *wii* when it appears without any affixes. Some case-marked forms have the root *mi-*.⁴² A similar situation holds for the second person pronouns *amĩ* (singular), which has the combining form *ami-* and *atumĩ* (plural) with combining form *atumi-*.

The case markers that trigger combining pronominal forms are: accusative *-na*, comitative *-haĩ* and locative *-(n)ĩ*; and the verbal different subject suffix *-(n)ĩ* triggers the combining form of a preceding second person subject suffix. Other suffixes do not trigger the combining forms. Table 2.21 contrasts the combining forms, with accusative suffix *-na*, with the non-combining forms with focus suffix *-ka*:

⁴² It is interesting to note that the verb *mini* 'arrive' has the form *wini* in the other Jivaroan languages, suggesting that Aguaruna has undergone a change of the sequence /win/ to /min/.

PERSON	ACCUSATIVE	FOCUS
1SG	[mína] mi-na	[wíka] wi-ka
2SG	[ámína] ami-na	[ámik] ami-ka
2PL	[atúmin] atumi-na	[átumik] atumi-ka

Table 2.21: Combining pronominal roots

Note that the locative form of first person singular is *minaĩ* – the expected form is ***minĩ*. This suggests that *-nĩ* may be a diphthong reducing suffix; the only place the unreduced form is expected to show up is when it is suffixed to a monovocalic root, and the only example of such a root is *mi* ‘1SG’.

The second person possessive (*-mĩ*) and subject (*-mĩ*, *-humĩ*, *-umĩ*, *-uhumĩ*) suffixes show the same combining forms:

(181) [yatsúmin]

yatsu-mi-na
brother:PERT-2-ACC
‘your brother’

(182) [wahiŋmihãĩ]

wahi-hu-mi-hãĩ-ŋa
sister.in.law-PERT-2-COMIT-UNCERT
‘with your sister-in-law?’ (6:4:45)

(183) [wíʔakmin]

wi-a-ku-mi-nĩ
go-IMPV-SIM-2SG-DS
‘you going (different subject)...’

2.6.3 Summary of morphophonology

We have seen that Aguaruna, while basically agglutinative, has a large number of different rules that operate at morpheme boundaries. Assuming that the processes must have been phonologically conditioned at an earlier stage of the language, one is tempted to see in the different behaviours different classes of morphemes, or levels of morpheme

juncture, such as suffix versus enclitic. However there is no such two-way distinction to be made on phonological grounds, and the processes do not fall into neat classes; so the conclusion must be that synchronically these are simply idiosyncratic behaviours proper to each suffix.

2.7 Accent

Aguaruna has a pitch accent: in every phonological word, one syllable carries an accent, and is pronounced with a higher pitch than the rest of the word. The principle of “one word per accent, one accent per word” is an important criterion and diagnostic of wordhood (§2.8). Perhaps the most interesting feature of accent assignment is that it operates differently in verbs and nouns (with adjectives following the nominal pattern), although with some small overlap; the two systems are therefore described separately below (verbs in §2.7.1, nouns and adjectives in §2.7.2). Although the full details of accent assignment are not yet fully understood, a basic synopsis of the two systems is as follows:

- Some, but not all, **verbal roots** and **suffixes** have lexically specified accents; only the leftmost accent surfaces in the verbal word and if there is no underlying accent a default rule applies.
- **Nouns** and **adjectives** may have lexically specified accents, but there is little evidence that nominal suffixes do. Instead, most nominal suffixes trigger accent shift in the root.

The two patterns are almost entirely separate, with the exception of two nominal suffixes that may take accent themselves: *-a* ‘first’ and *-numa* ‘locative’, and only a few verbal suffixes shift accent.

Accent is potentially phonemically contrastive, and surface minimal pairs can readily be found. Such minimal pairs are more common in verbal than nominal roots, and both verbs and nouns show some morphological processes marked only by differing surface accent position. Some verb pairs that are homophonous except for the accent position also show remarkably similar semantics, suggesting that the relationship is more than simply chance similarity. It seems likely that these pairs result from some historical morphological process, which is no longer productive.

Some examples of minimal pairs in verb roots are.⁴³

⁴³ Note that the accent marked in these examples is that which surfaces when the action nominaliser *-ta* is added to the unmarked stem.

- | | |
|---|---------------------------------|
| (184) a. ʃíki
‘urinate (on something)’ | b. ʃikí
‘draw water’ |
| (185) a. iháki
‘defecate on O’ | b. ihakí
‘stain O’ |
| (186) a. ípina
‘fence in’ | b. ipíná
‘dam (stream etc.)’ |
| (187) a. ukáiiuqa
‘collapse’ | b. ukaiiuqá
‘capsize’ |

Noun roots distinguished by accent are rare. The following are ultimately borrowings, although common words.

- | | |
|--|--|
| (188) a. kútʃi
‘pig’ (< Qu. <i>kutʃi</i> < Sp. <i>cochino</i>) | b. kutʃí
‘knife’ (< Sp. <i>cuchillo</i>) |
|--|--|

The only other surface minimal pair I am aware of is discussed below.

Accent is assigned to the nucleus of an underlying phonological syllable, which is a single vowel. This does not always correspond to a surface syllable: as a result of synaeresis, the underlyingly accented vowel may end up forming part of a surface long vowel or diphthong (§2.5). Should that happen, the underlyingly accented vowel is still the locus of the increased pitch, so an accented long vowel or diphthong surfaces with a rising or falling pitch contour. Consider the following examples, which constitute a minimal pair distinguished only by underlying accent position once the final vowel is elided.

- | | |
|---|-------------------------------|
| (189) a. [kâ:p]
ká.a.pi
‘ <i>tamshi</i> vine’ | b. [kǎ:p]
ka.á.pi
‘fly’ |
|---|-------------------------------|

In (190) below, the falling and rising pitch contours of the surface long vowels of examples (189a) and (b) are illustrated:

- | | |
|--|--------------------|
| (190) a. [ka:p]
‘ <i>tamshi</i> vine’ | b. [ka:p]
‘fly’ |
|--|--------------------|

As noted in §2.3.1, a more useful way to transcribe surface long vowels, diphthongs and triphthongs is as sequences of vowels, with the underlying accent position marked. There is no possibility of ambiguity as all surface vowel sequences within a phonological word are homosyllabic. The surface minimal pair illustrated in (189) and (190) would then be transcribed as (a) [káap] and (b) [kaáp], and this is the convention that I follow in all other examples.

Many nominal suffixes trigger an accent shift one syllable rightward (§2.7.2); this phenomenon operates at the same underlying level as accent assignment, so surface disyllables of the shape CVCV, CVNVCV and surface monosyllables of the shape CV₁V₁ and CV₁V₂ all show identical accent shift effects, as they are all underlyingly disyllabic. The table below illustrates accent shift with nominative forms and accusative forms marked with the accusative suffix *-na*, which shifts accent one syllable rightward.

	NOMINATIVE		ACCUSATIVE		GLOSS
	UNDERLYING	SURFACE	UNDERLYING	SURFACE	
a.	tsá.pa	tsá.pa	tsa.pá.na	tsa.pán	‘gourd bowl’
b.	kám.pa	kám.pa	kam.pá.na	kam.pán	‘ <i>pucacuru</i> ant’
c.	ká.a.pi	káap	ka.á.pi.na	kaá.pin	‘ <i>tamshi</i> vine’
d.	dá.i	dái	da.í.na	daín	‘tooth’

Table 2.22: Accent shift in accusative marked nouns

The underlying forms for all four nouns in table 2.22 show that accent shifts one syllable rightward in the accusative form, and even though the surface forms for examples (c) and (d) are monosyllabic, the effects of accent shift can be heard in the pitch contour of the complex nuclei. Example (c) is repeated below with the change in pitch contour between the nominative and accusative forms represented:

(191) a. 
 kaapi
tamshi.vine

b. 
 kaapi-na
tamshi.vine-ACC

2.7.1 Accent in verbs

2.7.1.1 Underlying accent

Some, but not all, verbal roots and suffixes have an underlying lexically-specified accent. In the surface form of a verbal word, the leftmost of these accents surfaces. If a verbal word contains no lexically-specified accent, whether in the root or a suffix, then accent falls on the root by default. The default root accent surfaces on the second vowel of underlyingly disyllabic roots, and the available evidence suggests that longer roots always have a lexically specified accent.

For example, the root *taka* ‘work’ has no lexically-specified accent, while the imperative suffix *-ta* does – so the underlying accent of the imperative suffix surfaces in the following example (in examples in this section, lexically-specified accents are marked in the morphemic forms).

- (192) [takastá]
taka-sá-tá
work-ATT-IMP
‘work!’

But when there is no accented suffix, the surface form is accented on the second vowel of the root:

- (193) [takástathai]
taka-sá-tata-ha-i
work-ATT-FUT-1SG-DECL
‘I will work’

The preceding two examples also illustrate the effects of vowel elision on verbal accent. When an accentuated vowel is elided, accent shifts to the next accent-bearing suffix, or again defaults to the root if there is no such suffix. Compare the following examples, where the accent of the ‘attenuative’ Aktionsart suffix *-sa* surfaces in (a), but not in (b) or (c):

- (194) a. [wahasá]
waha-sá
stand-ATT:SEQ+1PL:SS
‘(we) having stood...’

b. [wahastá]

waha-sá-tá
stand-ATT-IMP

‘stand (there)!’

c. [wahásmahai]

waha-sá-ma-ha-i
stand-ATT-RECPAST-1SG-DECL

‘I stood’

The contrast between otherwise homophonous accent-bearing and non-accent-bearing suffixes can produce surface minimal pairs distinguished only by accent:

(195) a. [yúwahai]

yu-a-ha-i
eat-IMPV-1SG-DECL

‘I am eating’

b. [yuwáhai]

yu-á-ha-i
eat-HIAF-1SG-DECL

‘I’m finished eating’

Verbs with inherent root accent always result in rhizotonic words, while those with no inherent root accent only surface as rhizotonic when they occur without any accent-bearing suffixes, through the application of the default rule.

2.7.1.2 Accent shift in verbs

A few suffixes and morphological combinations can trigger accent effects without actually taking the accent themselves.

The low affectedness Aktionsart suffix *-i(ni)* always puts accent on the preceding vowel:

(196) [waháita]

waha-i-tá
stand-LOAF-IMP

‘stand up!’

Negative *-tʃa* causes accent to fall on the root in all forms.

(197) a. [takasmí]

taka-sá-mí
work-ATT-HORT

‘let’s work’

b. [takástʃami]

taka-sá-tʃa-mí
work-ATT-NEG-HORT

‘let’s not work’

- (198) a. [yuwámi]
 yu-á-mí
 eat-HIAF-HORT
 ‘let’s eat’
- b. [yúwafmi]
 yu-á-tʃa-mí
 eat-HIAF-NEG-HORT
 ‘let’s not eat’

There are two elision situations in which accent shifts to a normally non-accent-bearing suffix rather than to the root. Firstly, when DR triggered by the relativiser *-u* reduces an Aktionsart suffix that would otherwise take the accent, the accent surfaces on *-u*, despite its lack of underlying accent:

- (199) [tipisú]
 tipí-sá-u
 lie.down-ATT-REL
 ‘lay down’

When such a form is followed by *-i* (short form) copula, that suffix is accented, although it too lacks an underlying accent:

- (200) [tipisuí]
 tipí-sá-u-i
 lie.down-ATT-REL-COP:3:DECL
 ‘he lay down’

Secondly, some exceptional verbs can have the accent fall on the normally non-accent-bearing suffixes ‘immediate future’ *-ta* and ‘intentional’ *-tasa / -tatus*, as in the following examples. The first person singular suffix *-ha* does not have an underlying accent, but when the intentional future suffix *-ta* has its vowel elided accent shifts to a following first singular suffix (a). The same phenomenon may allow accent to fall on the intentional subordinator *-tasa / -tatus* (b).

- (201) a. [utithái]
 uti-tá-ha-i
 fetch+LOAF-IFUT-1SG-DECL
 ‘I will fetch (it)’
- b. [minítatus]
 mini-tatus
 arrive:PFV-INTENT+3:SS
 ‘(he) intending to arrive...’

With all other suffixes, accent defaults to the root as expected:

(202) [miníttahai]

mini-tata-ha-i

arrive:PFV-FUT-1SG-DECL

‘I will arrive’

The verbs that allow such exceptional accent placement must be lexically marked exceptions, and would need to be marked as such in a dictionary.

2.7.1.3 Further considerations

Verb forms incorporating the imperfective stem are always rhizotonic, with default or lexically-defined accent on the root, as no underlyingly accented suffixes combine with the imperfective stem. In addition, the imperfective stem often surfaces with accent one syllable to the left of that in the unmarked stem. Because of the lack of morphophonological variation, it is impossible to judge whether this arises from a different lexically specified accent, a different default rule or some other cause.

Accent on borrowed Spanish verbs tends to be on the second syllable:

(203) a. [ganáthai]

gana-ta-ha-i

earn:PFV-IFUT-1SG-DECL

‘I want to earn (money)’ (< Sp. *ganar*)

b. [faltáawai]

falta-a-wa-i

be.lacking-IMPFV-3-DECL

‘it’s short’ (< Sp. *faltar*)

And note the perfective stem in the following example, showing apparent underlying root accent:

(204) [fritáta]

frita-ta

fry:PFV-IMP

‘fry it!’ (< Sp. *fritar*)

Such examples suggest that underlying accent on the second syllable of the root is the default pattern for verbs.

2.7.2 Accent in nouns and adjectives

Accent assignment in nouns and adjectives shows a different pattern from that of verbs. Only two nominal suffixes can take accent themselves (*-numa* ‘locative’ and *-utfi* ‘diminutive’), but most trigger accent shift within the stem. There is some evidence for a default accent assignment in nouns, but not enough to state with certainty, nor is accent predictable. Accent shift rules for stems of two or three underlying syllables can be clearly formulated, and accent never shifts in stems of more than four syllables; for stems of exactly four syllables, however, the data are scarce and inconclusive. The following discussion is split into two parts, the first dealing with two and three syllable stems and the second dealing with four syllable stems.

2.7.2.1 Accent shift in two and three syllable stems

Accent in disyllabic and trisyllabic nominal roots may fall on the first or second syllable. The overwhelming majority of disyllables have initial accent. In trisyllables accent generally falls on the second syllable, but initial accent is not uncommon. The only oxytonic trisyllable in my data is *akahu* [akahú] ‘shotgun’, from Sp. *arcabuz* ‘harquebus’. It is not uncommon for borrowings to be phonologically unusual (§2.9).

I have identified five patterns of accent shifting effects – the shift is always either one syllable to the right or to the suffix itself. Accent shifts operate on derived stems as well as underived roots, and some shift types are sensitive not only to the number of syllables in the stem but also to the accent position prior to shifting, and to the syllable structure (i.e. whether there are surface long vowels or diphthongs in certain positions).

1. Simple shift

The most common pattern is to shift the accent one syllable rightward in all disyllabic and trisyllabic nominal stems, as exemplified by the accusative suffix *-na*:

NOM	ACC	GLOSS
píʃak	piʃákan	‘bird’
dúku	dukún	‘mother’
wíi	wíin	‘salt’

Table 2.23: Simple accent shift

Simple shift is also triggered by the following nominal suffixes:

(205)	<i>-hu</i>	Pertensive + first person singular possessor
	<i>-hu</i>	Pertensive
	<i>-haĩ</i>	Comitative
	<i>-ia</i>	Ablative
	<i>-(n)ĩ</i>	Locative
	<i>-kI</i>	Restrictive
	<i>-fa</i>	Uncertainty
	<i>-tsu</i>	Speculative
	<i>-fa(kama)</i>	Additive
	<i>-nau</i>	Possessive

The adjectival suffix *-(t)taku* ‘partly’ also triggers such a shift: *wĩŋka* ‘blue’, *wĩŋkátaku* ‘bluish’.

2. Simple shift except in trisyllabic stems with second syllable accent

The following suffixes trigger a simple rightward shift in all disyllabic and trisyllabic stems except that when suffixed to a trisyllabic stem with second syllable accent in the unmarked form, accent surfaces on the suffix itself:

(206)	<i>-numa</i>	locative
	<i>-(a)i</i>	instrumental

With disyllables and trisyllables that show initial syllable accent in the nominative, the effect is the same as the simple shift group, and accusative marked forms are included in the following table for comparison.

NOM	ACC	INSTR	LOC	GLOSS
káya	kayán	kayái	kayánum	‘stone’
píŋak	piŋákan	piŋákai	piŋáknum	‘bird’
tŋimpúi	tŋimpuín	tŋimpuiyái	tŋimpuinúm	‘stool’
wawík	wawikún	–	wawiknúm	Wawik River

Table 2.24: Locative type shift

3. Shift in trisyllabic stems only

The second person possessor suffix *-mĩ* is unique in its accent shift properties, triggering a simple rightward shift only in 3 vowel stems, with no effect on 2 vowel stems. Examples are given with first singular possessor *-hu*, which triggers simple shift in 2 and 3 vowel nouns, for comparison.

NOM	PERT:1SG	PERT:2	GLOSS
dáwɪ	dawíŋ	dáwim	‘foot’
intáf	intaŋíŋ	intaŋím	‘hair’

Table 2.25: Shift in 3 vowel nouns only

4. Suffix always accented

The suffix *-a* ‘first’ always takes the accent itself, and is always the last suffix added. An epenthetic glide [y] is typically inserted between a stem-final /i/ and the suffix *-a*.

NOM	FIRST	GLOSS
tsúntsu	tsuntsuá	‘snail’
tʃimpúí	tʃimpuiyá	‘stool’

Table 2.26: Always accented

5. Final vowel accent

The vocative form may shift the accent to the final vowel, and suppresses apocope:

(207) a. [yatsuhú]

yatsu-hu
 brother-PERT:1SG+VOC
 ‘hey my brother!’

b. [simonká]~[simónka]

‘hey Simon!’

This accent shift is not obligatory, and is probably better considered a function of the typically shouted delivery of vocative forms. Although Payne (1990b) gives vocative forms for a variety of nouns, in practice it only appears with names and kinship terms used for address.

Shift types (4) and (5) are not limited to two and three syllable stems.

2.7.2.2 Accent shift in four syllable stems

Analysis of accent shift in four syllable stems is hampered by the difficulty in finding illustrative examples. The shift apparently only occurs in four syllable stems with paroxytonic (third syllable) accent. Since four syllable roots are rare, and nominals are not normally host to more than two suffixes, such stems are uncommon in my corpus.

suffixes: *-hu* first person pertensive, *-hu* pertensive and *-mí* second person; and the additive suffix *-fakama*. Ideally, naturally occurring data should be used for this kind of study.

2.7.2.3 Accent shift with verbalisers *-ma* and *-maí*

The verbalisers *-ma* (manipulative) and *-maí* (inchoative) also trigger accent shift in nominal stems. This can be seen in the imperfective stem of the derived verb – the unmarked stem then has the accent shifted one vowel rightwards.

NOUN	GLOSS	IMPFV	UNMARKED	GLOSS
anĩntái	‘heart’	anĩntái-ma	anĩntái-ma	‘think’
naŋki	‘spear’	naŋkí-ma	naŋki-má	‘throw’

Table 2.28: Accent shift with manipulative verbaliser *-ma*

Inchoative *-maí*, *-mí* takes the accent itself in disyllabic and trisyllabic roots, otherwise there is no shift. Verbs formed with the inchoative verbaliser do not show differing accent in different stems.

NOUN	GLOSS	IMPFV/UNMARKED	GLOSS
númi	‘wood’	numi-mí	‘become a tree’
aĩntsu	‘person’	aĩntsu-máuŋa	‘become a person’
tsíuŋatik	‘mythical bird’	tsíatik-mauŋa	‘become a <i>tsegatik</i> ’

Table 2.29: Accent shift with inchoative verbaliser *-m(a)í(a)*

2.7.2.4 No shift

The following suffixes never trigger accent shift:

- (209) *-ka* focus
-tfau negative

Some roots also appear to be lexically marked as non-shifting; in such cases it is generally possible to find evidence of historical change that explains this. For example, *tawás* ‘feather crown’ does not shift accent: the accusative form is *tawásan*. We see that in the other Jivaroan languages, it appears as *tawásapV*, a four syllable stem which does not shift when accusative is added. Similarly, *paámpa* ‘plantain’ does not undergo apocope or

accent shift, and it appears to be cognate with a form *paántama* in the other languages. Another possibility is that a historically long vowel has been shortened, as in *tsanimpa* ‘manioc plant’, with surface nominative form *tsaním* and accusative form *tsanímpan*, lacking the expected shift – both Payne (1990b) and Wipio (1996) give this word with a long /i/.

2.7.3 Summary of accent

Accent in verbs has been shown to be largely predictable, based on underlying accents in roots and suffixes (with the caveat that root accent in imperfective stems is obscure). Assuming that nominals are like verbs in having potentially more than one underlying accent in a morphologically complex form, of which the leftmost surfaces, the conclusion is that trisyllabic roots with second syllable accent in the nominative actually have no inherent accent, as these forms surface with accent on locative *-numa* and instrumental *-ai*, both of which must have underlying accent.

This means that disyllabic roots all have lexically-specified underlying accent, as do trisyllabic roots with initial accent in the nominative.⁴⁴

2.8 Phonological word

The phonological word in Aguaruna can be readily identified by phonotactic means. The first two criteria are the most important phonotactic cues, and are properties of all words:

1. There is one primary accent per word
2. There is potential for pause between words

The following criteria are also relevant, although their effects are apparent only in a subset of phonological words:

3. Minimum word of two phonological syllables (§2.5.2.1)

⁴⁴ Payne (1990b:180) agrees that the default accent position is the second syllable in nouns and adjectives (note that for Payne, mora=vowel): “[T]he basic pattern of accent assignment on Aguaruna substantives assigns high pitch to the second mora from the beginning of the word. Certain exceptions have lexically marked accents on the first or third moras.”

4. Word boundary blocks nasal spreading (§2.4)
5. No *Va* diphthongs in initial phonetic syllable in careful speech (§2.3.1)
6. Restriction on word-initial [uɟ] (§2.3.2)

Aguaruna is an agglutinating language, and almost entirely suffixing. From the data available, it appears that there is almost complete overlap between grammatical and phonological word, that is, almost every morpheme either forms an independent phonological word, or is affixed to a stem and forms part of a larger phonological word.

The only examples of mismatch are: reduplication (§2.8.1), where two phonological words represent one grammatical word; compound nouns (§2.8.2), which may fuse into a single phonological word; and postposed pro-forms functioning as relativisers (§2.8.3), which may be also fuse into a single phonological word.

The issue of cliticisation is a difficult one, as phonological, syntactic and semantic criteria do not agree (§2.8.3).

2.8.1 Reduplication

The process of partial reduplication consists of copying and preposing the first phonetic syllable and the onset and nucleus – but not the coda – of the second phonetic syllable. The reduplicated material forms a separate phonological word, with an accent of its own. By far the most common occurrence of reduplication is in subordinate verbs formed with the repetitive suffix *-kawa*, which always involves reduplication.

(210) [ásu asutínakũã]

asu asuti-ina-kawã
 REDUP hit-PL:IMPFV-REP+3:SS
 ‘hitting and hitting’ (6:2:83)

Where reduplication applies to a morphologically complex word, the reduplicated element consists of the first two syllables of the root, plus any material forming part of a diphthong with the second syllable; a consonantal coda on the second phonetic syllable is not included in the reduplicated element:

REDUP = [σ.(C)V₀]

Where the second syllable must be part of the root.

(211) [pam.pái pam.pái.na.kũã]

pampai pampa-ina-kawã
REDUP discuss-PL:IMPFV-REP+3:SS

‘(as they were) discussing and discussing...’

Here we have a disyllabic verb root /pampa/, but the /i/ of the plural imperfective suffix is included in the reduplicated material. This can be explained by the rules given above for collapsing vowel sequences into single syllable nuclei. In this case, the /i/ is resyllabified into the second syllable of the word, so the first two phonetic syllables are [pam.pai]; and these two syllables form the REDUP element.

A coda on the second phonetic syllable never forms part of the REDUP element; compare (212) below, where the REDUP element is not **[awán]; also example (213), where the reduplicated element is not **[búut]:

(212) [a.wá a.wán.ta.kũã]

awa awanta-a-kawã
REDUP fan.fire-IMPFV-REP+3:SS

‘fanning and fanning (the fire)’ (6:2:55)

If the surface form of the verb root has fewer than two phonetic syllables, then the reduplicated element will also be monosyllabic:

(213) [búu búut.kã.ũã]

buu buuta-kawã
REDUP cry+IMPFV-REPET+3:SS

‘crying and crying’

Reduplication is less productive in non-verbal words. The nominal suffix *-ima* ‘even’ (probably < *ima* ‘so much’) is always accompanied by partial reduplication, following the same principles as described above. In the following example the root *nuwa* ‘woman’ is reduplicated as [nuwai], including the /i/ of the suffix *-ima* ‘even’:

(214) [nuwái nuwáima ipámatuã]

nuwai nuwa-ima ipama-tu-ã
REDUP woman-EVEN invite-APPLIC-HIAF:SEQ+3:SS

‘having invited even the women...’ (4:2:31)

The same partial reduplication in numerals gives a distributive meaning:

- (215) *maki makitʃiki*
 REDUP one
 ‘one each’

2.8.2 Compound nouns

The two elements of a compound noun form a single grammatical word. Typically, compounds comprise two phonological words, but may fuse into one. Some freely vary, depending on factors such as speed of speech:

- (216) [*íkamỹãwãã*]~[*íkam ỹãwãã*]
ikama yawaã
 forest dog
 ‘jaguar’

Many names of flora and fauna, as well as toponyms, are historically fused compounds. An illustrative example is *Bakants*, a community in Imaza district, historically from *baka* (< Sp. *vaca*) ‘cow’ + *#ntsa* ‘stream’ – so the name could be translated as ‘Cow Creek’. The personal name *Jempets* [*hímpis*] also ultimately arises from a toponymic compound *h#mpí* ‘hummingbird’ + *#ntsa* ‘stream’ (cf. Jijón y Caamaño 1919:388ff, following Beuchat & Rivet 1909, 1910). Of similar note are the many plant names ending in /numi/ < *numi* ‘wood, tree’.

Compounds show some phonological dependency even when they appear as two phonological words. Consider example (217):

- (217) [*kãỹũk wákam*]
kãyuka wakampí
agouti macambo
 ‘variety of macambo fruit’

The form is pronounced as two phonological words, each carrying an accent. But the noun *wakampí* in isolation has second vowel accent: [*wakám*]. There is a rule for assigning the two accents to a compound: the first element surfaces with its usual nominative form, and the second element has initial accent, regardless of its accent in isolation. When the compound fuses into a single phonological word, only the leftmost accent surfaces (example 216).

When the compound takes accusative case, accent is not shifted:

(218) [káỹũk wákampin]

kāyuka wakampi-na
agouti macambo-ACC

‘variety of macambo fruit (accusative form)’

This suggests that the whole compound is being treated as a single phonological word, so that accent shift does not apply because it is greater than four syllables.

The accent assignment rules show that there is some phonological fusion in all compounds, but there are still two accents, and apocope applies as if they are two words: so *añtsu tʃápi* (person palm.species) ‘variety of palm’ surfaces as [ańts tʃápi], with the final /i/ intact, where we would expect apocope of the final /i/ if the compound formed a single phonological word.

Further details on the formation of compound nouns is in §3.7.

2.8.3 Clitic versus affix

Morphemes in Aguaruna may be free or bound. Free morphemes can by definition stand alone as independent phonological and grammatical words. Bound morphemes must form part of a phonological word that is headed by a free morpheme, that is, a lexical root. Bound morphemes have a range of properties, and there are four parameters by which one could potentially distinguish types of bound morphemes in Aguaruna: phonological effects, syntactic scope, selectivity, and ordering with respect to other bound morphemes.

Phonological effects, as has been shown above (§2.6), vary widely between bound morphemes but do not provide any major diagnostic criterion for distinguishing types. Ordering is potentially relevant, inasmuch as one would expect that those bound morphemes that appear closer to the root would be affixes, and those further from the root to be clitics. Aikhenvald (2002b) shows that this is not a strong test, however, as languages such as Tariana and Portuguese, with a well-defined distinction between affix and clitic, can show the inverse order to that expected. The most useful diagnostic tools, then, are syntactic scope and selectivity.

Aikhenvald (2002b: 43) gives a list of properties of clitics, of which the following are potentially relevant to Aguaruna:

A. Selectivity

C. Type of host

L. Syntactic scope

Certain phonological properties suggest differing levels of phonological cohesion, for example, some case suffixes trigger the combining form of pronominal roots while others do not.

At the syntactic level, case-markers all operate at the level of the NP rather than the word, so these could be called fixed-position clitics with phrasal scope – but note that there is still some level of selectivity, as they appear only on nouns, pronouns and adjectives, never quantifiers.

Mood markers operate at the level of the clause. They are typically bound to verbs, although one, polar interrogative *-ka*, may appear bound to some other constituent.

Discourse-level morphemes are less selective, appearing on verbs and adverbs as well as nouns; they typically have phrasal scope, at least with NPs. Some moods/modalities trigger marking on constituents, these markers are also low in selectivity and have phrasal scope.

The table below illustrates a few properties of bound morphemes:

PROPERTIES	Case markers	Focus <i>-ka</i>	Additive <i>-fa(kama)</i>
Triggers accent shift	✓	–	✓
May be suffixed to N and V	–	✓	✓
Triggers combining form	✓	–	–

Table 2.30: Potential criteria for distinguishing suffix and enclitic

So there are six subtypes of potential “clitics”:

MORPHEMES	TYPE	POSSIBLE HOSTS	SYNTACTIC SCOPE	PHONOLOGICAL EFFECTS
Case markers	Fixed position – final element of NP	Noun, adjective or pronoun	Phrase	Trigger combining form of singular SAP pronouns
Mood/modality markers type (i)	Floating	NP, adverb, subordinate clause	Phrase/constituent	–
Mood/modality markers (ii)	Floating	verb, NP, adverb, subordinate clause	Phrase/constituent	–
Polar interrogative	Floating	verb (may be either verb in complex predicate), NP	Clause	–
Discourse markers	Floating	NP, adverb, subordinate clause	Phrase/constituent	–
Negative relativiser	Floating	Noun, adjective, verb	Phrase/constituent	–

Table 2.31: “Clitic” types

The only relevant property is selectivity: “Relative selectivity is one of the scalarly defined parameters in determining which morphemes are clitics in a particular language.” (Aikhenvald 2002b: 45). Given that this is a scalarly defined distinction, rather than a binary one, it is of very little value for Aguaruna to say of a given bound morpheme that it is a clitic or an affix. I therefore refer to them all as suffixes – it should be borne in mind that this term is to be read as ‘bound morpheme’.

A description will need to state, for every bound morpheme, properties such as (1) what hosts it can take; (2) what is its ordering with respect to other bound morphemes; and (3) what is its syntactic scope. Labelling any or all of the bound morphemes that show lower selectivity or wider scope ‘clitics’ does not capture any significant generalisation, and in fact obscures the fact that bound morphemes form a natural grouping in opposition to roots. And given that the cross-linguistic validity of the class of clitics is moot (Joseph 2002), there is no call to use the term for Aguaruna.

There is one distinction worth capturing, that of encliticised relativisers (§2.8.4), since they are potentially free morphemes that appear phonologically bound under certain syntactic conditions. The fact that these morphemes may appear as separate phonological words sets them apart from the bound morphemes.

2.8.4 Encliticisation of relativisers

The demonstrative pronouns *hu* (proximal) and *au* (distal), the anaphoric pronoun *nu*, and forms derived from the intensifier *ima* ‘so much’ may function as relativisers, in which role they directly follow a predicate which is unmarked for mood. The postposed relativiser may form a single phonological word with the predicate; in that case the relativiser carries the primary accent, but a secondary accent is also noticeable in the same position as the underlying accent of the host.

(219)[ĩwãntʃianúu]~[ĩwãntʃia núu]

ĩwantʃi-a = nu

devil-COP:3=ANARel

‘that which is the devil’

This is a ‘simple clitic’, as the clitic can also stand as an independent word.

Although the actual phonological realisation varies, for the sake of consistency all postposed relativisers are transcribed as enclitics in the examples given. See §5.4 for a full description of relativisation.

2.8.5 Interjections

Some members of the class of interjections do not fit into the usual phonological system. The following four interjections violate the minimum word requirement described in §2.5.2.1:

- (220) a. [tʃak̚] ‘boundary marker’ in narratives
b. [waʔ] surprise
c. [hiʔ] surprise
d. [maʔ]~[máa] hesitation

The glottal stop appears in five of eighteen interjections, but in only three full lexemes, all nouns (see §2.2.2). A full list of conventionalised interjections is in §3.8.2.

2.9 Phonology of loans

Older Spanish loans are adjusted to Aguaruna phonology: *aanʃksía* [aanʃsía] < Sp. *anzuelo* ‘fishhook’; *akahu* [akahú] ‘shotgun’ < Sp. *arcabuz* ‘harquebus’; *matʃita* [bátʃit] < Sp. *machete*. Since the mid-1950’s, with the establishment of the bilingual education

system, Spanish names have become common, and Spanish and Aguaruna phonology basically coexist. Spanish words such as *grabadora* ‘tape recorder’, *bala* ‘bullet, cartridge’, *jugador* ‘player (on a sports team)’ are pronounced as in Spanish, even when they take Aguaruna morphology. Accent shift triggered by nominal suffixes applies to older loans (as in 221) and some newer ones (for example *bala* ‘bullet, cartridge’ undergoes shift), but *ad hoc* Spanish lexical items do not undergo accent shift (222).

- | | |
|-------------------|---------------|
| (221) a. [bátʃit] | b. [batʃítan] |
| batʃita | batʃita-na |
| ‘machete’ | machete-ACC |
| (222) a. [tígre] | b. [tígren] |
| tigre | tigre-na |
| ‘jaguar’ | jaguar-ACC |

Verb roots too are occasionally borrowed: *fritáta* ‘fry it!’, with Spanish *frita* ‘fry’ followed by the native imperative suffix *-ta*; *faltáwai* ‘it’s not enough’, with Spanish *falta* ‘lack, be short’ followed by native third person subject *-wa* and declarative *-i*.

Loans from Quechua are adjusted to fit Aguaruna phonology, for example *yaakata* [yáakat] < Qu. *llaqta* ‘town’; *piʃaka* [píʃak] < Qu. *pishcu*. Note especially the insertion of vowels to fit the underlying (C)V(N) syllable pattern of Aguaruna.

In addition to new Spanish loans which contain many phonemes and consonant clusters that are impossible in native phonology, two older loans show some more subtle phonological oddities: *piʃaka* ‘bird’ (from Quechua) can surface with a [kk] cluster when suffixed with a /k/ initial suffix (§2.5.5.2); and *akahu* [akahú] ‘shotgun’ (< Sp. *arcabuz*) is the only example of a trisyllable with oxytonic accent (§2.7.2).

Further evidence that even the oldest identifiable loans are not completely integrated comes from their grammatical properties, in particular the fact that they may be ambiguous as to word-class membership (see §3.12). Further comparative investigation may well show that other apparently irregular words are actually historical loans from other languages.

Chapter 3: Word Classes

3.1 Introduction

Aguaruna has major open word classes verb, noun and adjective. Adjectives are very similar to nouns in their morphology and distribution, but can be distinguished by various morphological and syntactic tests (§3.4). Minor word classes are personal and demonstrative pronouns; numerals; quantifiers; adverbs, with the subgroups manner, time, and location; a rich set of sound-symbolic words that are morphologically and syntactically a subset of the manner adverbs; a set of discourse particles that indicate speaker attitude; and interjections. The status of interjections as words is marginal; they run through a continuum from more conventionalised words to involuntary vocalisations and often do not fit the standard phonology. Interrogative words are all members of other classes but share certain semantic and morphosyntactic properties. There are no true coordinators, but the discourse particle *tuhã* ‘but’ may function as a contrastive conjunction (§12.3.1), and the interjection *atsa* ‘no’ may function as a disjunction (§12.3.2).

The purpose of this chapter is to define the word classes of Aguaruna, along with their subclasses, and justify the distinctions on a language-internal basis. A full description of the morphology and syntax of nouns (and as much as is shared with pronouns, demonstratives and adjectives) will be found in Chapters 4 and 5. Verbal morphology is covered in Chapters 6 to 10. The morphology of major word classes is briefly covered in this chapter where it is relevant to the definitions; minor word classes receive full treatment here. Section §3.11 gives an overview of word-class-changing derivation.

3.1.1 Overview of functional slots

Table 3.1 below summarises the functional slots that can be filled by the main word classes.

	VERB	NOUN	PRONOUN	DEM	ADJECTIVE	ADVERB
Core or oblique argument	–	✓	✓	✓	–	–
Equative clause complement	–	✓	✓	✓	✓	–
Head of predicate	✓	limited	–	–	limited	–
Head of NP	–	✓	✓	✓	–	–
Possessum in NP	–	✓	–	–	some	–
Possessor in NP	–	✓	✓	✓	–	–
Modifier in NP	–	some	–	✓	✓	some
Modifier of a verb	–	–	–	–	–	✓

Table 3.1: Word classes and functional slots

Croft (1991) recognises three basic syntactic functions in any language: **reference**, **modification** and **predication**. These are mapped to semantic classes **objects**, **properties** and **actions**. Aguaruna has three major word classes, corresponding to the three major functions:

WORD CLASS	FUNCTION
Noun	Naming entities and concepts
Verb	Predicating events and states
Adjective	Ascribing properties or qualities

Table 3.2: Major word classes

Aguaruna verbs are readily distinguished from all other classes, but nouns and adjectives are very similar, at least on the surface (Corbera 1994: 165; and cf. Jespersen 1958[1924]: 72ff.). The distinction must be drawn on grammatical grounds, however the grammatical differences between the adjective and the noun class are rather subtle, and only emerge clearly if one begins with a semantic and functional approach.

3.1.2 Class-crossing words

A small group of words function in more than one class, with various changes in meaning depending on the function.

WORD	NOUN	MODIFIER OF				
		NP	ADJ	ADV	VERBAL PREDICATE	VERBLESS PREDICATE
ima (§3.4.4.3)	–	‘only’ (+ RESTR)	‘more’	‘more’	–	–
ʃiha (§3.4.4.1)	–	–	‘very’	‘very’	‘well’	‘very’
sintʃi (§3.4.4.2)	‘strength’	–	‘too’	–	‘strongly’, ‘hard’	–
afi (§5.2.4)	–	‘all’	–	–	‘all’, ‘completely’	–
maĩ (§5.2.4)	–	‘both’	–	–	‘on both sides’ etc.	–
tuki (§5.2.5)	–	‘just like’	–	–	‘always’	–

Table 3.3: Class-crossing words

The common pattern is for such words to function as NP operators (§5.2) or clause-level adverbs (§3.7). Just one of these words can function as a member of a major word class: *sintʃi* means ‘strength’ as a noun. Two of these words, *ima* and *sintʃi*, may be borrowings from Quechua. All such class-crossing words are discussed in the sections appropriate to each use and cross-referenced. Crossing between major word classes (e.g. noun to adjective) is treated as class-changing derivation and discussed in §3.11.

3.2 Verb

Verbs function as predicates within a clause. Nouns and adjectives can function predicatively in equative/attributive clauses, but such clauses are restricted in their TAM possibilities. Verbs are primarily defined morphologically: they are obligatorily inflected for tense, mood, aspect, number, person OR subordinate functions. The only possibility of bare verb roots is directly preceding an inflected auxiliary verb, and in that case the two form a single complex predicate. A few suffixes are shared between nouns and subordinate verbs.

3.2.1 Transitivity

Underived verbs may be intransitive or transitive, and there are three underived ditransitive verbs, that take two accusative-marked objects in addition to the subject, and three copula verbs, that take two nominative-marked arguments. A few intransitive verbs can function as copulas in some equative and attributive clauses. There is just one attested S=O ambitransitive verb, *śa* ‘bite O’ or ‘burn oneself’; however the potential suffix makes all transitive verbs S=O ambitransitive. See §11.4 for a full discussion of transitivity.

There is no true passivisation, and nominalisation, relativisation and switch-reference operate on a subject/non-subject basis, applying readily to transitive, ditransitive and intransitive verbs (Chapter 10). Similarly, the two objects of ditransitive verbs are equal with respect to case-marking (§4.6.2, §11.3.2), relativisation and nominalisation (Chapter 10) and switch-reference (§9.5). The same observation holds for all objects of verbs that have undergone valency-increasing derivation such as applicativisation (§11.4.4).

In addition to the subject, speech act participant objects are indexed on transitive verbs, but third-person objects are never marked on the verb. Only one object may be marked on a verb, and evidence from both naturally occurring and elicited data suggests that only one SAP grammatical object may appear in a clause. A subtle distinction between the two types of object (O and E) can be discerned in verbal object marking – see §11.3.2.

Because of the lack of third-person object marking and the possibility of NP ellipsis, transitivity can be difficult to determine in any given example. The distinction is a robust one, however, as shown in general by the existence of valency-affecting suffixes, and it can be tested for any given verb simply by checking whether it can license accusative-marked objects. Grammatical relations are discussed fully in §11.3.

TYPE	NUMBER	EXAMPLES
Transitive	about 66%	<i>awatu</i> ‘hit’, <i>yu</i> ‘eat’, <i>kitama</i> ‘be thirsty for’
Intransitive	about 33%	<i>wi</i> ‘go’, <i>pakihina</i> ‘fall in love’
Ditransitive	3	<i>su</i> ‘give O to E’, <i>naŋki</i> ‘throw O at E’, <i>siuŋa</i> ‘ask E for O’
Copula	3	<i>a</i> ‘be’, <i>dikapi</i> ‘feel’, <i>nahani</i> ‘become’

Table 3.4: Transitivity classes of verbs

Transitive verbs are the most common type, outnumbering intransitives by a ratio of about 2:1 in text counts (note that this is a count of distinct lexemes in a text, not tokens).

Valency increasing derivation is productive and common, while valency decreasing derivation other than reflexive and reciprocal is unproductive – see §§7.4 – 7.5.

3.2.2 Existential *a* and copula *a*

Two irregular verbs are homophonous, having the root *a*. They are probably historically related, but synchronically quite distinct. The existential verb *a* ‘exist’ is intransitive, taking just an S argument. Existential *a* never takes the imperfective suffixes *-a* (singular) or *-ina* (plural), and it has a suppletive plural S form *aya* ‘exist:PL’.

Copula *a* is restricted to subordinate clauses and finite clauses that are not present tense declarative, polar interrogative or tag questions – in those clause types the copula complement is marked with the copula suffix (§4.10).

The following differences distinguish existential *a* from copula *a*:

1. Suppletive plural S root *aya* (exist:PL) for existential, regular plural *a-ina* (COP-PL:IMPFV) for copula
2. TAM restrictions (mentioned above) on copula but not existential
3. Negation is marked on the copula complement with the nominal suffix *-tʃau* (§0) in copular clauses (a), but with the suppletive negative existential verb *atsu* ‘exist:NEG’ (§7.7.1) in existential clauses (b):

- (1) a. *wíka yãwããtʃuithai*

[wi-ka] [yawaã-tʃau-ita-ha-i]
 [1SG-FOC]_{CS} [dog-NEG-COP-1SG-DECL]_{CC}

‘I am not a dog’

- b. *yúmi atsáwai*

yumi atsa-wa-i
 water exist:NEG+IMPFV-3-DECL

‘there’s no water’

4. Interrogation is marked with nominal suffixes in copular clauses (a), but with verbal suffixes in existential clauses (b):

- (2) a. *húfa nihám̃tʃikait*
 [hu-ʃa] [nihamantʃi-ka-ita]
 [PRX-UNCERT]_{CS} [*masato*-POLINT-COP:3:INT]_{CC}
 ‘is this *masato* (manioc beer)?’
- b. *nihamá̃ʃ áwak*
nihamantʃi a-wa-ka
masato exist-3-POLINT
 ‘is there any *masato*?’

Copula *a* has a suppletive subordinate form *asa* which is used for both non-temporal and sequential subordinate clauses. It is always treated morphologically as a perfective stem, so takes sequential suffixes which differ from non-temporal subordinate suffixes in DS clauses (§9.4).

The verbs *waha* ‘stand’ and *huwa* ‘remain’ may also function as copulas, as in the following examples:

- (3) *iiniá kakáktʃau wahasuí*
 [iinia] [kaka-ka-tʃau] waha-sa-u-ai
 [one.of.us]_{CS} [be.strong-INTS-NEG:REL]_{CC} stand-ATT-REL-COP:3:DECL
 ‘our people were not strong’ (6:8:21)
- (4) *wíi wákí b́isimaŋ huwáktathai*
 [wi] [waki_bisimaŋ] huwa-ka-tata-ha-i
 [1SG]_{CS} [sad]_{CC} stay-INTS-FUT-1SG-DECL
 ‘I will be sad’

The grammatical properties of copular and equative/attributive clauses are described in §§11.4.5 – 11.4.6.

3.2.3 Inherent plurality in verbs

A subclass of verb roots are inherently specified for plurality. That is, there are pairs of verbs that have the same meaning except that one requires plural S (if intransitive) or O (if transitive). The plural argument is always S or O, never A – cf. Dixon (1994:55).

The following tables give examples of some intransitive and transitive plural verbs, and their non-plural counterparts.

NON-PLURAL S	PLURAL S	GLOSS
puhu	batsa	‘live’, ‘be’
wi	aʃina	‘go’

Table 3.5: Number specifying intransitive verb roots

NON-PLURAL O	PLURAL O	GLOSS
mau	amu	‘kill’
apuhu ⁴⁵	tʃimpi	‘put’

Table 3.6: Number specifying transitive verb roots

These are not suppletive roots: verbal number marking is always optional in Aguaruna, and the non-plural roots can refer to singular or plural S or O participants, as in the following example where a non-plural intransitive root takes plural subject marking:

- (5) yúwak puhúinawai
 yu-a-kũ puhu-ina-wa-i
 eat-IMPV-SIM+3:SS live-PL:IMPV-3-DECL
 ‘they are eating’

There may be more to the distinction than number: *amu* ‘kill (plural O)’ could be better translated as ‘finish off’ (it is typically translated by native Aguaruna speakers with the Spanish verb *terminar*) – the choice is similar to the English verbs ‘kill’ / ‘massacre’, of which the second must have a plural object, but the first may have singular or plural. The Aguaruna verb *amu* ‘finish off’ can also take food or drink as object, e.g. *amu-ka-ta* (finish.off-INTS-IMP) ‘finish (the food) up!’, showing that it differs semantically from *mau* ‘kill’ in more than just number.

3.2.4 Verb conjugations

Verbs fall into three conjugations based on phonological changes between the unmarked, imperfective and perfective stems; the conjugation of any verb must be learned as part of its lexical form. Verbs can also be divided into two classes based on which allomorph of the applicative and first singular object suffixes they select (*-hu* or *-tu*). This

⁴⁵ < a-puhu (CAUS-live)

selection is, as far as I can tell, entirely lexically determined. The two ways of grouping verbs (conjugations and *-hu / -tu* verbs) are independent of each other.

Because these classes relate to morphological processes, they are described in the verbal morphology chapters: conjugations based on stem vowel alternations in §6.3, and classes based on applicative/first singular object suffix in §7.6.

3.3 Noun

Nouns take suffixes marking case and possession relations. A number of these suffixes are shared with adjectives, pronouns and adverbs, but only nouns can take the pertensive suffix and its associated person markers, and only proper nouns have vocative forms.

Nouns may form endocentric compounds: only nouns enter into such compounds, with the exception of four adjective-noun compounds – see §3.3.7.1.

There is no synthetic number marking on nouns. In addition to cues available from verbal morphology, there are two strategies available to explicitly mark number within an NP: a noun can be modified with a numeral, or a relativised plural form of the copula *a-ina-u* (COP-PL:IMPFV-REL) may modify the noun; functionally this is a plural marker.

Syntactically, nouns typically head NPs, a property shared with pronouns and nominal demonstratives. A few human nouns may also modify a head noun within an NP.

3.3.1 Gender

There is no grammatical gender in Aguaruna, but some kinship terms (§3.3.5 below) and five other nouns specify natural gender as part of their meaning. Four of these nouns form pairs: ‘woman’ – ‘man’ and ‘sow’ – ‘boar’; but ‘rooster’ has no logical opposing term meaning ‘hen’ – the latter can only be expressed by the non-gender-specific *atafu* ‘chicken’. Table 3.7 is an exhaustive list of inherently gendered (non kinship) nouns in my data.

FEMALE FORM		MALE FORM	
nuwa	‘woman’	aiʃmaŋku	‘man’
ʃaŋkai	‘sow’	sukisiki ⁴⁶	‘boar’
–		ãyumpa	‘rooster’

Table 3.7: Inherently gendered nouns

Where a noun denoting a naturally gendered being is not gender-differentiable, it can be modified with the word *nuwa* ‘woman’ or *aiʃmaŋku* ‘man’ to specify female and male, respectively.

- (6) a. útʃi núwa
 útʃi nuwa
 child woman
 ‘girl’
- b. útʃi áiʃmaŋ
 útʃi aiʃmaŋku
 child man
 ‘boy’
- (7) a. míʃu núwa
 míʃu nuwa
 cat woman
 ‘female cat’
- b. míʃu áiʃmaŋ
 míʃu aiʃmaŋku
 cat man
 ‘male cat’

Corbera (1994:137) mentions that in the case of birds, the terms used are *nuwa* ‘woman’ and *ãyumpa* ‘rooster’:

- (8) a. báʃu núwa
 baʃu nuwa
 curassow woman
 ‘female curassow’
- b. báʃu áyũm
 baʃu ãyumpa
 curassow rooster
 ‘male curassow’

The native speakers I worked with rejected this, however, asserting instead that the correct form for ‘male curassow’ is *baʃu aiʃmaŋku* (‘curassow man’), while the term *ãyumpa* is exclusively used with the meaning ‘rooster’.

⁴⁶ Perhaps derived from *suki* ‘scrotum, testicles’

3.3.2 Nominal possession classes

There are two major subclasses of nouns in Aguaruna, based on their marking in possessive constructions: suffixing nouns take the pertensive suffix *-hu* and a suffix indicating the person of the possessor, while vowel-changing nouns only need the person suffix, and some undergo apophony in the final syllable of the root. The distinction has some overlap with alienable versus inalienable possession, as vowel-changing nouns cover almost all body parts, some kinship terms and a few other nouns ('house', for example) and suffixing nouns cover everything else. There are three obligatorily possessed nouns: *duku* 'mother' and *apa* 'father' both imply second person possessor if used without any pertensive marking (§3.3.5.1), and *yatfi* 'brother (of ♂)' implies third person possessor, while the partially suppletive root *yatsu* is used with first and second person possessors. Any other noun can readily be used outside of a possessive construction. See §4.4 for details.

3.3.3 Loans from Spanish

Non-nativised loans from Spanish are distinguished phonologically and morphologically from native vocabulary. Older loans are nativised and take regular morphology, as in example (9) – note in particular the native pattern of accent shift when the accusative suffix is added:

- (9) a. [bátʃit]
batʃita
'machete' < Sp. *machete*
- b. [batʃítan]
batʃita-na
machete-ACC

More recent loans retain Spanish pronunciation and, to some extent, morphology. In example (10) the Spanish noun *jugador* 'player' has Spanish plural marking, and is also marked as plural by the Aguaruna plural marker *ainau*.

- (10) huyaðóres áinau
 [huyaðóres a-ina-u]
 [player.PL COP-PL:IMPFV-REL]
 ‘players’

Further discussion is in §3.12.

3.3.4 Proper names

Proper names form a class based on syntactic restrictions, as they cannot be modified, nor can they be possessed. Traditional Aguaruna names are often regular nouns such as names for animals or common cultural artifacts, as in (11). Nicknames are common, and these follow the traditional pattern.

- (11) a. tihɨkás
 tihɨkasa
 ‘decorative ribbon / female name (*Tijigkas*)’
- b. tihɨsán
 tihɨkasa-na
Tijigkas-ACC

Nowadays most names are Spanish, and follow the same pattern as other recent borrowings, in particular retention of Spanish phonology. One nativising phenomenon is in vocative forms, which are marked by suppression of apocope and accent shift to the final vowel. Many Spanish names end in a consonant, and in such cases, a final vowel /a/ is added, as in (12).

- (12) aβelá
Abel.VOC
 ‘Abel!’

Traditional Aguaruna personal names are mostly used nowadays as surnames and nicknames. When the Peruvian naming system (given name, paternal surname, maternal surname) was first introduced to Aguaruna communities, people took their father’s name as their first (paternal) surname and mother’s name as second (maternal). These surnames are now passed on in the standard hispanic pattern. As a result, the traditional Aguaruna women’s names dropped out of use as surnames after the first generation, and all modern native surnames come from traditional men’s names.

All proper names, including those borrowed from Spanish, can take all case markers but they cannot take pertensive morphology, that is, they cannot be possessed.

Proper names show a distinctive behaviour in NPs, where they can follow the head in modifier position but do not take case morphology, which typically appears on the final element of an NP. This is described and illustrated in §5.6.

3.3.5 Kinship terms

Kinship terms are the only nouns that can take both vocative and pertensive marking –often both at once – as in (13), where vocative is signalled by suppression of apocope and accent shift.

- (13) *yatsuhú*
 yatsu-hu
 brother-PERT:1SG+VOC
 ‘my brother!’

Interlocutors are typically addressed by a kinship term appropriate to their generation and gender, whether blood relatives or not.

Some kinship terms are inherently gendered, and the three terms for siblings depend upon the gender of both siblings in the relationship: the relation between siblings of opposite sex is expressed by the term *uma*; that between two males by *yatsu* (with first or second person possessor) or *yatʃi* (with third-person possessor); and that between two females by *kai*. The terms are reciprocal: any two siblings address one another using the same word.

	MALE	FEMALE
MALE	yatsu / yatʃi	uma
FEMALE	uma	kai

Table 3.8: Gender-based terms for siblings

A similar pattern holds for siblings-in-law:

	MALE	FEMALE
MALE	sai	wahi / antsu
FEMALE	wahi / antsu	yuwa

Table 3.9: Gender-based terms for siblings-in-law

The sibling terms also cover parallel cousins, while the sibling-in-law terms cover cross cousins. *wahĩ* refers to an opposite-sex spouse of a same-sex sibling, while *antsu* refers to a cross cousin of the opposite sex – potential marriage partners for men and unmarried women.

Table 3.10 lists the other gendered kinship terms:

RELATION	MALE	FEMALE
Grandparent ⁴⁷	apatʃi	dukutʃi
Parent or parent’s same-sex sibling	apa	duku
Parent-in-law	wiʉqa	tsatsa
Child	utʃi	nawanta
Son of ♂’s brother (<i>yatsu/yatʃĩ</i>)	utʃinu	-
Child of sibling-in-law or cross-cousin ⁴⁸	ahiku	nuwasu

Table 3.10: Gendered kinship terms

Non-gender-specific kinship terms are *awĩ* ‘child of opposite-sex sibling’ (i.e. *uma* from table 3.8) OR ‘spouse of child’; and *tihanʃki* ‘grandchild’.

Because of the breakdown of traditional marriage patterns and replacement of kinship terms with borrowed Spanish terms, many traditional kinship nouns appear to be falling into disuse in contemporary Aguaruna.

3.3.5.1 *apa* ‘father’ and *duku* ‘mother’

The words *apa* ‘father’ and *duku* ‘mother’ form a subclass based on (A) irregular pertensive marking; and (B) irregular vocative forms.

A Irregular pertensive marking

When the possessor is second person, these nouns take no pertensive morphology. In all other persons, they behave morphologically as regular alienably possessed nouns.

⁴⁷ The terms for grandparents are decomposable as *apa-utʃi* (father-DIM) and *duku-utʃi* (mother-DIM).

⁴⁸ Neither of these terms is commonly used in Wawik, according to my consultants.

- (14) a. ámina ápa
 [ami-na apa]
 [2SG-ACC father:PERT:2]
 ‘your (sg) father’
- b. atúmi ápa
 [atumi apa]
 [2PL+GEN father:PERT:2]
 ‘your (pl) father’
- c. mína apáŋ
 [mi-na apa-hu]
 [1SG-ACC father-PERT:1SG]
 ‘my father’
- d. áuna apahí
 [au-na apa-hĩ]
 [DST-ACC father-PERT:1PL/3]
 ‘his/her father’

The second-person forms are not deficient in other morphology, as in the following example where the second-person possessed noun *apa* ‘father’ takes accusative case:

- (15) ámina apán wainkámhai
 [ami-na apa-na] waina-ka-ma-ha-i
 [2SG-ACC father:PERT:2-ACC] see-INTS-RECPAST-1SG-DECL
 ‘I saw your father’

B Irregular vocative forms

These two nouns do not take regular vocative marking, instead adding the suffix *-wa*. Accent is typically shifted to the final vowel, as with other vocative forms.

- (16) a. apawá
 apa-wa
 father-VOC
 ‘father!’

- b. dukuwá
 duku-wa
 mother-VOC
 ‘mother!’

3.3.6 Locational nouns

Nouns with inherent locational meaning can take the ablative suffix *-ia* directly, while other nouns must have the locative suffix *-numa* added first – see examples in §4.6.6.

Locational nouns also function as oblique constituents of motion verbs without taking the locative suffix:

- (17) líma wítathai
 lima wi-tata-ha-i
 Lima go:PFV-FUT-1SG-DECL
 ‘I will go to Lima’

In §11.4.1.3, an example is given of an unmarked pronoun functioning as the locational argument of the verb *wí* ‘go’, suggesting that this behaviour could be a property of motion verbs rather than locational nouns. Further tests and more data are required to determine precisely what conditions the appearance of unmarked locational NPs.

A group of seven nouns take an exceptional locative form, marked with accent shift instead of a suffix. They are described in §4.6.4.

3.3.7 Compound nouns

Compound nouns are common in Aguaruna and evidence of fossilised compounds suggests that compounding has been a productive process for some time. All compound nouns share the syntactic property of being endocentric and head-final. A few nouns may function as adjectives, but compounds differ from modified NPs in the following ways:

- A. Semantically: the modifying noun is in a delimiting function
- B. Syntactically: the modifying noun precedes the head
- C. Phonologically: the two nouns show phonological dependency in accent assignment, and may fuse into one phonological word

Some forms that must have originated in compounds are no longer parseable into two words, having fused completely into one grammatical and phonological word.

A Semantic properties of compounds

All compound nouns in my data are endocentric, that is, they denote a subclass of items described by one of the elements, which is the head (Aikhenvald 2007a: 30). The head is always the second element. Typically, the first element modifies the head with respect to one particular property.⁴⁹ The most common area for compounding is in names of flora and fauna.

(18) dápi mántʃi

dapi mántʃi
snake locust

‘type of locust that has a venomous bite’

(19) ípak hímpi

ipaka hímpi
annatto hummingbird

‘type of hummingbird with a red chest (the colour of annatto)’⁵⁰

(20) aíns ũyũʃ

aínsu ũyũʃi
person sloth

‘type of sloth that is thought to look human’⁵¹

Some examples of compounds do not involve the same relation of modification between the two elements. Consider example (21):

(21) íkam yáwã

ikama yawaã
forest dog

‘jaguar’

⁴⁹ A Karmadhāraya (descriptive) compound in traditional Sanskrit terminology.

⁵⁰ It was not possible to identify the species.

⁵¹ Probably the brown-throated three-toed sloth (*Bradypus variegatus*).

The referent is a type of dog (in the general Amazonian sense of predatory carnivore), but it does not resemble a forest in any respect; instead, it is a *dog from the forest*.⁵² In other examples, the relation between the two nouns is more like possession (compare pseudo compounds, in which a possession relationship is morphologically marked, §3.3.7.2).⁵³

- (22) kístian tʃítʃam
 kistian tʃitʃama
mestizo language
 ‘Spanish (language)’

- (23) ʃiwáj ɓáikua
 ʃiwaha baikua
 enemy angel’s trumpet
 ‘variety of angel’s trumpet (*Brugmansia suaveolens*) said to have been stolen from enemies during raids’

And in some cases the relation is unclear:

- (24) númpa wítʃin
 numpa witʃin̩ku
 blood squirrel
 ‘type of squirrel’

Of course, there is almost certainly a historical reason for the choice of determining noun that is simply not known to the present researcher. Other examples that appear equally opaque prove to have logical motivation on further investigation. For example, *wakampɪ* ‘macambo’ (*Theobroma bicolor*, a fruit related to cocoa) heads compounds in combination with three animal names:

- (25) a. kǎyũk wákam
 kǎyuka wakampɪ
 agouti macambo
 ‘variety of macambo’

⁵² This compound may have originated as *ikama-ia yawaã* (forest-ABL dog), lit. ‘one-from-the-forest dog’.

⁵³ These and the previous *ikama yawaã* ‘jaguar’ are Tatpuruṣa (determinative) compounds in the traditional terminology, as one noun bears a case relationship to the other.

b. káfai wákam

kafai wakampi
paca macambo

‘variety of macambo’

c. pabáu wákam

pabau wakampi
tapir macambo

‘variety of macambo’

The motivation for the names comes from the size of the fruits: the relative size is matched to the relative size of the animal specifier.

B Syntactic properties of compounds

As the preceding examples have shown, the modifying element of a compound always precedes the head. This contrasts with the internal syntax of a modified NP, in which the modifier always follows the head (see §5.3).

C Phonological properties of compounds

As noted above, compounds show a continuum of phonological fusion. All compounds show some phonological dependency, manifested in accentuation effects, but only in the most fused is vowel elision affected.

The accent in the second (head) element of a compound is always on the first syllable, regardless of the accent in isolation: example (25a) above has the surface pronunciation [káyuk wákam], but the head noun in isolation surfaces as [wakám].

Compounds tend to become a single phonological word. The form in (21), *ikama yawaã* ‘jaguar’, appears in my data as one or two phonological words, apparently depending on such factors as speed of speech and emphasis. A number of synchronically monomorphemic nouns appear to have arisen historically from compounds.

(26) yúŋkipak

yuŋki-paki

‘collared peccary (*sajino*)’ cf. *paki* ‘white-lipped peccary’

The first element is a so-called “cranberry morpheme”: it has no apparent synchronic meaning and does not appear outside of this one compound.⁵⁴ Similarly, many names of flora end with /numi/, apparently arising from compounds headed by *numi* ‘wood, tree’.

- (27) tsampáunum
tsampau-numi
‘manioc plant’

Some examples end in /nimi/, showing the sporadic vowel harmony discussed in §2.5.6.2.

- (28) páunim
pau-nimi
sapodilla-wood
‘tree with leaves similar to *sapodilla* (*Manilkara zapota*)’

Apocope applies in fused forms where it would not in those consisting of two phonological words. So in *yujkipaki* [yúŋkipak] ‘collared peccary’ apocope has applied, but in *muunta paki* [múun páki] ‘peccary sp.’ the head element *paki* is an independent phonological word, and because it has only two syllables apocope does not apply.

Fused forms clearly consist of one phonological word: there is just one, stable accent; vowel elision applies where it would not if these were two words; literate native speakers write them as one word. It appears that the most phonologically bound compounds are also the most difficult to parse, normally because the first element no longer exists as an independent word. Whether the phonological cohesion arises as a result of the difficulty in parsing or vice versa is hard to tell. Full discussion of phonology of compounds is in §2.8.2.

⁵⁴ There is a word *yujki* ‘queen leafcutter ant’ which may be the historical source, for reasons lost in the mists of time. Or it could be a borrowing from Quechua *yunka* ‘forest, jungle’, which has been lost, or was never used, as an independent word. The compound must be old: it has cognates in the other Jivaroan languages, all of which end in /piki/, applying the sporadic ‘vowel harmony’ discussed in §2.5.6.2, and attesting to the fact that the word is not synchronically considered a compound. Further phonological changes in Achuar-Shiwiar have produced the two dialectal variants *yajkipik* and *najkipik*. Also of interest is Gnerre’s (1999: 119) suggestion that the word *paki* ‘peccary’ is itself an old Carib loan.

Compounds are lexicalised, and cannot be nonce formations. The meaning is generally not immediately predictable from the sum of the parts. For the most part compounds tend to be names of flora and fauna – using the compounding strategy, a number of similar species can be named based on a prototype system. The language has developed in an area renowned for its great biodiversity, so such a system of nomenclature makes sense. But we must be wary of offering functional explanations for nomenclature – consider for instance the following comment on Achuar naming of amphibians:

“[F]rogs are the only generic category of tailless batrachians that have a name (*puach*)⁵⁵ used in composing the names of particular species. Toads are named by individual species but not subsumed into a generic category.” (Descola 1996: 87)

In Aguaruna, by contrast, toads have a generic name (*takafu*) but frog species are individually named, and this could be considered a natural, almost inevitable, consequence of the fact that some species of frog are edible, while all toads are inedible.

3.3.7.1 Adjective-noun compounds

Adjective-noun compounds are rare, totalling only four in my data, as listed:

COMPOUND	GLOSS	TRANSLATION
múun páki	muunta paki big peccary	‘large species of peccary’
múun uwíŋ	muunta uwíha big hand	‘thumb’
isáham uwíŋ	isahama uwíha tall hand	‘middle finger’
sútaŋ uwíŋ	sutaha uwíha short hand	‘ring finger’

Table 3.11: Adjective-noun compounds

Firstly note that all but one are names of digits. Secondly, note that two are formed with *muunta* ‘big’, ‘adult’ which functions as a noun as well as an adjective, so they are not definitive examples of adjective-noun compounding. This leaves us with two fingers: ‘tall’

⁵⁵ According to Uwarai et al. (1998), *puwatfi* is the name of a particular species of frog in Aguaruna.

and ‘short’. The other two fingers are *tsɨŋkɨ uwɨha* ‘index finger’ (cf. *tsɨŋkɨna* ‘fork in branch’) and *utʃi uwɨha* (child hand) ‘little finger’.

3.3.7.2 Pseudo compounds

A few terms for body parts appear at first glance to be compounds in terms of their semantic unity, but are in fact normal possessive NPs. In the following examples, the overt marking on both nouns (genitive (§4.6.2.1) and pensive (§4.4)) shows that these are possessive NPs. The phonological fusion characteristic of compounds is not in evidence: there are two stable accents that are just as expected for the constructions.

(29) *numpá híntĩ*

numpa *híntĩ*
 blood+GEN path:PERT:1PL/3

‘vein’ lit. *blood’s path*

(30) *duhí wããhĩ*

duhi *wããhĩ*
 nose+GEN hole-PERT:1PL/3

‘nostril’ lit. *nose’s hole*

3.3.8 Summary of noun subclasses

The major subclasses of nouns are compared in the table below, based on their morphological and syntactic possibilities.

	PROPER NAME	KIN	LOCATION	OTHER
Can take vocative marking	✓	✓	–	–
Can take pensive marking	–	✓	some	✓
Can be locational complement without locative suffix	–	–	✓	–

Table 3.12: Morphological comparison of nominals

3.4 Adjective

Adjectives and nouns are distinguished from other word classes by their ability to form part of an NP, taking case-marking morphology as appropriate, and by their ability to function predicatively, as verbless equative clause complements. The distinction between

adjective and noun is a more subtle one, as they share a number of surface properties.⁵⁶ There is a distinction, however, that ultimately arises from the semantic distinction between nouns as referring words, denoting a bundle of properties, and adjectives as modifying words, denoting just one property. In my description of the grammatical properties of adjectives I will concentrate on the distinction between adjective and noun. There are about 40 underived adjectives in my corpus; see §3.4.9 for examples based on semantic types.

In the following sections, I first discuss the semantic basis of adjectives as distinct from nouns. Then after illustrating the surface similarities that make the distinction difficult to identify, I describe the grammatical properties of adjectives, showing that clear grammatical differences arise from the underlying distinction between the two classes in Aguaruna.

3.4.1 Semantic and discourse distinction

Adjectives denote just one property, while nouns are characterised by a bundle of properties, of which more or fewer may be present depending on how closely the referent fits a prototype.⁵⁷ This is the basic semantic distinction underlying the two word classes, and gives rise to the functional distinction between **reference** (nouns) and **modification** (adjectives). Dixon (2004a: 10) tells us that adjectives have two functions:

“(a) In a statement that something has a certain property ... (b) As a specification that helps focus on the referent of the head noun in an NP.”

These two functions are grammatically instantiated in Aguaruna by (a) equative clauses (31, 32); and (b) NP modification (33, 34).

- (31) húka óyak múuntai
 [hu-ka oya-ka] [muunta-i]
 [PRX-FOC pot-FOC]_{CS} [big_{Adj}-COP:3:DECL]_{CC}
 ‘this pot is big’

⁵⁶ Payne (2001:596) suggests “weakness of a class of adjectives” as a possible areal feature of Amazonia.

⁵⁷ cf. Jespersen (1958[1924]:75): “The adjective indicates and singles out one quality, one distinguishing mark, but each substantive suggests, to whoever understands it, many distinguishing features by which he recognises the person or thing in question.”

(32) útʃi píipiʃ áinawai

[utʃi] [piipitʃi] a-ina-wa-i
[child]_{CS} [small_{Adj}]_{CC} COP-PL:IMPFV-3-DECL

‘the children are small’ (8:1:71)

(33) wámpaʃ muúntan tsukapíak

[wampatʃi muunta-na] tsukapí-a-kũ
[backpack big_{Adj}-ACC] carry.over.shoulder-IMPFV-SIM+3:SS

‘carrying a big backpack over his shoulder...’ (2:3:6)

(34) útʃi píipitʃin sãásã

[utʃi piipitʃi-na] saã-sã
[child small_{Adj}-ACC] take-ATT:SEQ+3:SS

‘having taken the small children...’ (8:1:55)

However, the ability to head equative clauses is also a property of nouns (35, 36).

(35) áanka wámpíʃkui

[aan-ka] [wampíʃku-i]
[MED-FOC]_{CS} [butterfly_N-COP:3:DECL]_{CC}

‘that’s a butterfly’

(36) áiʃmaŋ áinawai

[aiʃmaŋku] a-ina-wa-i
[man_N]_{CC} COP-PL:IMPFV-3-DECL

‘they are men’

And so, apparently, is the ability to modify NPs (37, 38):

(37) útʃi kuwihá intsákan

[utʃi kuwiha] intsa-ka-nu
[child baby_N+ACC] piggyback-INTS:SEQ-1SG:SS

‘(I) having carried the small child on my back...’ (8:1:62)

(38) áiʃiŋtin núwa

[aiʃi-hĩ-tinu] nuwa]
[husband-PERT:1PL/3-ATTRIB] woman_N]

‘married women’ (6:9:12)

Conversely, one can find examples of adjectives in headless NPs, which look on the face of it like NP heads.

(39) wiŋkán hukíthai

[wiŋka-na] hu-ki-ta-ha-i
[blue_{Adj}-ACC] take-TRF-IFUT-1SG-DECL

‘I’ll take the blue (one)’

In discourse, there is a typical functional division of labour:

- Nouns introduce or refer to participants as arguments of verbs
- Adjectives describe participants as equative clause complements

The preference for adjectives to take a predicating role is shown by the examples below, where the combination of noun and modifier is expressed not with a simple NP of the form [N Adj], but with a relative clause formed on the copula-marked adjective.

(40) papí mùuntahúka wíŋkayai

[papí muunta-a = hu-ka] [wiŋka-ai]
[book big-COP:3=PRX_{Rel}-FOC]_{CS} [blue-COP:3:DECL]_{CC}

‘this big book is blue’ or more literally ‘this book that is big, is blue’

(41) papí piipitʃianúʃa yánauwaita

[papí piipitʃi-a = nu-ʃa] [ya-nau-aita]
[book small-COP:3=ANA_{Rel}-UNCERT]_{CS} [who-POSS-COP:3:INT]_{CC}

‘whose is the small book?’ lit. ‘whose is the book that is small?’

The similarities in surface distribution, combined with the large amount of morphology in common, mean that it can be difficult to determine the word class of any particular lexical NP constituent.

However, I shall demonstrate in the following sections a number of grammatical criteria by which adjectives can be distinguished from nouns. In the process, it will be seen that these distinctive grammatical properties of adjectives arise from a basic underlying division between property words and referring words – so adjectives cannot be considered to be a subclass of nouns.

Although nouns can be predicated in the same way as adjectives, this is not their typical function. Furthermore, only a few human nouns can appear in modifying function in an NP (as in 37 and 38), and the appearance of adjectives in headless NPs (as in 39) is highly contextually constrained. The more fruitful course of investigation, then, is to

must be available. Of the nouns, only those that denote humans can modify NPs. In possessive NPs, only nouns can be possessors, and many adjectives are questionable or ungrammatical in headless possessed NPs, where the pertensive suffix is required. The following table summarises the distinct properties of nouns and adjectives.

	NOUN	ADJECTIVE
Can head NP	All	None
Can modify headed NP	Only human nouns	All
Can modify headless NP	N/A	Only in certain contexts
Can be possessed (with pertensive suffix)	All	Some, and only in certain contexts
Can be possessor	All	None

Table 3.13: Properties of nouns and adjectives as NP constituents

3.4.3.1 Headless NPs

Adjectives may be more or less acceptable in headless constructions, and may even be incompatible with pertensive morphology. The most adjectival behaviour is displayed by *pɨŋkɨha* ‘good’. It can head an NP as a zero-derived abstract noun, meaning ‘goodness’, but cannot be interpreted as modifying a headless NP:

- (42) *mína pɨŋkɨhan iwaintúktahai*
 [mi-na pɨŋkɨha-na] iwaina-tu-ka-ta-ha-i
 [1SG-ACC good-ACC] CAUS+see-APPLIC-INTS-IFUT-1SG-DECL
 ‘I’ll show my goodness’
 NOT
 ** ‘I’ll show my good (one)’

Other adjectives may appear in headless NPs:

- (43) *níŋka muúntan ʃináu*
 ní-ka [muunta-na] ʃina-u
 3SG-FOC [big-ACC] sing+IMPFV-REL
 ‘it (the *kúgkup* bird) sang with a big voice’ (Lit. *it sang a big (one)*) (6:7:3)

However no adjective can **head** an NP: headless constructions are limited to contexts in which a head noun can be retrieved, either from the preceding discourse or from general knowledge of the world. Compare 44(a) with the questionable 44(b):

- (44) a. ámiʃ atáʃ muúntan yuwáu
 amitʃa [atafu muunta-na] yu-a-u
 fox [chicken big-ACC] eat-HIAF-REL
 ‘a fox ate the big chicken’
- b. ámiʃ muúntan yuwáu
 ? amitʃa [Ø muunta-na] yu-a-u
 fox [Ø big-ACC] eat-HIAF-REL
 ‘a fox ate the big (chicken)’

The form in 44(b) is only acceptable if the head noun ‘chicken’ has already been introduced into the discourse, hence the NP is headed by a null element (Ø). Even in context, this example was not acceptable for some native speakers.

Core colour terms are not easily combined with pertensive suffixes (45 and cf. 39 above with no pertensive suffix):

- (45) ** [wiŋka-hu-na] hu-ki-ta-ha-i
 [blue-PERT:1SG-ACC] take-TRF-IFUT-1SG-DECL
 ‘I’ll take my blue one’

For all adjectives, the relativisation strategy using an ecliticised demonstrative is available to form fully acceptable headless NPs:

- (46) mí nau mùuntahúna hukíthai
 [mi-nau muunta-a = hu-na] hu-ki-ta-ha-i
 [1SG-POSS big-COP:3=PRX_{Rel}-ACC] take-TRF-IFUT-1SG-DECL
 ‘I’ll take my big (one)’ Lit. *I’ll take this (thing) of mine that is big.*

This example also illustrates the above-mentioned preference for predicate adjectives. Also of note is the use of the adjectival possessive form *mi-nau* (1SG-POSS) ‘mine’, avoiding the use of pertensive marking on the possessum.

3.4.4 Gradability

Properties are gradable, and the grammatical expression of gradation is cross-linguistically a not uncommon criterion for distinguishing adjectives from other word classes (Dixon 2004a: 26). This is the case in Aguaruna.

There are three modifiers used for grading adjectives, all of which also operate on other word classes, and one unproductive suffix which is limited to a subset of adjectives.

All four strategies are illustrated in table 3.14, along with the modifiers' functions with other word classes (a dash in a cell indicates that the strategy is not possible with that word class). Also compare table 3.3 above.

	WITH ADJ	WITH NOUN	WITH VERB	WITH ADV
<i>ʃiiha</i>	'very'	–	'well'	'very'
<i>sintʃi</i>	'too' (cannot be modified)	–	'strongly'	–
<i>ima</i>	'more'	'only' (+ RESTR suffix)	–	'more'
-(t)taku	'partly' (limited application)	–	–	–

Table 3.14: Modification of adjectives

The distinct patterns of applicability and meaning that arise from combinations of the four modification strategies with different word classes clearly distinguish adjective as a separate class. Below I discuss the four strategies individually.

3.4.4.1 Gradation with *ʃiiha* 'very'

The adverb *ʃiiha* means 'well' when modifying a verb (47), and 'very' when modifying the adverb *sintʃi* 'strongly' (48). The following example was in the context of checking that a banknote is genuine: you give it a good pull, and a false note will rip in two.

(47) *ʃiiŋ hapiktá*

ʃiiha hapi-ka-ta
well pull-INTS-IMP
'pull it well!' (Obs)

(48) *ʃiiŋ sintʃi ahániahai*

[*ʃiiha sintʃi*] *ahantu-ia-ha-i*
[very strongly] be.shy-REMPAST-1SG-DECL
'I was really very shy' (2:2:163)

ʃiiha also means 'very' when modifying an adjective:

- (49) *húka jíiŋ sútahutʃi*
 [hu-ka] [ʃiiha sutahtʃi-i]
 [PRX-FOC] [very short-COP:3:DECL]
 ‘this is very short’

The following elicited example makes use of a modified attributive adjective, but no such constructions appear in my corpus of natural narrative:

- (50) *ỹáũ ỹãwãã jíiŋ muúntan wainkámhai*
 yaũ [yawaã [ʃiiha muunta-na]] waina-ka-ma-ha-i
 yesterday [dog [very big-ACC]] see-INTS-RECPAST-1SG-DECL
 ‘yesterday I saw a very big dog’

Similarly, example (51), in which a human noun that can function as an NP modifier is modified by *ʃiiha* was elicited, and no such examples appear in natural data; so it would appear that its use is effectively incompatible with nouns.⁵⁸

- (51) *nĩ jíiŋ aíʃmaŋkui*
 [nĩ] ʃiiha aíʃmaŋku-i
 [3SG] well man-COP:3:DECL
 ‘he’s very manly’

3.4.4.2 Gradation with *síntʃi* ‘too’

The adverb *síntʃi* in combination with verbs means ‘strongly’:

- (52) *síntʃi tupikákta*
 síntʃi tupika-ka-ta
 strongly run-INTS-IMP
 ‘run fast!’

And with adjectives it means ‘too’.

- (53) *húka síntʃi sútahutʃi*
 [hu-ka] [síntʃi sutahtʃi-i]
 [PRX-FOC] [too short-COP:3:DECL]
 ‘this is too short’

⁵⁸ This example could in fact be a calque from Spanish *él es muy hombre* ‘he’s very manly’.

Although *sɨntʃi* can be intensified with *ʃiha* when it modifies a verb, it cannot be further modified when modifying an adjective. Like *ʃiha*, *sɨntʃi* cannot be used to modify nouns⁵⁹; nor can it modify adverbs.

3.4.4.3 Comparison with *ima* ‘more’⁶⁰

The intensifier *ima* means ‘more’ in combination with adjectives and adverbs, as in the following examples.⁶¹

(54) húu óya imá utʃutʃihĩyĩ
 [hu oya] ima utʃutʃihĩ-ai
 [PRX pot] INTENS small-COP:3:DECL
 ‘this pot is smaller’

(55) húu óya imá múuntai áuhãĩ (apátkam)
 [hu oya] ima muunta-i [au-hãĩ (apatkama)]
 [PRX pot] INTENS big-COP:3:DECL [DST-COMIT (COMP)]
 ‘this pot is bigger than that one’

The standard of comparison appears in the comitative case, and is optionally followed by the comparative particle *apatkam*.⁶²

The same intensifier *ima* combines with nouns marked with the restrictive suffix *-ki* to give the sense of ‘only’ – that is, it intensifies the restrictive meaning.

(56) imá biíknak yuwámhai
 [ima biika-na-ki] yu-a-ma-ha-i
 [INTENS bean-ACC-RESTR] eat-HIAF-RECPAST-1SG-DECL
 ‘I only ate beans’

⁵⁹ But the word *sɨntʃi* itself is used as a noun meaning ‘strength’.

⁶⁰ There is a possibility that gradation is a historical development from a general intensifier under influence of the phonologically similar Spanish word *más* ‘more’, which similarly appears directly preceding an adjective or adverb. Also of interest is that the word *ima* is itself probably borrowed from the Quechua *ima* ‘very’.

⁶¹ Also *nuní* ‘thus’ can modify adverbs with the sense ‘more’.

⁶² < *apatu-ka-ma* ‘compare-INTS-O>A/S’: so this is ultimately a subordinate clause, which could be translated as ‘when (*comparand*) was compared with *standard*’. See §4.6.3 for further discussion.

(57) wíka imá tʃiriákonak wáinin áyahai

[wi-ka] [ima tʃiriako-na-kI] [waina-inu a-ia-ha-i]
 [1SG-FOC] [INTENS Chiriaco-ACC-RESTR] [see-NR COP-REMPAST-1SG-DECL]

‘I had only ever seen Chiriaco (a town in Bagua Province)’ (2:2:87)

The intensifier has the whole NP in its scope, including determiners:

(58) imá mína nuwahúk niŋkiúʃ puhúmĩ

[ima mi-na nuwa-hu-kI] [nĩ-kI-utʃi]
 [INTENS 1SG-ACC wife-PERT:1SG-RESTR] [3SG-RESTR-DIM]

puhu-mĩ

stay:PFV-RECPAST:3:DECL

‘only my wife stayed, alone’

ima cannot directly modify a verb, but it can modify non-verbal adverbs:

(59) húu imá sɪntʃi tupikáawai

[hu] [ima sɪntʃi] tupikaa-wa-i
 [PRX] [INTENS strongly] run+IMPFV-3-DECL

‘this one runs faster’

So the evidence of modification with *ima* shows a clear distinction between adjective and noun.

3.4.4.4 Gradation with *-(t)taku* ‘partly’

The suffix *-(t)taku* can be added to some colour terms and *udu* ‘raw’ to give the sense of ‘partly’, akin to the English suffix *-ish*. It is not clear what conditions the choice of allomorph.

ROOT		MODIFIED	
wɪŋka	‘blue’	wɪŋkáttaku	‘pale blue’
samɪkmau	‘green’	samɪkmauttaku	‘pale green’
udú	‘raw’	udútaku	‘partly cooked’

Table 3.15: Adjectives with suffix *-(t)taku*

The restriction of this suffix to members of the adjective class is a further reflection of the basic semantic fact that adjectives are gradable.

3.4.5 Adjectival morphology

Adjectives share almost all of their morphology with nouns. The shared suffixes are derivational (e.g. diminutive) and inflectional (case) and NP-level (focus etc.) suffixes, and the copula suffix. Nominal suffixes not shared by adjectives are those that pertain only to the head. The pertensive suffix *-hu* is not compatible with the most adjectival adjectives. The following tables list the nominal suffixes shared by adjectives (3.16), and those not shared (3.17).

SUFFIX	GLOSS
-utʃi	diminutive
-tʃau	negative (relativiser)
-na	accusative
-haĩ	comitative
-hu	pertensive (limited application)

Table 3.16: Nominal suffixes shared by adjectives

SUFFIX	GLOSS
-ia	ablative
(accent shift and suppression of apocope)	genitive
-nau	possessor

Table 3.17: Nominal suffixes **not** shared by adjectives

As mentioned above, the one purely adjectival suffix is *-(t)taku* ‘partly’, reflecting the fact that adjectives, unlike nouns, are gradable.

3.4.6 Adjectivalising derivation

There is no productive adjectivalising morphology, however there is evidence for etymological connections between some adjectives and words of other classes, and for a historically productive adjectivaliser.⁶³

⁶³ Note also the pair *biti* ‘full, enough’ (adverb) > *bitika* ‘equal, same’ (adjective).

3.4.6.1 Derivation between verb and adjective

Relative clauses have most of the distributional properties of adjectives, as NP modifiers. But they differ in some respects; in particular, relative clauses are not gradable and therefore cannot be adverbially modified as adjectives can. So relativisation is **not** the same as adjectivalisation. Furthermore, because relativisation is at the level of the clause, relative clauses (even those consisting of just one verb) cannot be considered a subset of adjectives.

It seems, however, that some adjectives have developed historically from verbs, for example *mamuku* ‘worn-out (of clothes etc.)’ < *mamu* ‘wear out (intrans.)’; *kapantu* ‘red’ < *kapau* ‘burn’. Note that both of these adjectives end in /u/, suggesting that the relativiser *-u* may have historically been part of their morphological makeup. For some other adjectives ending in /u/ a relationship is less certain: *yapau* ‘bitter’ may be related to the verb *yapa* ‘be salty’, and although *yumiimitu* ‘sweet’ has no clearly associated verb, the first element could be related to *yumi* ‘water, broth, juice, honey’.

3.4.6.2 Derivation between noun and adjective

There are a few pairs of adjective and zero-derived noun:

ROOT	ADJECTIVE	NOUN
<i>pɨŋkiha</i>	‘good’	‘goodness’
<i>muunta</i>	‘big’	‘adult’
<i>apu</i> ⁶⁴	‘big’	‘chief’
<i>aɪʃmaŋku</i>	‘male’	‘man’
<i>nuwa</i>	‘female’	‘woman’

Table 3.18: Adjective – noun pairs

It is difficult to say which is primary in each case. Only *pɨŋkiha* ‘good’ ~ ‘goodness’ looks as if the adjectival meaning is clearly primary, as the nominal meaning refers to only one property, a typical function of adjectives.

⁶⁴ Borrowed from Quechua *apu* ‘chief’.

In the other examples, it looks rather as if the nouns are primary, as each denotes a cluster of properties, with the corresponding adjective referring to just one property – cf. Bhat (1994):

“[A] noun, when used in the modifier function of the adjective, or when adjectivalized, tends to attain this adjectival property of singling out one quality.” Bhat (1994: 25)

In any case, the very possibility of derivation between noun and adjective presupposes two separate lexical classes.

3.4.6.3 Adjectivalising suffix *-(ha)ma*

A number of adjectives terminate with the sequence /hama/, and some of them show a relationship to other word classes. Table 3.19 lists a selection of such words.

ADJECTIVE	GLOSS	POSSIBLE SOURCE	GLOSS	WORD CLASS
ʃaahama	‘pale’	–	–	–
isahama	‘long, tall’	–	–	–
ʃiihama	‘pretty’	ʃiiha	‘well, very’	adverb
yamahama	‘new’	yama	‘now, recently’	adverb
duwihama	‘fat’	duwi	‘get fat’	verb
kakahama	‘valiant’	kaka	‘resist’	verb
katsūhama	‘hard’	katsua	‘ripen, harden’	verb

Table 3.19: Adjectives terminating in /hama/

The correlation is not perfect in the case of *ʃiiha* ‘well, very’, as the expected form is ***ʃiihahama*. This could be the result of a haplological reduction of a sequence /haha/, and a similar haplology is also indicated in pensive marking of some nouns (see §4.4).

3.4.7 Compound adjective *wakɪ bɪʃmanɪ* ‘sad’

One adjective is exceptional in consisting of two phonological words: *wakɪ bɪʃmanɪ* ‘sad’. Most ‘human propensity’ type meanings are expressed with verbs, e.g. *anɪ* ‘be happy’, *kahɪ* ‘be angry’. *wakɪ bɪʃmanɪ* functions in the same way as the other verbs, as it

always appears with a verb, typically *puhu* ‘live’ but also *huwa* ‘stay’. So effectively this is a phrasal verb: *wakɨ bɨsɨmaŋ puhu* ‘to be sad’, as in the following example.

(60) wi waki_bɨsɨmaŋ puha-ha-i
 1SG sad live+IMPFV-1SG-DECL
 ‘I am sad’

The word *wakɨ* means ‘stomach’, and both dictionaries give a verbal form *wakɨ bɨsɨ* ‘become sad’ (Wipio 1996: 139; Uwarai et al. 1998: 144) in addition to the compound adjective. In my corpus of natural speech, however, only the adjective appears.

3.4.8 Summary

Although adjectives in Aguaruna share many surface characteristics with nouns, I have shown above that there are clear grammatical properties that distinguish the two classes, all arising from the basic semantic distinction whereby nouns refer and adjectives modify.

Although there is no adjectivalising derivation, at least synchronically, the adjective class is best characterised as open. It is large, and borrowing of adjectives is possible. The cline of adjectival properties mentioned above probably applies to most grammatical properties of adjectives, making a sharp two-way division of referring versus modifying lexemes impossible, or arbitrary – cf. Jespersen:

“We cannot, of course, expect to find any sharp or rigid line of demarcation separating the two classes [i.e. adjectives and nouns] in the way beloved by logicians: language-makers, that is ordinary speakers, are not very accurate thinkers. But neither are they devoid of a certain natural logic, and however blurred the outlines may sometimes be, the main general classifications expressed by grammatical forms will always be found to have some logical foundation.”
 (Jespersen 1958[1924]: 81)

There are probably about 40 underived adjectives in the corpus. Three issues hinder an accurate count of adjectives:

1. It can be difficult to identify any given word as an adjective solely from its use in a text, without applying the syntactic tests described above

2. Some adjectives are etymologically derived from other word classes, and for a number of adjectives it is impossible to say whether they are synchronically morphologically simple or complex (§3.4.6)
3. Non-class-changing derivational suffixes (§3.4.5) may create new non-compositional lexemes, such as *muuntutfi* ‘old’ < *muunta* ‘big, adult’ + *-utfi* ‘diminutive’, and it is not obvious whether such words should be included in a count of adjectives

Further study is necessary to precisely delimit the class of adjectives, and until then any count given is necessarily an estimate.

3.4.9 Semantic range of adjectives

Dixon (1982, 2004a) divides adjectival meanings into four core types: DIMENSION, AGE, VALUE, COLOUR; and three peripheral: PHYSICAL PROPERTY, HUMAN PROPENSITY, SPEED. In Aguaruna all four of Dixon’s core adjective types, along with PHYSICAL PROPERTY and HUMAN PROPENSITY, belong to the adjective class. SPEED is represented by adverbs and verbs.

Table 3.20 gives some examples of the adjective types in Aguaruna, with accent marked as it appears in the nominative form. Note that forms that include the suffix *-hama* include a marked morphological boundary – see §3.4.6.3 for full details. For others, I have noted the presence of the diminutive suffix *-utfi* and any potentially related lexemes.

TYPE	EXAMPLES	GLOSS
DIMENSION	múunta	‘big’
	utʃutʃíhi	‘small’ ^a (cf. <i>utʃi</i> ‘child’)
	piípitʃi	‘small’ ^a
	yáihutʃi	‘small (of child or young animal)’ (includes <i>-utʃi</i> ‘DIM’)
PHYSICAL PROPERTY	ʃíihama (ʃiíha-hama)	‘pretty’
	udú	‘raw’
	samíka	‘fresh’
	sása	‘hanging’
	isá-hama	‘tall’
	sútahutʃi	‘short’ (includes <i>-utʃi</i> ‘DIM’)
	katsú-hama	‘hard’
	duwí-hama	‘fat’
	mamukú	‘worn out’ (cf. <i>mamu</i> ‘wear out’)
	yumíimitu	‘sweet’
COLOUR	púhu	‘white’ ^b
	ʃaá-hama	‘white’ ^b
	kapántu	‘red’ (cf. <i>kapau</i> ‘burn’)
	wíŋka	‘blue’
AGE	yamá-hama	‘new’
	tsákata	‘young’
	múuntutʃi	‘old’ (< big-DIM)
VALUE	píŋkíha	‘good’
	bitíka	‘same’ (cf. adverb <i>bíí</i> ‘full’)
HUMAN PROPENSITY	kaká-hama	‘valiant’
	yátʃa	‘wise’, ‘intelligent’ (Qu.)
	wáki bísimañ	‘sad’ (from verb? – §3.4.7)

^a It is unclear what the difference is between *utʃutʃihi* and *piípitʃi*, both ‘small’

^b It is unclear what the difference is between *puhu* and *ʃaahama*, both ‘white’

Table 3.20: Adjective types after Dixon (1982, 2004a)

3.5 Pronominal words

Like nouns, pronouns head NPs. Unlike nouns, they cannot be possessed, they do not take vocative forms, and they cannot be modified within the NP. In discourse pronouns must have a recoverable referent, whether already introduced in the discourse or introduced by a demonstrative pronoun itself through deictic reference.

3.5.1 Personal Pronouns

Personal pronouns are the only nominal type to show a number distinction, with singular and plural forms for each. The table below lists the personal pronouns.

PERSON	SINGULAR	PLURAL	
1	wi / wii	DEFINITE	ii
		INDEFINITE	hutii
2	ami	atumi	
3	nĩ / nĩĩ	dita	

Table 3.21: Personal pronouns

The first and third singular pronouns have their vowels lengthened and surface as [wii] and [nĩĩ] respectively when they appear unsuffixed, to fulfil the two-syllable minimal word requirement.

The distal demonstrative *au* frequently functions as a personal pronoun. There is no separate plural form for *au*, as is usual with demonstratives but unlike the personal pronouns.

3.5.1.1 First person plural

The distinction between the two first person plural forms has its basis in specificity: *ii* refers to a specific set of participants, while *hutii* is non-specific. This is not an inclusive/exclusive distinction, as both *ii* and *hutii* can exclude second person. Compare the following examples:

- (61) íi áinauti ãũãkmáhimí ámi
 [ii a-ina-u-ti] ãũã-ka-ma-himí-i [ami]
 [1PL COP-PL:IMPFV-REL-SAP] search-INTS-RECPAST-1>2:PL-DECL [2SG]
 ‘we searched for you (sg)’

(62) *hutii áinauti ámik wainkábiahimi*

[*hutii a-ina-u-ti*] [*ami-ka*] *waina-ka-maia-himi-i*
 [1PL COP-PL:IMPFV-REL-SAP] [2SG-FOC] *see-INTS-INTPAST-1>2:PL-DECL*

‘we all saw you (sg)’

The difference lies in the fact that the speaker of (61) has a specific group of people in mind, as searching is a deliberate activity. In (62), the action is less deliberate, so the indefinite *hutii* can be used.

In the following example from natural narrative *ii* specifically excludes second person:

(63) *íik hũwĩ íi núwati máinahi ámik wími áwĩ amíʃ máita*

[*ii-ka hu-ĩ ii nuwa-ti ma-ina-hi-i*]
 [1PL-FOC PRX-LOC 1PL woman-SAP bathe-PL:IMPFV-1PL-DECL]

[*ami-ka wi-mi au-ĩ ami-ʃa mai-ta*]
 [2SG-FOC go:PFV:SEQ-2:SS DST-LOC 2SG-ADD bathe+LOAF-IMP]

‘we women are bathing here, you go and bathe over there’ (6:9:20)

The standard way of inviting someone to do something together with the speaker uses *ii* marked with comitative case, as in the following example:

(64) *íihã nantsimámi*

ii-haĩ nantsima-mi
 1PL-COMIT dance:PFV-HORT

‘let’s dance together’

In this example *ii* must include second person, as there are only two participants involved. The speaker is asking the addressee to “dance with me”, not “dance with us”.

The following example similarly shows *ii* including the addressee. It is taken from a story in which a dog falls in love with a woman, so her husband kills the dog. The woman asks him ‘have you killed our dog?’, where ‘our’ is first person inclusive.

(65) *ỹãwãá íinu maáʃmakum*

[*yawaã ii-nau*] *maa-tʃa-ma-ka-umi*
 [dog 1PL-POSS] *kill+HIAF-NEG-RECPAST-POLINT-2SG:PAST*

‘have you killed our dog?’ (6:5:74)

In the following example both *ii* and *hutii* are used in combination with the word *iinia* ‘one of us’ carrying the SAP marker, giving the meaning ‘we being us’. *iinia* probably comes from *ii-nĩ-ia* (1PL-LOC-ABL) ‘(a person) from our place’.

(66) yatsúŋ simónŋ wakĩuqawai íi hutíi iiniáti kúntin maátasa wahúk wĩkáitaiamĩ nunúna

yatsu-hu simonŋ wakĩuq-a-wa-i [ii hutii iinia-ti
brother-PERT:1SG *Simon* want-IMPV-3-DECL [1PL 1PL one.of.us-SAP

kuntinu maa-tasa wahuk wĩkaiuq-taiamĩ nunu-na]
animal kill+HIAF-INTENT+1PL how walk-NORM ANA-ACC]

‘My brother Simon wants (to know) how we around here go hunting.’ (Text 3:1)

So it seems that the meanings are basically the same, but *ii* is specific and typically excludes second person. *hutii* is non-specific, and in particular it may or may not include second person. A relatively recent development of *hutii* is indicated by the fact that no cognates appear in the dictionaries of other Jivaroan languages, which have only the one form *ii*. Also the fact that *ii* enters into the semantically non-compositional idiom *ii-haiĩ* (1PL-COMIT) ‘you and I together’ suggests this is an older form. *hutii* may have ultimately arisen from the proximal demonstrative *hu* with the speech-act participant suffix *-ti*, meaning ‘we here’. Further study of conversational data will help to pin down the precise semantic differences between *ii* and *hutii*. The current work is based on narrative data, in which first person plural reference is rare.

First person plural is used to indicate a generic human object in verbal marking, but the pronouns are not used this way. See §7.5.6.3 for a description.

3.5.1.2 Combining stems of SAP pronouns

The first person singular and second person singular and plural pronouns have ‘combining forms’ that appear when some case suffixes are added:

PERSON	UNDERLYING ROOT	COMBINING FORM
1SG	wi	mi-
2SG	ami	ami-
2PL	atumi	atumi-

Table 3.22: Combining pronominal stems

The case suffixes are added to the combining stems, but there is one exceptional form: first person with locative surfaces as *mináĩ*, not the expected ***minĩ*. See §2.6.2.6 for further discussion.

3.5.1.3 Interrogative Pronouns

Interrogative pronouns are formed from three roots: *tu* ‘which (of an understood set)’, ‘where’; *wahĩ* ‘what (non-human)’; and *ya* ‘who (human)’. Interrogative pronouns take the same morphology as other pronouns, in addition to having some distinct morphological properties which are shared with other interrogative forms. Interrogatives are discussed as a group in §3.9.

3.5.2 Demonstrative pronouns

Among demonstrative pronouns (‘nominal demonstratives’ in Dixon’s (2003) terminology) there is a three-way spatial distinction: proximal, medial and distal. All are relative to the speaker, regardless of addressee’s position. There is also a general anaphoric pronoun *nu*, which is used for non-visible referents. Table 3.23 lists the surface realisations of the case-marked forms of the demonstrative pronouns, along with those marked with the ‘first’, ‘focus’ and ‘additive’ suffixes:

	PROXIMAL	MEDIAL	DISTAL	ANAPHORIC
NOM	húu	anú	áu	núu
ACC	húna	aánna	áuana	núna
LOC	húĩ	aaní	áwĩ	núĩ
ALL	huní	aán	aní	nuní
INSTR	húwi	adúi	áwi	dúwi
FIRST	huwá	anuwá	auwá	-
FOC	húka	aánka	áuk	dúka
ADD	húʃakam	aántʃakam	áuʃkam	dúʃakam

Table 3.23: Demonstratives

The proximal and general anaphoric pronouns have reduplicated variants *huhú* and *nunú* respectively, which can be freely substituted for the simple forms. The reduplicated forms are attested in nominative, accusative and locative case in my corpus.

In addition, the same two pronouns have long variants that appear only with locative and instrumental case: *huwahu-ĩ* (PRX-LOC), *huwahu-i* (PRX-INSTR); *nuwanu-ĩ* (ANA-LOC), *nuwanu-i* (ANA-INSTR). These forms must be based on the ‘relativised copula’ focussing construction (§5.4.3, §13.4.2), with the following structure:

- (67) *huwahũwĩ*
 hu-a = hu-ĩ
 PRX-COP:3=PRX_{Rel}-LOC
 ‘at this place that is here’

The medial demonstrative *anu* is particularly irregular, varying between roots *anu* and *aa(n)* through the paradigm. It is also the least common form in narratives, and is rare in my data. The examples I do have are in reported speech – the following example is spoken by a rat, in a story about how the rat teaches human women how to give birth:

- (68) *diiṅsákia anú mína utṣíṅ*
 dii-hu-sa-kia [anu] [mi-na utṣi-hu]
 look-1SG.OBJ-ATT-IMP:FAM [MED]_{CS} [1SG-ACC child-PERT:1SG]_{CC}
 ‘look at me; these/those are my children’ (6:6:36)

Demonstratives have an allative form that does not appear with other nominals, marked with the suffix *-n(i)* and giving a directional meaning. With all other nominals, locative case covers this allative sense.

- (69) *huní wimí*
 hu-ni wi-mi
 PRX-ALL go:PFV-HORT
 ‘let’s go this way’

- (70) *aán wainkámumi*
 aan waina-ka-ma-umi-i
 MED+ALL see-INTS-RECPAST-2SG:PAST-DECL
 ‘you saw it over in that direction’

All of the nominal demonstratives can function as specifiers within an NP, as in (71), or occur alone as head of an NP, as in (72). A nominal demonstrative heading an NP cannot be modified.

- (71) a. *nunú aĩnts*
 [*nunu aĩntsu*]
 [ANA person]
 ‘that person’
- b. *núna nuwán húwaya túwahamĩ*
 [*nu-na nuwa-na*] *hu-a-ia* *tuwahamĩ*
 [ANA-ACC woman-ACC] take-IMPV-REMPAST NARR
 ‘they took those women’ (6:2:63)
- (72) a. *húʃa wahimpáita*
hu-ʃa wahimpaita
 PRX-UNCERT what+COP:3:INT
 ‘what is this?’
- b. *núna húkĩ wíʃa wíʃakũã*
 [*nu-na*] *hu-kĩ* *wíʃa wi-a-kawã*
 [ANA-ACC] take-TRF:SEQ+3:SS REDUP go-IMPV-REPET+3:SS
 ‘having taken that (child) she was going and going...’ (6:1:46)

When one of the demonstratives *hu* ‘proximal’, *au* ‘distal’ and *nu* ‘anaphoric’ modifies a case-marked NP, it shows case agreement with the head noun, as in (71b). It is likely that the medial demonstrative *anu* shows the same phenomenon, but there are no examples in my data. Case agreement is described fully in §5.2.1.

3.5.2.1 Other functions of demonstratives

The demonstratives *hu*, *au* and *nu*, along with the intensifier *ima*, also function as relativisers – see §5.4.3 for detailed description. The distal demonstrative *au* is often used as a personal pronoun (§3.5.1), and in that role it can take all pronominal morphology.

3.5.2.2 Textual anaphora

Textual anaphora is frequent with the anaphoric pronoun *nu*, especially in reported speech and narratives. The example in (73) is the last line of a narrative. The demonstrative

nu-na (ANA-ACC) refers back to the entire story. Similar formulae are commonly used at the ends of traditional stories.⁶⁵

(73) wíi aníau asán núna wíi ítsiŋhai

[wi ani-a-u asa-nu] [nu-na] wi
 [1SG think.about-IMPV-REL COP:SBD/SEQ-1SG:SS] [ANA-ACC] 1SG

itsiha-ha-i
 relate+IMPV-1SG-DECL

‘being one who remembers, I tell that (story).’ (6:3:55)

Such anaphora can also refer to a conversation that is not in the form of a narrative. Example (74) comes from a story where a young man has just passed on to his sister-in-law a long series of instructions from his brother. The anaphoric pronoun *nunu* refers to the instructions:

(74) nunú dútíkami

nunu dutika-mi
 ANA do:PFV-HORT

‘let’s do that’ (6:4:42)

Similarly, an agreement will often be concluded with the formula in (75):

(75) núu atí

nu a-ti
 ANA exist-JUSS

‘let it (i.e. what has just been agreed) be’

3.5.2.3 Textual cataphora

Textual cataphora is rare in narrative but more common in conversation. The device uses the distal demonstrative pronoun *au*, which always carries the restrictive suffix *-kI* in such constructions. This is immediately followed by a clause which is apparently in apposition to the pronoun:

⁶⁵ The usage is analogous to the final line of Shakespeare’s sonnet 18: *So long lives this, and this gives life to thee* – where *this* refers to the sonnet itself.

(76) *aúk kaŋkapí ihuahai*

au-kI [*kaŋkapi ihu-a-ha-i*]
DST-RESTR [*Kagkap+VOC stab-IMPFV-1SG-DECL*]

‘Kagkap! I (will) stab it (the jaguar)!’ (6:4:127)

The pronoun *au-kí* (DST-RESTR) in this example cannot refer to the object argument, as it does not have the accusative suffix.

Use of textual cataphoric *au* expresses the unexpectedness of the information conveyed. The following example is from a story in which a woman had been sexually penetrated by an unknown assailant, which turns out to be an evil spirit that has taken the form of a monkey, in the night. Her husband stays awake the next night to see who has done this to his wife, and when he sees what he thinks is a monkey, he says the following to his wife:

(77) *aúk wáŋi áikaŋmawai*

au-kI [*wáŋi aika-hama-a-wa-i*]
DST-RESTR [*spider.monkey do-2.OBJ-IMPFV-3-DECL*]

‘a spider monkey is doing that to you!’ (6:2:13)

The context of the following example is that a woman is living in an agouti’s house, and has been told she cannot accompany the agouti to the garden because the path is too steep and dangerous. Later, however, the agouti’s child tells the woman that she has been lied to, and exclaims:

(78) *aúk p̄ŋkihai híntak*

au-kI [*p̄ŋkiha-i hinta-ka*]
DST-RESTR [*good-COP:3:DECL path-FOC*]

‘it’s a good path!’ (6:1:42)

Textual cataphora has some semantic overlap with discourse particles (§3.8.1) and with mood/modality (§11.5) as it expresses the speaker’s attitude towards the proposition expressed in the clause.

3.5.3 Pro-verbs

The demonstratives *hu*, *au* and *nu*, along with the intensifier *ima*, take special verbalisers *-ni* and *-ti(ka)* to form pro-verbs with meanings ‘do this’, ‘do that’ etc. The pro-verbs are widely used in bridging constructions in narrative. They are described in §3.11 on

class-changing derivation. A fifth root *a(a)* also forms pro-verbs; this root could represent the medial demonstrative *anu* or the demonstrative pro-adverb *aa* discussed below (§3.7.3).

3.5.4 *tikitfi* ‘another’

tikitfi ‘another’ shares almost all properties of the demonstratives: it can modify a following noun (79a) or head an NP (79b).

- (79) a. [*tikitfi* *intsana*]
 [other stream-ACC]
 ‘another stream’ (6:2:77)
- b. [*nu* *tikitfi* *a-ina-u*]
 [ANA other COP-PL:IMPFV-REL]
 ‘those others’ (6:4:126)

There are two major morphosyntactic differences between *tikitfi* and the demonstratives:

1. *tikitfi* does not show case agreement with the head noun (79a)
2. When heading an NP, *tikitfi* may be modified by a demonstrative, as in example (79b)

Minor differences are that *tikitfi* never functions as a relativiser, and it cannot be made into a pro-verb with the verbalisers *-ni* and *-ti(ka)*.

tikitfi is the only indefinite pronoun in Aguaruna; indefinite reference is typically achieved with circumlocutions such as the following (cf. §5.4.3, §13.6):

- (80) [*aintsu-a = nu-ni-inu*] *mina-u*
 [person-COP:3=ANARel-VR-NR] arrive+IMPFV-REL
 ‘something like a person (is) coming’ (8:1:73)

3.6 Numerals and quantifiers

Both numerals and quantifiers provide specific information about the number or quantity of an NP participant, and both are characterised by a flexibility or ambiguity with respect to word-class membership. When modifying an NP, they are NP operators, and then often take pre-head position like determiners. But both numerals and quantifiers may also follow the head, and some examples function adverbially. Adverbial uses typically directly

precede the verb. Numerals may also function adjectivally, and take case morphology, while quantifiers never take any morphology. There are also two derivational morphological processes that are unique to numerals – see table 3.25.

In the following sections I describe the morphological and syntactic properties of numerals and quantifiers. Their syntactic behaviour as NP constituents is described in §§5.2.3 and 5.2.4.

3.6.1 Numerals

Native Aguaruna numerals have single-word forms for the numbers one to three. Above three, a system of finger counting was traditionally used. To count this way, you start with an open hand, and lower the thumb first, then the little finger, and so on, closing the index finger last – thus the word for ‘four’ is the same as for ‘index finger’. The numerals for four and above are basically conventionalised descriptions of the counting process. The Aguaruna numerals are listed in the table below:

NUMBER	NUMERAL	GLOSS
1	makitʃiki	‘one’
2	himaha	‘two’
3	kampaatuma	‘three’
4	ipak usumit	‘(finger used to) paint with annatto’ i.e. index finger
5	uwaha amua	‘finished hand’
6	uwaha makitʃiki ihuk	‘one added to the hand’
7	uwaha himaŋa ihuk	‘two added to the hand’
8	uwaha kampaatuma ihuk	‘three added to the hand’
9	uwaha ipak usumit ihuk	‘index finger (ie. four) added to the hand’
10	uwaha mai amua	‘both hands finished’

Table 3.24: Aguaruna numerals

The system can be extended as far as twenty by adding toes as well as fingers. Since the introduction of bilingual schools, Spanish numerals are used almost exclusively from four upwards, except that *uwaha mai amua* ‘ten’ is occasionally heard – it is accompanied with a distinctive gesture of putting both closed fists together. Despite the overwhelming

use of Spanish numerals, Aguaruna speakers still know the traditional forms and sometimes use them in contexts where they do not want Spanish speakers to understand, such as discussing prices amongst themselves.

Numerals may precede the noun, as with demonstratives:

- (81) hímaŋ aĩnts
 [himaha aĩntsu]
 [two person]
 ‘two people’

The numeral *makitʃiki* ‘one’ may function as an indefinite article, introducing participants into a narrative:

- (82) iŋkúŋmahai makitʃík aĩntsún
 iŋku-ha-ma-ha-i [makitʃiki aĩntsu-na]
 meet-PLU-RECPAST-1SG-DECL [one person-ACC]
 ‘I met a person’

The article must always precede the head noun, but in its function as a numeral it may follow its head. In example (83), there is a connotation that there is *only one* banana being offered:

- (83) tsabáú makitʃík yuwáta
 [tsamau makitʃiki] yu-a-ta
 [banana one] eat-HIAF-IMP
 ‘eat one banana’

Numerals may function as adverbs or adjectives; in the latter function they can take case morphology, as in the following example where the numeral *makitʃiki* ‘one’ is the only element of a headless NP:

- (84) makíʃkin yuwámhai
 makitʃiki-na yu-a-ma-ha-i
 one-ACC eat-HIAF-RECPAST-1SG-DECL
 ‘I ate one (of them)’

When functioning adverbially, a numeral will not take case marking and may take clause-initial position:

- (85) makifkíʃ wíka yuwáʃmahai tsamaúnak
 makitʃiki-ʃa wi-ka yu-a-tʃa-ma-ha-i tsamau-na-ka
 one-ADD 1SG-FOC eat-HIAF-NEG-RECPAST-1SG-DECL banana-ACC-FOC
 ‘I didn’t eat even one banana’

Numerals have two unique morphological processes: (1) partial reduplication to give distributive meaning (‘*n* each’) and (2) a suffix *-a* gives iterative meaning (‘*n* times’).

ROOT	DISTRIBUTIVE	ITERATIVE	GLOSS
makitʃiki	maki makitʃiki	makifkia	‘one’
himaha	hima himaha	himaha	‘two’
kampaatuma	no data	kompatuma	‘three’

Table 3.25: Numeral morphology

See §2.8.1 for phonological details of reduplication. The iterative suffix has the same form as the nominal ‘first’ suffix, which is never used with numerals, and always takes the accent.

- (86) himá himáhan tinamkáhai
 hima himaha-na tinama-ka-ha-i
 REDUP two:DISTRIB-ACC share.out-INTS-1SG-DECL
 ‘I shared (them) out two apiece’

- (87) kumpatumá taámĩ
 kumpatum-a ta-a-mĩ
 three-ITER come-HIAF-RECPAST:3:DECL
 ‘he came three times’

These two morphological processes apply to no other word class.

3.6.2 Quantifiers

Quantifiers typically modify NPs but unlike adjectives and determiners cannot take case-marking morphology, so morphologically they resemble adverbs. Table 3.26 lists the quantifiers in my data:

QUANTIFIER	GLOSS
aʃi	‘all’
matʃik	‘a little’, ‘a little while’
biti	‘full’
dikasi	‘a little, a few’
dukapi	‘enough’ or ‘a lot’
himaituk	‘half’
kuwaʃata	‘many, much’
mai	‘both’
uhumak~wahumak	‘a little’

Table 3.26: Quantifiers

Syntactically, quantifiers must be contiguous with the rest of the NP. Note the change of scope depending on the position of *aʃi* ‘all’ in the following examples:

(88) aʃi útʃi áinau tsamaún yuwáŋmĩ

[aʃi útʃi a-ina-u] [tsamau-na] yu-a-aha-mĩ
 [all child COP-PL:IMPFV-REL] [banana-ACC] eat-HIAF-PL-RECPAST:3:DECL
 ‘all the children ate bananas’

(89) útʃi áinau aʃi tsamaún yuwáŋmĩ

[útʃi a-ina-u] [aʃi tsamau-na] yu-a-aha-mĩ
 [child COP-PL:IMPFV-REL] [all banana-ACC] eat-HIAF-PL-RECPAST:3:DECL
 ‘the children ate all the bananas’

In particular, note that the quantifier in both examples is in the pre-head determiner position. Although this is the preferred position, it is not required; in the following example the quantifier follows its head (note that no ambiguity is introduced by varying the position of the quantifier in this example):

(90) ukúm kuwaʃat ayáwai

[ukumpi kuwaʃata] aya-wa-i
 [blackfly many] exist:PL+IMPFV-3-DECL
 ‘there are many blackflies’

Quantifiers may also function adverbially. The following example is from a story in which a man joins a herd of peccaries and turns into a peccary. After some time, the other people speculate that he will have completely changed. The sense of *afi* is not a numeric ‘all’, rather an adverbial ‘completely’.

- (91) *afí nahánĩstai áuk*
afi nahani-ĩ-tsa-tai au-ka
 all change:PFV-3:PFV-SPEC1-SPEC2 DST-FOC
 ‘he’ll have changed completely, that guy’ (4:2:30)

Note the lack of accusative case on the quantifier *batfik* ‘a little’ in the following example:

- (92) *bátfik unuimáhai*
matfik unuima-a-ha-i
 a.little learn-HIAF-1SG-DECL
 ‘I’ve learned a little’

The verb *ayampa* ‘look around’ in the following example is intransitive, and the S is singular, so the quantifier *mai* ‘both’ cannot refer to an NP argument.

- (93) *mái ayámpã*
mai ayampã
 both look.around:PFV:SEQ+3:SS
 ‘(the man) having looked around on both sides...’ (6:3:45)

All of this shows that quantifiers are characterised by their flexibility: they may function as determiner or modifier, or they may function adverbially, outside of NP. As a rule quantifiers do not take case-marking.

matfik ‘a little’ is also used in combination with *asa* (COP:SBD/SEQ) to give the sense ‘in a little while’:

- (94) *bátfik asán wíuyahai*
 [*matfik asa-nu*] *wi-a-ha-i*
 [a.little COP:SBD/SEQ-1SG:SS] go-IMPV-1SG-DECL
 ‘I’ll go in a little while’

Note that the subordinate verb has the same subject as the controlling verb – so a literal translation would be ‘I being a little bit, I will go’.

3.7 Adverbs

In all language descriptions ‘adverb’ tends to be a something of a disparate category. Typically adverbs can be divided into at least three subclasses, manner, time and location; and this is the case in Aguaruna. A fourth subclass is sound-symbolic words, very important in the Jivaroan languages, which pattern syntactically and semantically with manner adverbs but are considered by native speakers to be a different class.

Adverbs modify a predicate. They are almost entirely without morphological possibilities; the exceptions are time and location words, which can receive diminutive *-utfi* and focus *-ka*.

3.7.1 Manner adverbs

Manner adverbs fall into two subclasses: verbal and non-verbal. The verbal type are inflected for the person of the subject, using the same person markers as same-subject subordinate verbs. Manner adverbs typically precede the predicate in a clause, as in the following example spoken by the village chief when some young men were getting too boisterous at a party:

- (95) *diipása nantsimámi*
diipasa nantsima-mi
 slowly+1PL dance:PFV-HORT
 ‘let’s dance slowly (i.e. carefully)!’

The person markers for verbal-type adverbs are laid out in the following table:

PERSON	SINGULAR	PLURAL
1	<i>-nu</i>	suppression of apocope
2	<i>-mí</i>	
3	nasalisation of stem-final vowel	

Table 3.27: Person markers in verbal-type adverbs

These are the same markers as same-subject subordinate verbs (§9.4.1). Second person singular and plural are not differentiated, as the following example shows. The verbal marking shows that the subject is second-person plural:

- (96) wáinkamihúipahum
 wainaka-mi ihu-i-pa-humi
 in.vain-2 stab-APPR-2:INT/PROHIB-2PL
 ‘don’t stab it in vain!’ (6:4:160)

The table below exemplifies the adverbial person paradigm with the adverb *aatusa* ‘thus’ (for the change of /s/ to [ts] following /t/ see §2.2.3).

PERSON	SINGULAR	PLURAL
1	[áattsan] aatusa-nu	[áattsa] aatusa
2	[áattsam] aatusa-mi	
3	[áatus] aatusã	

Table 3.28: Paradigm of verbal-type adverb *aatusa* ‘thus’

Because of the morphological similarity, clauses subordinated with the non-temporal subordinator *-sa* can look like adverbs, for example *imamkima-sa* (take.care-SBD) ‘carefully’. The few examples of true adverbs have no corresponding verb, for example *diipasa* ‘slowly, carefully’ has no corresponding verb **diipa*; it may in fact have been borrowed from Sp. *despacio* ‘slowly’, reanalysed to fit the native system. Similarly, *aatusa* ‘thus’ has no corresponding verb **aatu*, but looks as if it has come from *aa* ‘thus’ plus *tu* ‘say’. A further corollary of the non-verbal nature of these words is the fact that they cannot take different subject marking, unlike verbs.

The table below lists the unambiguously adverbial forms in my corpus, that is, those that have no corresponding verb.

ADVERB	GLOSS
aatusa	‘thus’
diipasa	‘slowly, carefully’
tikima	‘so much’
wainaka	‘in vain’

Table 3.29: Verbal type manner adverbs

wainaka ‘in vain’ occasionally appears as *wainakasa*, apparently including the non-temporal subordinating suffix *-sa*. This suggests that these adverbs are considered by

speakers to be defective verbs, that only exist in subordinate form, rather than a separate word class.

Non-verbal adverbs take no morphology. Examples from the corpus are listed in the table below:

ADVERB	GLOSS
aa	‘thus’
ataktu	‘again’
diik	‘watching’, ⁶⁶
kakahus	‘easily’
ʃiiha	‘well’
paan	‘clearly’
sintʃi	‘strongly’, ⁶⁷
titu	‘still’, ‘quietly’
waamakɨ	‘quickly’
tsikin	‘suddenly’

Table 3.30: Non-verbal adverbs

Below are some examples:

(97) ámik titú puhustá

ami-ka titu puhu-sa-ta
2SG-FOC still live-ATT-IMP

‘you stay still’ (6:1:37)

(98) íkamỹãwãã tsikin wahukú dútikam nĩ máaniu

[ikam_yawaã tsikin wa-hu-ka-u] [dutika-ma]
[jaguar suddenly go.up-APPLIC-INTS-REL] [do.that:PFV-NON.A/S>A/S]_{Bridge}

[nĩ maani-u]
[3SG fight-REL]

‘The jaguar suddenly came up to him; when it did that he fought (it).’ (6:4:81)

⁶⁶ Probably from *dii* ‘watch’.

⁶⁷ *sintʃi* also functions as a noun ‘strength’; see §3.1.2.

The adverb *waamakɨ* ‘quickly’ is typically non-verbal, but as with *wainaka* ‘in vain’, it may appear with the suffix *-sa*, as in Text 2: 39, where a third-person subject form *waamakɨsã* appears.

The adverb *ʃiiha* ‘well’ is unique in that it can also modify adverbs and adjectives, with the meaning ‘very’:

- (99) a. ʃiiŋ sɨntʃi tupikákta
 ʃiiha sɨntʃi tupika-ka-ta
 very strong run-INTS-IMP
 ‘run very fast!’
- b. ʃiiŋ múun
 ʃiiha muunta
 very big
 ‘very big’

ʃiiha tends to have a distinctive emphatic intonation, with a lengthened vowel and a very high, falling pitch.

3.7.2 Sound-symbolic words

The sound-symbolic forms present in my data fall into two classes. The first group is purely onomatopoeic, for example “*tu, tu, tu...*”, which refers to hitting a tree root as a signal and “*hau, hau, hau...*” referring to a jaguar’s roar. There are apparently many well-established onomatopoeic representations of bird and animal calls, which would provide an interesting field for future study. The onomatopoeic forms typically appear repeated two or three times, and some appear to be nonce formations.

The second group fit into the regular phonology, and those attested in my corpus are listed below:

FORM	MEANING
hawát	putting something over ones shoulder (bag etc) (7:6:104)
ídaim	snake sticking out its tongue (cf. <i>idaima</i> ‘stick out tongue’ < <i>idai</i> ‘tongue’)
kakút	hitting, breaking apart (6:1:58)
kutút	vomiting
kuwiŋkahá	unwrapping
pakít	solid hitting solid
panán	coming out (of a hole, doorway etc.)
páuh	falling (6:2:35)
piípi	slapping with the hand (7:6:100)
piít	jumping (6:1:55)
piŋkasuá	wrapping up (Text 1:10) (cf. <i>p#mp#</i> ‘wrap up with winding motion’)
pisút	slashing
puhút	‘splash’
pútit	taking small bites
pútut	taking big bites
taŋkít	hitting
tapít	grabbing something
tjaát	entering (house, cave etc) (6:2:48)
tuhít	a part snapping off (6:2:12)

Table 3.31: Sound-symbolic words

Sound-symbolic words are used adverbially to modify predicates. Some examples have a close relationship with particular verbs: the locution in (100) is common:

(100) tapít atjík...

tapit atji-kā

SYM grab-INTS:SEQ+3:SS

‘having grabbed it: “yoink!”...’ (7:6:79)

Sound-symbolic words that have such a close association with a particular verb can be used without the accompanying verb; the verbal meaning is understood. Example (101) is from a story in which a hummingbird flies through the forest with its tail on fire, setting alight all the dry trees it hits. The sentence contains no verb referring to the hummingbird hitting the trees, but this is understood from the use of the sound-symbolic form *pakít*, which always denotes something solid hitting another solid object.

(101) númi kukáu átatman pakít pakít akáã...

[numi kukau a-tatamana] pakít pakít akaã
 [wood dry exist-A/S>O/E] SYM SYM burn:PFV:SEQ+3:SS

“‘whack! whack!’ having set alight the dry trees that were there...’ (1:4:25)

The sound-symbolic words are an important part of all the Jivaroan languages, and Payne (2001:596) mentions ideophones as a widespread feature of Amazonian languages. Nuckolls (1996) describes an elaborate and grammatically important system of sound-symbolic forms in Pastaza Quechua, and the following statement applies equally well to the Jivaroan languages:

“Its pervasiveness in Quechua speakers' discursive practice suggests that sound symbolism ramifies with their larger cultural concerns by pointing their attention to what is perceptually salient, affectively suggestive, and imaginatively engaging.” (Nuckolls 1996:5)

Sadly Nuckolls does not discuss contacts between Pastaza Quechua and neighbouring Jivaroan languages – this would no doubt be an extremely rewarding area for future research.

Phonologically, the majority of sound symbolic words are of the form CVCVC and all except one (*pauh* ‘falling’) are well-formed phonological words, unlike many of the purely onomatopoeic terms. Sound symbolic forms never take any morphology, and so are syntactically and morphologically a subset of the non-verbal type manner adverbs. They are considered to be distinct by speakers, however, who typically characterise them as representing the “sound’ of an action. In conversation, the sound-symbolic words tend to be associated with gestures and emphatic intonation.

3.7.3 Demonstrative manner adverbs

There are some adverbs with demonstrative function, which can be used to accompany gestures, or to refer anaphorically to an earlier mentioned action. The one basic form is to be *aa* ‘thus’; the others appear to be morphologically complex, although it is hard to be sure of the source and/or directionality of development:

ADVERB	GLOSS	SOURCE
áa	‘thus’	-
aá-tu-sa	‘thus’	thus-say-SBD
hu-ní	‘like this’	PRX-ALL (?)
imáni	‘so much’	pro-verb(?)
nu-ní	‘like that’	ANA-ALL (?)

Table 3.32: Demonstrative adverbs

aatusa is a verbal-type adverb, and is inflected as a subordinate verb (table 3.29). The others are non-verbal adverbs. *aatusa* is also used to signal the end of a list of coordinate NPs – see §5.8.

3.7.4 Time words

Time words are the most commonly encountered class of adverbs. They most frequently take initial position in the clause, as in the following examples, but are in general more mobile than manner adverbs.

- (102) a. kaʃín tũwĩ wítatmi
 kaʃini tu-ĩ wi-tata-mĩ
 tomorrow where-LOC go:PFV-FUT-2
 ‘where are you going tomorrow?’

- b. ãhúm wainiámi
 ãhum wai-naia-mi
 later see-RECIP:PFV-HORT
 ‘let’s meet later’ (leave-taking formula)

Constructions involving an NP referring to a period of time, plus a subordinate form of the copula may function as time adverbs:

- (103) a. dúkap tsawán ásã
 [dukapì tsawanta] asã
 [many day] COP:SBD/SEQ+3:SS
 ‘after many days...’
- b. bátjik asán
 matjikì a-sa-nu
 little.while COP:SBD/SEQ-1SG:SS
 ‘in a little while (I will...)’

Like non-verbal type adverbs, time words are morphologically opaque, but three roots appear to be represented more than once, as shown in table 3.33.

TIME WORD	GLOSS	RELATED FORM?
ãhúm	later	–
đíkatkau	first	–
íki	not yet	–
káfi	‘at night’	–
káfikmas	‘early in the morning’	káfi
kaíínĩ	‘tomorrow’	káfi
túki	‘always’ (also NP operator meaning ‘like’, §5.2.5)	–
yamá	‘newly, just now’	–
yamáí	‘now’	yamá
yáũ	‘yesterday’	–
yáuntjukì	long ago (or ‘very recently’?)	yáũ

Table 3.33: Time words

The time word *íki* ‘not yet’ is always used with a negative verb. The following example was uttered by a man who was holding a bowl of *masato* (manioc beer); his wife, whose job is to hand round the *masato* bowl, made to take it from him, thinking he had already drunk his share:

- (104) hukípa íki umáshai
 hu-ki-i-pa íki uma-sa-ha-i
 take-TRF-APPR-2:INT/PROHIB not.yet drink-ATT-1SG-DECL
 ‘don’t take it, I haven’t drunk yet’ (Obs)

A special time word used at the beginning of traditional stories is the compound *duwik muunta* (olden.days adult) ‘in the time of our ancestors’. That this originated as a compound noun is shown by the fact that it may appear with the locative suffix *-numa*. In my data this compound only ever appears introducing traditional narratives, and the first element *duwik* only ever appears in this compound.

Unlike non-verbal manner adverbs, time words can take some morphology: restrictive *-kI*; focus *-ka*; and additive *-fa(kama)*.

- (105) a. *yabaík*
 yamai-kI
 now-RESTR
 ‘right now’
- b. *yáuntʃukik*
 yauntʃuki-ka
 long.ago-FOC
 ‘long ago’
- c. *wimí dikás káʃij*
 wi-mi *dikas* *kaʃi-ʃa*
 go:PFV-HORT really night-ADD
 ‘let’s go, really, even though it’s night’ (8:1:74)

Temporal adverbs can also be formed from dates and similar with the ‘time locative’ suffix *-tin*, e.g. *dosmilseis-tin* ‘in 2006’; *byernes-tin* ‘on Friday’. All my examples of the suffix *-tin* are added to borrowed Spanish time words (see §3.11.4.2).

3.7.5 Location words

I have already mentioned inherently locational nouns that can be used without the locative suffix, and nouns with irregular locative forms (§3.3.6). Underived location words are listed in the table below:

LOCATION WORD	GLOSS
amáin	‘the other side of the river’
atú	‘on the river bank’
atúfat	‘far off’
ímau	‘way over there’
yakí	‘above, vertically up’

Table 3.34: Location words

These words function adverbially, and take no morphology.

(106) íntsa atú wíuqahai

íntsa atú wi-a-ha-i
stream on.the.riverbank go-IMPV-1SG-DECL

‘I’m going to the bank of the stream (without crossing)’

(107) yãwãã yakí áwa

yawaã yakí a-wa
dog above exist-3:EXCL

‘there’s a dog up there!’ (Obs)

(108) amáin wimí

amain wi-mi
other.side go:PFV-HORT

‘let’s cross (the river)’

There are also a few nouns that are functionally part of the location word set. These differ amongst themselves in the extent of their similarities to location words.

initak ‘inside’ and *waapak* ‘under’ may function adverbially:

(109) ínitak áwai

initaka a-wa-i
inside exist-3-DECL

‘it’s inside’

But to say *what* something is inside or under, a possessed form must be used:

(110) piuqaká waápkín áwai

piuqaka waapakĩ-nĩ a-wa-i
bed+GEN under:PERT:1PL/3-LOC exist-3-DECL

‘it’s under the bed’

(111) *namaká ínitkín*

[*namaka* *initakĩ-nĩ*]
[river+GEN underneath:PERT:1PL/3-LOC]_{NP}

‘at the bottom of the river’ (2:1:11)

untsu ‘right’ and *mĩna* ‘left’ only appear as possessed nouns:

(112) *mína mĩnahũĩ áwai*

mi-na *mĩna-hu-ĩ* *a-wa-i*
1SG-ACC left-PERT:1SG-LOC exist-3-DECL

‘it’s on my left’

Three other forms require the locative suffix *-numa*: *uku-numa* ‘behind’; *nuhi-numa* ‘upstream’ (cf. *nuhi* ‘nose’, also used to refer to the prow of a canoe); and *tsumu-numa* ‘downstream’. The latter form is exemplified in the following example, from a story about a battle with a group of Huambisas from the Santiago River. They are referred to as ‘enemies from downstream’ because one must travel down the Marañón River from the Aguaruna area where this story was recorded to get to the Santiago River.

(113) *tsumúnumia jiwàhanunú kanús anúmkauwai kayánum*

[*tsumu-numa-ia* *jiwaha-a = nunu* *kanusa*]
[downriver-LOC-ABL enemy-COP:3=ANARel *Santiago.River*]_{NP}

anuma-ka-u-ai *kaya-numa*
land-INTS-REL-COP:3:DECL rock-LOC

‘those enemies from downriver, (those from the) Santiago River, landed (their canoes) on the rocks’ (6:8:18)⁶⁸

ĩma ‘go ahead’ is a verb, and appears as a sequential subordinate clause:

(114) *ĩmkan wĩuqahai*

ĩma-ka-nu *wi-a-ha-i*
go.ahead-INTS:SEQ-1SG:SS go-IMPV-1SG-DECL

‘I’m going on ahead’ lit. *I having gone ahead, I’m going.*

⁶⁸ Note that this example contains an ‘apposed name’ NP, as described in §5.6. The name *kanusa* is typically applied both to the Santiago River and to the Huambisa people who live there.

Finally, there are the nouns mentioned above that have exceptional locative forms, formed with accent shift instead of a locative suffix, such as *hintá* ‘in the path’ < *hintá* ‘path’; *náin* ‘uphill’ < *náinta* ‘hill’.

All location words and locative case-marked NPs make no distinction between locational and directional uses. The only class to have separate locative and allative forms is the demonstratives (§3.5.2).

3.7.6 Intensifier *ima*

The intensifier *ima* is a particularly flexible word. It typically functions as a manner adverb, but also may modify an adjective or adverb (properties shared only with *fiha* ‘well’), and may modify NPs, where in combination with the restrictive suffix it gives the meaning ‘only’ (§3.4.4.3). Unlike other adverbs except perhaps *aa* ‘thus’, *ima* combines with the verbalising suffixes *-ni* and *-tika* to produce pro-verbs meaning ‘do so much’ (§3.11.1.2).

A number of words of different classes are derived from *ima*:

FORM	WORD CLASS	GLOSS	TRANSLATION
ímau	location word	INTENS.LOC	‘over there’, ‘right there’
ímaŋ	adjective	INTENS.ADJ	‘so big’, ‘so grand’
íman	pronoun	INTENS.NR	‘such a big one’, ‘such a grand one’
imáfi	manner adverb	INTENS.ADV	‘so well’, ‘better’
imáni	demonstrative manner adverb	INTENS.DEM.ADV	‘so much’

Table 3.35: Forms based on intensifier *ima*

The manner adverb *imáfi* (INTENS.ADV) ‘so well’ can be analysed as composed of *ima* plus *fiha* ‘well’.

3.8 Particles

3.8.1 Discourse particles

Discourse particles express speaker attitude and have scope over the whole clause. They do not modify any element of the clause, so can be omitted and still retain the meaning of the clause.

Discourse particles are:

FORM	GLOSS
áyatak	‘only’
díkás	‘really’
kamǐ́	‘better’
nuwiŋtú	‘furthermore’
túha	‘even so’, ‘but’
úntsu	‘well then’

Table 3.36: Discourse particles

The distal demonstrative with restrictive suffix (*au-kI*) also functions as a discourse particle when used in its textual cataphoric function, signalling the speaker’s attitude towards the exclamation that follows (§3.5.2.3).

Because of their function of placing a clause in the context of the surrounding discourse, the discourse particles may function like coordinators. *túha* ‘even so, but’ in particular often functions as a disjunction ‘but’, and this function is described in §12.3.2.

A detailed study of the use of discourse particles is a topic for future research.

3.8.2 Interjections

There is a semi-closed class of interjections. They typically consist of just one surface syllable of the shape CVC or CVV. Some interjections do not fit into the usual phonological system – see §2.8.5.

Table 3.37 gives an exhaustive list of conventionalised interjections present in my data:

FORM	FUNCTION
tʃak	‘boundary marker’ in narrative
wa□	surprise
hi□	surprise
tʃii	‘oh really?’, ‘I see’
áa	‘thus’
□ái	surprise
pái	enough, done, ready
atʃá	‘I don’t know’
tsúa	‘well how about that?’
háu	response to someone calling ones name
s#í	despair
s#í	‘thank you!’ ⁶⁹
ayú	agreement, ‘ok’
ái	as above – form used in women’s casual register
h#í ~ #í	‘yes’
atsá	‘no’
ma□ ~ máa	hesitation
tʃúu	exasperation

Table 3.37: Standard interjections

As with the sound-symbolic forms, interjections can be loosely categorised into two classes: those that are more fixed, and nonce formations, which often are not well-formed phonological words.

3.9 Interrogatives

Interrogatives do not form a word class in the same sense as other classes, as its members are drawn from other classes. There are three interrogative pronouns: *tu*, *ya* and

⁶⁹ *s#í* ‘thank you’ can be modified with the quantifier *kuwafata* ‘much’: *s#í kuwafata* ‘thank you very much’.

wahĩ, differing in specificity and humanness; a fourth root *wahu* always appears in complex forms⁷⁰, and the fifth root is the pro-clausal form *wãã ~ waŋka* ‘why’.

FORM	WORD CLASS	GLOSS
tu	Location word	‘where’
tu	Pronoun	‘which (of a set)’
ya	Pronoun	‘who (human)’
wahĩ	Pronoun	‘what (non-human)’
wahu-pa	Quantifier	‘how many’, ‘how much’
wahu-ka	Adverb	‘how’
wahu-ti	Time word	‘when’
wãã~waŋka	Pro-clause	‘why’

Table 3.38: Interrogative words

The suffixes *-pa*, *-ka* and *-ti* that appear with the root *wahu* are not attested anywhere else (“cranberry” morphs).

There are some morphological features that separate interrogatives out as special lexemes within other classes:

1. Interrogatives impart ‘content interrogative’ mood to their clause; the verb then takes no mood suffix but is marked by suppression of apocope (compare 115a and b, and see §8.7.3)
2. Related to the suppression of apocope is the appearance of the full form of third-person copula suffix with an interrogative lexeme (compare 116a and b, and see §4.10.2) and long-form second person suffix *-mia* on subordinate verbs in interrogative clauses (§9.4.1.3)
3. A different second person suffix *-pa* appears with a copula-marked interrogative lexeme – it only appears here and on prohibitive verbs (compare 117a and b, and see §8.6.1)
4. A special suffix *-ki* appears only on interrogatives – its meaning is unclear, but appears to function as a focus marker (§4.8.1)

⁷⁰ In spite of appearances, comparative evidence suggests that *wahĩ* and *wahu* do not share a root **wa*, having originated in PJ forms **wari* and **uru* respectively.

- (115) a. wíuqamik
 wi-a-mi-ka
 go-IMPV-2-POLINT
 ‘are you going?’
- b. túu wíuqami
 tu wi-a-mi
 where go-IMPV-2
 ‘where are you going?’
- (116) a. píjkiñkait
 piñkiha-ka-ita
 good-POLINT-COP:3:INT
 ‘is it good?’
- b. yánauwaita
 ya-nau-aita
 who-POSS-COP:3:INT
 ‘whose is it?’
- (117) a. amikáitam
 ami-ka-ita-mi
 2SG-POLINT-COP-2
 ‘is it you?’
- b. yáitpa
 ya-ita-pa
 who-COP-2:INT/PROHIB
 ‘who are you?’

wahĩ ‘what’ followed by the copula suffix *-aita* surfaces as *wahimpáita* ‘what is it?’, with epenthetic /mp/. This is often reduced to *wahimpáya* in casual speech.

- (118) húfa wahimpáya
 hu-ʃa wahimpaya
 PRX-UNCERT what+COP:3:INT
 ‘what is this?’

Interrogative forms use different second-person subject markers from declarative. The normal morphemes are singular *-mí*, plural *-humí*, but in interrogatives they are singular *-pa*, plural *-hupa*. Interestingly, the second person prohibitive forms also include the *-(hu)pa* forms, as in the examples below, and one of the verbal second-person object markers is *-pa* (§7.5.6).

- (119) a. hukípa
 hu-ki-i-pa
 take-TRF-APPR-2:INT/PROHIB
 ‘don’t take it!’
- b. iyáhaiŋpa
 iya-ha-i-hupa
 fall-PLU-APPR-2PL:INT/PROHIB
 ‘don’t fall! (plural)’

3.10 Hesitation pro-form

The hesitation pro-form *naa* may function as an interjection or pronoun. In its pronominal function *naa* heads an NP and takes nominal morphology, but cannot be modified.

- (120) a. naán yúwahai ... uháŋ kíŋkiutʃin wíka yúwahai
 naa-na yu-a-ha-i... [uháŋ_kíŋki-utʃi-na] wi-ka
 INDEF-ACC eat-IMPV-1SG-DECL [wild.potato-DIM-ACC] 1SG-FOC

 yu-a-ha-i
 eat-IMPV-1SG-DECL
 ‘I’m eating thingamajig ... I’m eating wild potatoes (*sachapapa*)’ (6:1:18)
- b. naáŋkam nuwínuŋkam
 naa-ŋakama nuwínu-ŋakama
 INDEF-ADD husband-ADD
 ‘also umm ... also her husband’ (6:6:54)
- c. náutʃik katípiutʃik
 na-utʃi-ka katipi-utʃi-ka
 INDEF-DIM-FOC rat-DIM-FOC
 ‘the little umm ... the little rat’ (6:6:69)

- d. nahínaʃkam ʃinutáihinaʃkam yapəŋkáu áinawai
 na-hĩ-na-ʃakama ʃinu-taĩ-hĩ-na-ʃakama yapahi-ka-u
 INDEF-PERT:1PL/3-ACC-ADD call-NON.A/S:NR-PERT:1PL/3-ACC-ADD swap-INTS-REL
- a-ina-u-ai
 COP-PL:IMPFV-REL-COP:3:DECL
- ‘also their umm ... also their songs they swapped’ (6:7:47)

In each case the indefinite pronoun takes the same suffixes as does the full form. The uninflected form is [náa], and the accent is shifted when the accusative suffix *-na* is added, giving the surface form [naán] < *naa-na* (HESIT-ACC), just like a regular noun.

It is important to note that *naa* is a hesitation device: it **always** anticipates a full lexical noun, and cannot be used for hedging or anaphoric reference as can English ‘thingamajig’ for example.

3.11 Word-class-changing derivation

There are a number of derivational suffixes for changing the word class of a root, both productive and unproductive. The most common and productive is nominalisation of verbs, and this is discussed in detail in Chapter 10.

3.11.1 Verbalisation

Verbs are derived productively from nouns, and unproductively from nouns, some pronouns and adverbs.

3.11.1.1 From nouns

There are six processes by which verbs are derived from nouns, listed in the table below along with the semantic properties of the derived verb and a comment on the productivity of the process.

SUFFIX	SEMANTICS	PRODUCTIVITY
-∅	‘typical’ action (often manipulative)	unproductive
-ma	manipulative – derives a transitive verb	unproductive
-na	attributive, ‘to get <i>noun</i> ’	unproductive
-mauqa	inchoative – ‘become <i>noun</i> ’	productive but uncommon
-tu	meteorological phenomena	unproductive, only two examples
-tu	onomatopoetic verbs	unproductive

Table 3.39: Denominal verbalisation

Zero derivation may produce verbs of any transitivity type. There is not enough evidence to say for certain which direction the derivation works: perhaps the verb is primary, with a zero-derived noun.

- (121) *hũya* ‘house’ → *hũya-∅* ‘arrive’ (intransitive)
tĩmafi ‘comb’ → *tĩmafi-∅* ‘comb O’s hair’ (transitive)
naŋki ‘spear’ → *naŋki-∅* ‘throw O at E’ (ditransitive)

Verbalisation with manipulative *-ma* always produces a transitive verb. The derived verb has the sense of some typical action associated with the noun, and there is no flexibility. So for example, *naŋki-ma* (spear-VR) always means ‘throw O’, and could not mean, for example ‘stab’.

- (122) *hũya* ‘house’ → *hũya-ma* ‘build O (must be ‘house’)
naŋki ‘spear’ → *naŋki-ma* ‘throw O’ (cf. *naŋki* ‘throw x at y’)

Manipulative *-ma* was also previously used to accommodate verbs borrowed from Spanish, as in the following examples, although in contemporary Aguaruna this suffix is not used to nativise borrowed verbs (see §3.12.1.1).

- (123) *kanta-ma* < *cantar* ‘sing’
kuita-ma < *cuidar* ‘care for’

Attributive *-na* derives an intransitive verb meaning ‘to get a *noun*’. As with the attributive nominal suffix (see §4.5.1), it is suffixed to the first person plural/third person possessed form of the noun:

- (124) *paki-hĩ* (lover:PERT:1PL/3) → *paki-hĩ-na* ‘fall in love’
nuwĩ (wife:PERT:1PL/3) → *nuwĩ-na* ‘get married’

The first example contrasts with manipulative *-ma* added to the same stem, the latter deriving the transitive verb *paki-hĩ-ma* (lover-PERT:1PL/3-VR) ‘to fall in love with O’.

Inchoative derives a verb that means simply ‘become x’. It is not very common but appears in traditional stories in which animals may appear as humans, and origin myths in which people get turned into trees, birds and animals.

- (125) *aĩntsu* ‘person’ → *aĩntsu-mauça-* ‘become human’
numi ‘wood’ → *numi-mauça-* ‘become a tree’

Only two derived meteorological verbs appear in my data.

- (126) *ĩtsã* ‘sun’ → *ĩtsan-tu-* ‘shine (of sun or moon)’
nasĩ ‘wind’ → *nasĩn-tu-* ‘blow (of wind)’

The meteorological forms are typically used with an overt cognate subject:

- (127) *nasĩ* *nasĩnta-a-wa-i*
wind blow-IMPV-3-DECL
‘the wind is blowing’, ‘it’s windy’

Five onomatopoeic verbs derived with *-tu* represent involuntary oral actions:

VERB	GLOSS
<i>búu-tu</i>	cry
<i>hatʃi-tú</i>	sneeze
<i>hiki-tú</i>	hiccup
<i>hukaá-tu</i>	snore
<i>ũhu-tú</i>	cough

Table 3.40: Onomatopoeic ‘oral action’ verbs

The suffix *-tu* is from the verb *tu* ‘say’, and the verbs are fossilised speech reports consisting of onomatopoeic representations of the sound described, for example *hatʃi* represents a sneeze, *hiki* a hiccup.

3.11.1.2 Pro-verbs

Pro-verbs are formed on demonstratives and adverbs, by means of two verbalisers *-ni* and *-ti(ka)*.

ROOT		<i>-ni</i>	<i>-ti(ka)</i>	GLOSS
PROXIMAL DEMONSTRATIVE PRONOUN	hu	hu-ni-	hu-tika-	‘this’ / ‘do this’
ANAPHORIC PRONOUN	nu	nu-ni-	nu-tika-	‘that’ / ‘do that’
INTENSIFYING ADVERB	ima	ima-ni-	ima-tika-	‘so’ / ‘do so much’
DEMONSTRATIVE ADVERB	aa	aa-ni-	a-ika- ⁷¹	‘thus’ / ‘do thus’

Table 3.41: Verbalisation from pronouns and adverbs

The semantic distinction between the two verbalisers lies in the anticipated discourse prominence of the subject or object. The *-ni* forms are used where the subject of the verb is to be more topical in what follows, and the *-ti(ka)* forms where the object is to be more topical. An illustration of this distinction can be found in the fact that the subordinator *-ma*, which indicates a switch whereby a non-subject of the subordinate verb becomes subject of the controlling verb, only appears with *-ti(ka)* forms. On the other hand, the subject nominaliser *-inu* only appears with the *-ni* pro-verbs.

Given the distinction in subject versus object prominence, one might expect a transitivity distinction in the two types of pro-verb. This is not the case, however. All the pro-verbs are (potentially) transitive, but rarely appear with an overt direct object (except when used euphemistically to mean ‘have sex with’). In the example below, there is no concrete object.

(128) wāŋka hūniawa

wāŋka hūni-a-wa

why do.this-IMPV-3

‘why does (he) do this?’ (6:5:16)

But in the following example, an object NP is included:

⁷¹ It is not clear why the /t/ of *-tika* does not appear in this form.

(129) h́una d́utikan ẃitathai

hu-na dutika-nu wi-tata-ha-i
PRX-ACC do.that:PFV:SEQ-1SG:SS go:PFV-FUT-1SG-DECL

‘when I’ve done this, I’ll go’

The pro-verbs are very common in narratives, and are used in bridging constructions to track participants and provide a conceptual link between finite clauses. Bridging constructions are described more fully in the context of clause combining in §12.4 and in the context of discourse structure in §13.3.

3.11.2 Deverbal nominalisation

Verbs are nominalised with three suffixes: *-inu* refers to the subject (A or S), *-taĩ* to a non-subject, typically O or location, and *-ta* to the action. Because nominalisations retain a number of verbal properties and are completely productive, they are discussed in Chapter 10 as part of verbal morphology.

3.11.3 Adjectivalisation

Although there is no productive adjective-forming derivation, there are some pairs of adjectives and words from other classes that appear to be related, and there is evidence for an unproductive adjectivalising suffix *-hama*. These phenomena were described in §3.4.6.3, as they are relevant to the definition of adjective as a distinct word class.

3.11.4 Adverbialisation

Adverbialisation is rare, with just two processes, described below.

3.11.4.1 ‘Even’

Nouns can be adverbialised with the suffix *-(a)ima*, which is always accompanied by reduplication. The resulting adverb has the meaning ‘even X’ where X is the noun root, as in the following example:

(130) aſı́ tı́kitſı́k utſı́ útſı́ma hınámı́tãı́...

[aſı́ tı́kitſı́ka] [utſı́ útſı́ima] hına-mataĩ
[all other-FOC] [REDUP child-EVEN] die.PL:PFV:SEQ-1/3:DS

‘all the others, even the children, having died...’ (6:2:64)

The following example demonstrates the adverbial status of the resulting form, as it takes no accusative marking even though the source noun is semantically the object of the following verb:

- (131) nuwái nuwáima ipámatũã
 [nuwai nuwa-ima] ipama-tu-ã
 [REDUP woman-EVEN] invite-APPLIC-HIAF:SEQ+3:SS
 ‘having invited even the women...’ (4:2:31)

The same suffix takes the form *-aima* following /i/ in the following example:

- (132) kiŋkí kiŋkíuɔaima
 kiŋki kiŋki-aima
 REDUP wild.potato-EVEN
 ‘even wild potato (*sachapapa*)’ (4:3:32)

The ‘even’ form is very rare in my data, I cannot be certain of the conditioning factors in choice of allomorph.

3.11.4.2 Time locative

The suffix *-tin* is added to dates borrowed from Spanish to form time words.

- (133) a. dosmilseis-tin
 2006-TIME
 ‘in (the year) 2006’
 b. lunes-tin
 Monday-TIME
 ‘on Monday’

Wipio (1996:155) gives examples of this suffix on native noun and verb roots, deriving traditional names of seasons, as in examples (134) below.

- (134) a. watʃi-tin
cañabrava.flower-TIME
 ‘the season when the *cañabrava* reed is in flower’
 b. ʃinu-tin
 call-TIME
 ‘the season when birds and monkeys make a lot of noise’

No such examples appear in my corpus.

3.12 Borrowing and codeswitching

3.12.1.1 Spanish

Where to draw the line between loanwords and code-switching? I heard many examples like the following when visiting Aguaruna-speaking households:

- (135) a. *dúsi tostámu*
 dusi tosta-*mau*
 peanut toast:PFV-NON.A/S:REL
 ‘toasted peanuts’
- b. *fritáta*
 frita-*ta*
 fry:PFV-IMP
 ‘fry it!’
- c. *ganáthai*
 gana-*ta-ha-i*
 earn:PFV-IFUT-1SG-DECL
 ‘I want to earn (money)’

The underlined verbs, from Spanish *tostar* ‘toast’, *fritar* ‘fry’ and *ganar* ‘earn’ respectively, have not been altered to fit Aguaruna phonology, nor do they use the verbalising suffix *-ma* that normally appears on verbs borrowed from Spanish (see §3.11.1.1). But they do take native Aguaruna morphology. Compare the nominal examples below:

- (136) a. *huyaðóres áinau*
 huyaðóres *a-ina-u*
 player:PL COP-PL:IMPFV-REL
 ‘players’
- b. *eskwélanum*
 eskwela-*numa*
 school-LOC
 ‘at school’

- c. tígren
tigre-na
 jaguar-ACC
 ‘the jaguar’

Note in particular that example (a) has both Spanish plural marking *-es* and the Aguaruna relative-clause plural marker *ainau*. Appel & Muysken (1987:172-3) note a similar situation in Quechua, where Spanish nouns are borrowed along with plural marking, and are then marked with the native plural suffix, for example *polisiya-s-kuna* (police-PL-PL) ‘policemen’, where the underlined morphemes are Spanish.

All these examples are difficult to classify as code-switching or borrowings, as they consist of a single Spanish word which doesn’t have an Aguaruna equivalent in (a) and (b), although it does in (c).

3.12.1.2 Quechua

There are a number of loanwords from Quechua in Aguaruna. These must have diffused from other areas, since there is no Quechua spoken in the Wawik River area. Quechua I was spoken on the upper Marañón River (Adelaar 2004), so there is some possibility of early contact with Jivaroan. Any other contact would have been with Quechua II, in the Inca or post-colonial era. Adelaar (2006) says:

“Most Quechua loans in Amazonian languages are relatively recent and have their origin in lingua franca type varieties of Quechua associated with a short period of Inca expansion (roughly from 1470 to 1532) or with Spanish colonial and missionary policies (roughly from 1532 to 1770).” (Adelaar 2006: 293)

Among the Shuar, Quechua speakers are associated with shamanic power and are the most sought after teachers for apprentice shamans (Rubenstein 2002). Taylor & Chau (1983) note that Quechua words may be introduced into Achuar shamans’ songs, and, to a lesser degree, the magic songs (*an#nta*) traditionally used by all adults (§1.7.2).

The following table lists the clear examples of borrowings in Aguaruna. Because of the lack of information concerning contacts between Quechua and Jivaroan speakers, and the often high degree of phonological change in naturalising loans to Aguaruna phonology,

it was impossible to ascertain an exact source for each word. The source orthography has been retained for all Quechua words cited.

AGUARUNA	QUECHUA	GLOSS (WORD CLASS)	SOURCE
apu	apu	‘chief’ (N); ‘big’ (Adj)	Hornberger & Hornberger (1977: 10)
ima	ima	‘very’; ‘so much’ (Adv)	Hornberger & Hornberger (1977: 70)
kutʃi	cuchi	‘pig’ (N) (< Sp <i>cochino</i> ?)	Stark & Muysken (1977: 169)
kuwitʃiki	cuchqui	‘money’	Stark & Muysken (1977: 169)
mifju	mishi	‘cat’ (N)	Stark & Muysken (1977: 256)
piʃaka	pishcu	‘bird’ (N)	Stark & Muysken (1977: 280)
sintʃi	sinchi	‘strength’ (N); ‘strong’ (Adj)	Stark & Muysken (1977: 313)
yaakata	llaqta	‘town’ (N)	Hornberger & Hornberger (1977: 111)
yatʃa	yachaj	‘clever person’ (N); ‘clever’ (Adj)	Stark & Muysken (1977: 355)

Table 3.42: Aguaruna and Quechua pairs

Note that of the examples given, three may function as both noun and adjective – a common pattern in Quechua but not in Aguaruna – and the intensifier *ima* is particularly versatile in Aguaruna (§3.7.6). In addition, *piʃaka* ‘bird’ is phonologically unusual (see §2.5.5.2). This suggests that Quechua borrowings, although they are very commonly used words and appear on the surface to be well integrated into the language, are still a little short of complete assimilation in terms of word class behaviour and phonology. Further study is required.

Adelaar (2004: 443) notes that Quechua has a negative suffix *-tʃu*, cf. Jivaroan *-tʃa*, *-tʃau*; perhaps this is evidence of grammatical borrowing.

3.12.1.3 Other languages

Gnerre (1999: 116-7) identifies a number of lookalikes, of which the most likely to be loans are *tsukanʃka* ‘toucan’ (Carib *tukan*) and *yawaã* ‘dog, jaguar’ (Carib *yawar*).

From Tupí-Guaraní (perhaps via some other language(s)) come *timu* ‘barbasco’ and *kamu* ‘canoe’.

Adelaar (2004: 442) notes the similarity of Jivaroan *umu* ‘drink’ to Aymara *uma*, and also shows a number of grammatical lookalikes between Jivaroan and Aymara (2004: 436ff.).

Although lookalikes are fairly easy to find, however, these are not necessarily proof of borrowing, any more than they are proof of genetic relationship. As Gabelentz warns:

“It is terribly seductive to roam the world of languages comparing words from them at random and then to bestow upon scholarship a series of newly discovered relationships. Very many stupidities also result from this[.]” (von der Gabelentz 1972: 154)⁷²

Much work remains to be done in the field of genetic and areal relations among South American languages, and the Jivaroan family is particularly interesting in this regard, as it sits both typologically and geographically right at the nexus of the Andean and Amazonian areas.

⁷² “Es ist schrecklich verführerisch, in der Sprachenwelt umherzuschwärmen, drauf los Vocabeln zu vergleichen und dann die Wissenschaft mit einer Reihe neu entdeckter Verwandtschaften zu beglücken. Es kommen auch schrecklich viel Dummheiten dabei heraus[.]” Translation by Bill Poser (<http://itre.cis.upenn.edu/~myl/languagelog/archives/001511.html>).

Chapter 4: Nominal Morphology

4.1 Introduction

Nominal⁷³ morphology serves three broad functions: it can alter the sense of the nominal itself (derivation); it can mark relations within the NP (pertensive and genitive markers); and it can index the NP's function in the clause (case marking etc.). Nominal morphology is intimately bound up with the structure and functions of the NP: case markers are usually suffixed only to the last element of an NP, and the appearance of case suffixes can be an important diagnostic criterion for NP membership; and the relationship of possession is marked on both the possessum and the possessor. Double-case marking can occur, but is limited to combinations involving the ablative suffix.

An important aspect of nominal morphology is that many suffixes are shared with other word classes, including adjectives, personal pronouns, demonstratives and adverbs, and any word class overlaps are described for each suffix; in effect, this chapter covers all non-verbal morphology. However, a good number of the suffixes described are available only to nouns, and even the most versatile group, the discourse suffixes, are most commonly encountered with nouns. For each suffix (or group of suffixes that show the same properties) the possibility of appearing with other word classes in addition to nouns is discussed.

There is very little morphology that is unique to a word class other than noun or verb: a few adjectival suffixes and a few pronominal suffixes. These are described in the appropriate sections of Chapter 3, as they are relevant as diagnostic criteria in identifying word classes.

4.2 Structure of the nominal word

Nouns are defined syntactically as heading NPs and morphologically as those words that take suffixes marking case, pertensive and vocative. Inflectional morphology is shared

⁷³ The vast majority of suffixes that apply to nouns also apply to adjectives, so I use the term “nominal” in the traditional sense to designate the superclass of nouns and adjectives. Morphology that applies to nouns but not adjectives is specifically described as such.

with pronouns and adjectives to the extent that it is marked at the phrase level. Discourse suffixes are shared with pronouns, adjectives, verbs, adverbs, time words and subordinate clauses. Morphological possibilities are a major component of word-class distinctions, and are discussed in Chapter 3.

ROOT

- A: Diminutive
- B: (i) Pertensive
(ii) Person
- C: (i) Attributive, Possessive, Negative, Diminutive, Similative, SAP marker
(ii) Verbalisers (§3.11.1.1)
- D: Case
- E: Restrictive
- F: Discourse, Mood/modality
- G: Copula

Figure 7.1: Nominal morphological slots

Nominal morphology is entirely suffixing (see §2.8.3 for a discussion of the concepts of clitic and affix in Aguaruna). Suffixes can be divided on semantic and morphological grounds into four broad classes which are, in the order in which they are affixed: derivational, pertensive, inflectional and discourse suffixes. I describe these classes below.

4.2.1 Derivational suffixes

In contrast to inflection, which only marks the grammatical role of an NP in its clause, derivation changes the meaning of words, creating new lexemes. The clearest examples of derivational morphology are morphemes that change the word class, discussed in §3.11. There are, however, a number of suffixes which alter the fundamental meaning of a nominal without changing its word class. Derivational suffixes fall in slot C, following pertensive marking, but the diminutive suffix *-utfi* is unique in that it may also precede pertensive marking, appearing in slot A (but note it cannot appear in slots A and C in the

same word). Word-class-changing derivational suffixes relevant to nouns are verbalisers, which are described in §3.11.1.1; the current chapter deals only with word-class-preserving derivational suffixes.

4.2.2 Pertensive suffixes

Pertensive suffixes are those which mark a noun as possessed. These are not derivational, in that they do not create new lexemes, nor are they inflectional, as they can co-occur with the various inflectional case suffixes. Pertensive suffixes form a distinct group based on morphological characteristics, preceding inflectional suffixes. When the possessor is second person, there are two sub-slots in pertensive marking, the first filled by the pertensive marker itself and the second marking the person of the possessor. The other persons are marked with portmanteau suffixes, although it is possible to analyse these as morphologically complex (§4.4.2).

4.2.3 Inflectional suffixes

Inflectional suffixes mark case, and enter into a system of oppositions. They are almost completely mutually exclusive, and can be arranged as a paradigm.

4.2.4 Discourse suffixes

The fourth class are the discourse suffixes. Some express adverbial type meanings, such as ‘also’, ‘only’, ‘first’; there are no grammatical restrictions on the addition of these suffixes; their use is limited only by semantic and pragmatic considerations. Others are associated with clausal mood, speaker attitude and focus, and show some grammatical constraints on their application. The discourse suffixes are the most versatile, and are compatible with almost all word classes.

4.2.5 Accent shift

Certain suffixes induce a shift of accent in nouns and adjectives. The phenomenon of accent shift is discussed in detail in §2.7.2 along with all other morphophonological effects.

4.2.6 Class-changing derivation

4.2.6.1 Nominalising suffixes

There exists a range of nominalising suffixes, all of which are restricted to verb roots. These are action nominaliser, A/S nominaliser, non-A/S nominaliser. Once a verb has been nominalised, it can head an NP and take the full range of nominal suffixes, subject to semantic/pragmatic restrictions. Nominalising morphology is described in Chapter 10.

4.2.6.2 Denominalising suffixes

Denominalising suffixes are added to a noun to create a new word of a different class. There are three verbalisers that can be added to nouns: manipulative *-ma*, attributive *-na* and inchoative *-mauqa*. There are also a number of noun-verb pairs in which there is no morphological marker of verbalisation or nominalisation. Verbalisation is described in §3.11.

Nouns may also take a copula suffix, which allows them to head a predicate. A copula-marked noun can take verbal morphology, but there are some restrictions. Since a noun can also head a predicate in a verbless clause, there is no syntactic reason to call the copula a verbaliser, and although morphologically verblike, the resulting form cannot take the full range of verbal morphology. Thus I consider the copula suffixes to be part of nominal morphology and discuss them in §4.10 below.

4.3 Derivational morphology, first level

The first level of derivational morphology consists of only one suffix, *-utʃi* ‘diminutive’. Diminutive precedes pertensive marking, unlike other derivational suffixes.

- (1) *yaáptʃiŋmin*
yaapɪ-utʃi-humɪ-na
nerve-DIM-PERT:2-ACC
‘your little nerves’ (2:3:55)

However, the diminutive suffix may also appear in slot C, following other slot C suffixes – see examples in §4.5.

4.4 Pertensive morphology

The relationship of possession consists of one noun (the possessor) modifying a second (the possessum). In Aguaruna possession is normally head-marked (on the possessum) and dependent-marked (on the possessor), but there is also a nominal possessive marker that marks possessors without requiring any marking on the possessum.

Nouns fall into two classes based on the marking they take as possessum. The first group, which I label “suffixing”, marks possession entirely with suffixes in all persons, while the second group (labelled “vowel-changing”) uses a combination of suffixes and root apophony in second person, and root apophony only in first plural and third persons. The classes are not distinguished when the possessor is first person singular; then all nouns are marked only with a suffix *-hu*. The marking forms two layers, one marking the noun as possessed and the second indexing the person of the possessor; I use the term **pertensive** both as a gloss for the morpheme that indicates a noun is possessed, and as a general term for the morphological group that comprises the two layers. Use of this term avoids possible confusion between ‘possessed’ and ‘possessor’ marking.

Table 4.1 below shows the person markers for possessum. Third person and first plural possessor are identically marked, giving a three-way distinction of 1SG/ 2 / OTHER.

PERSON	MARKER		
	VOWEL-CHANGING CLASS		SUFFIXING CLASS
1SG	-hu		-hu
2	vowel change in root +	-mi	-humĩ
1PL/3		nasality of final vowel	-hĩ

Table 4.1: Morphological marking of possessum

The table below exemplifies possession paradigms for a vowel-changing noun *numpa* ‘blood’ and a suffixing noun *susu* ‘beard’.

	VOWEL-CHANGING	SUFFIXING
ROOT	[númpa] 'blood'	[súsu] 'beard'
1SG	[numpáj] numpa-hu blood-PERT:1SG	[susúŋ] susu-hu beard-PERT:1SG
2	[númpim] numpi-mi blood+PERT-2	[susuhúm] susu-humĩ beard-PERT:2
1PL/3	[númpĩ] numpĩ blood+PERT:1PL/3	[susuhĩ́] susu-hĩ beard-PERT:1PL/3

Table 4.2: Possession paradigms

There is good evidence that both paradigms can be analysed as morphologically complex, consisting of two levels: the first marking the noun as possessed, and the second marking the person of the possessor – this approach is taken by Payne (1990b), and Corbera (1994: 124ff.), although their analyses need to be altered slightly to explain all of the observed facts. The morphological makeup of pertensive marking is discussed in section §4.4.2 below; prior to that, the marking patterns are described.

The possessor may take one of two forms, genitive, described in §4.6.2.1, or possessive, described in §4.5.2. The structure of the possessive NP as a whole is described in §5.5.

4.4.1 Stem apophony

Nouns of the vowel-changing class with final /a/ or /u/ undergo vowel changes when the possessor is a person other than first singular. Roots ending in /i/ and /ĩ/ never show vowel changes. There is a basic regularity to the apophony, although a few exceptions must be admitted. There is also some phonological basis for subgroups of vowel-changing nouns based on apophony effects:

- Roots ending in /a/ show regular apophony, with the final vowel becoming /ĩ/ or /i/ depending on the quality of the preceding vowel

- Roots ending in /hV/ always show irregularities, probably arising from haplology in the first-person singular possessed form, which is marked with the suffix *-hu*
- Roots ending in /u/ are the least common, and data are insufficient to support a rule-based analysis: of three examples, one changes /u/ to /i/, one shows the same change but only in the non-second form, and the third *adds* final /i/ in the non-second form, while still retaining /u/

Patterns of apophony are described below. Table 4.3 exemplifies vowel-changing nouns ending in /i/ and /ĩ/, with no vowel change with any possessor:

ROOT	1 SG	2	1 PL/3	GLOSS
anintai	anintai-hu	anintai-mi	anintaĩ	‘heart’
kai	kai-hu	kai-mi	kaĩ	‘sister (♀ speaking)’
awi	awi-hu	awi-mi	awĩ	‘child of sibling of opposite sex’/ ‘spouse of child’
ditsipi	ditsipi-hu	ditsipi-mi	ditsipĩ	‘chest’

Table 4.3: Possessed forms of vowel-changing nouns with final /i/ and /ĩ/

Vowel changes with final /a/ are phonologically conditioned. Final /a/ becomes /ĩ/ if the preceding syllable contains the vowel /u/ or /i/:

ROOT	1 SG	2	1 PL/3	GLOSS
duka	duka-hu	duki-mi	dukĩ	‘leaf’
numpa	numpa-hu	numpi-mi	numpĩ	‘blood’
nuwa	nuwa-hu	nuwi-mi	nuwĩ	‘woman’
nuŋka	nuŋka-hu	nuŋki-mi	nuŋkĩ	‘ground’
hĩuqa	hĩuqa-hu	hĩi-mi	hĩĩ	‘house’

Table 4.4: Change of final /a/ to /ĩ/ following /i/ and /u/

Elsewhere, that is, following a syllable with nucleus /a/ or /i/, /a/ becomes /i/:

ROOT	1SG	2	1PL/3	GLOSS
kata	kata-hu	kati-mi	katĩ	‘penis’
yawaã	yawaã-hu	yawai-mi	yawayĩ	‘dog’ ⁷⁴
hinta	hinta-hu	hinti-mi	hintĩ	‘path’
iha	iha-hu	ihi-mi	ihĩ	‘shit’

Table 4.5: Change of final /a/ to /ĩ/ following /i/ and /a/

The single exception to these rules in my data is the noun *tfitfama* ‘speech’, which takes the possessed form *tfitfamĩ* ‘our/his/her speech’, rather than the expected ***tfitfamĩ*.

There appears to be no regular rule to the /u/-final vowel-changing nouns. If more examples can be found, perhaps a regular rule can be induced, but my data contain only the three nouns shown in table 4.6.

ROOT	1SG	2	1PL/3	GLOSS
wĩnu	wĩnu-hu	wĩni-mi	wĩnĩ	‘mouth’
baku	baku-hu	baku-mi	bakuĩ	‘thigh’ (E2:79)
yatsu	yatsu-hu	yatsu-mi	yatʃĩ	‘brother of ♂’

Table 4.6: Possessed forms of vowel-changing nouns ending in /u/

Roots that end in /hV/ give rise to some confusion:

ROOT	1SG	2	1PL/3	GLOSS
uhahi	uha-hu	uhahi-mi	uhahĩ	‘pubic hair’
kaŋkaha	kaŋka-hu	kaŋkahi-mi	kaŋkahĩ	‘lower leg’
uwaha	uwa-hu	uwahu-mi	uwahĩ	‘hand’
numpiha	numpi-hu	numpihu-mi	numpihĩ	‘anus’

Table 4.7: Possessed forms of nouns ending in /hV/

There are two patterns here: the first two nouns are treated as regular vowel-changing nouns, but the first singular form has the suffix *-hu* added to the root without its final /hV/ –

⁷⁴ But ‘dog’ also appears as suffixing: *yawaã-hĩ* (dog-PERT:1P/3) ‘his/her/our dog’.

perhaps a haplological deletion.⁷⁵ The second pattern sees the noun treated as a suffixing noun but throughout the paradigm the suffixes are added to the root minus its final /hV/ syllable; this looks like a more generalised haplology.

4.4.1.1 Exceptional nouns

A few nouns do not fit into the patterns described above:

- The irregular *tfitfama* ‘speech’ has already been mentioned. *aiḥ* ‘husband’ appears only in the vowel-changing possessed form, but Uwarai et al. (1998:11) give *aiḥh* as the possessed form, that is, a suffixed form *aiḥ-h* (husband-PERT:1PL/3). Perhaps this is a similar situation to the noun *yawaã* ‘dog’, which may be declined as either type.
- The noun *uma* ‘sibling of opposite sex’ has second person form *umai-mi* (sibling:PERT-2) and third person form *umayĩ* (sibling:PERT:1PL/3).
- *duku* ‘your mother’ and *apa* ‘your father’ take no pertensive marking with second person possessor, but are declined as regular suffixing nouns for all other persons.

All nouns marked with the diminutive suffix *-utfi* are suffixing, regardless of the class of the underived root. For example, *yaapĩ* ‘nerve:PERT:1PL/3’ is of the vowel-changing class, but compare example (1), in which the diminutive-marked form *yaapĩ-utfi* (nerve-DIM) is followed by the pertensive morphology proper to the suffixing class. This suggests that suffixing is the default class, but it could also be the case that diminutive forms take their class from that of the noun *utfi* ‘child’, which is clearly related etymologically to the diminutive suffix.

4.4.2 Morphological analysis of pertensive marking

It is clear that the second person suffixing form must be morphologically complex: *-mi* marks second person throughout the grammar, including on vowel-changing nouns, so it is safe to assume the *-hu* element marks the noun as possessed. What of the 1PL/3 form

⁷⁵ The proposed haplology would apply to /hV-hV/ regardless of vowel quality.

-hĩ? Previous analysts (Payne 1990b, Corbera 1994: 124ff) have decomposed this into *-hu* and a 1PL/3 marker *-(i)ĩ*, with subsequent fusion of the vowels. By this analysis, the same suffix *-(i)ĩ* also triggers the apophony and nasalisation in vowel-changing nouns. Further support for this hypothesis comes from the accent shifting effects: *-hu* shifts accent in 2 and 3 vowel nouns, and *-(i)ĩ* shifts accent in 3 vowel nouns.

Another piece of evidence for the hypothesised morphologically complex origin of *-hĩ* comes from the word *apahui* ‘God’, presumably a fossilised example of an earlier stage of development decomposable as **apa-hu-(i)ĩ* (father-PERT-1PL/3) ‘our father’. In the modern language, ‘our father’ is *apa-hĩ* (father-1PL/3).

The problem with prior analyses is that vowel mutation also happens in second person forms, so the mutation cannot be triggered simply by fusion of *-(i)ĩ* with the root-final vowel. The following set of rules adequately predicts the regular pertensive marking described above:

1. The pertensive form of the noun is marked for vowel-changing nouns with root apophony for non-first-singular possessor and zero-marked with first singular possessor. For suffixing nouns, pertensive is marked with the pertensive suffix *-hu*.
2. Person is marked for all possessed nouns with the suffixes *-hu* 1SG, *-mĩ* 2 and *-ĩ* 1PL/3.
3. The combination *-hu-hu* (PERT-1SG) is reduced haplogically to *-hu*.
4. The combination *-hu-ĩ* (PERT-1PL/3) fuses to surface as *-hĩ*.

These rules explain all except the exceptional nouns already described. Support for the phonological rules in 3 and 4 comes from the word *apahui* ‘God’ and the examples of haplogy in noun roots that end in /hV/.

While this hypothesis is certainly of value as a historical explanation, and reduces the observed data to a relatively simple set of rules, it has the problem in a synchronic description of postulating a hypothetical morpheme *-ĩ* that never actually surfaces in that form.

4.4.3 Semantic correlates of class membership

The two classes of nouns basically represent a distinction of inalienable versus alienable possession, where vowel-changing nouns are inalienably possessed and suffixing nouns alienably possessed; however, the assignment of any given noun to one or the other class is not readily predictable on semantic grounds. The extra phonological material

involved in marking alienable possession can be seen as iconic, inasmuch as the possession bond is seen to be weaker (T. Payne 1997:105).

The vowel-changing, inalienable class includes body parts (including ‘leaf’, ‘root’, and ‘branch’), kinship terminology, and a few other nouns such as ‘house’, ‘land’, ‘path’, ‘shit’ – all readily acceptable semantically as inalienably possessed. But within the important semantic areas of body parts and kinship terminology we find many suffixing nouns too, as illustrated in tables 4.8 and 4.9.

ROOT	GLOSS
ampu	‘guts’
kuntu	‘arm’
muntsu	‘nipple’
susu	‘facial hair’
tʃuki	‘vulva’

Table 4.8: Suffixing body-part nouns

ROOT	GLOSS
pata	‘relative’
apatʃi	‘grandfather’
dukutʃi	‘grandmother’
diitʃii	‘uncle’
wiɥa	‘father-in-law’
tsatsa	‘mother-in-law’
yuwa	‘female cross-cousin of female’
antsu	‘cross-cousin of opposite sex’
wahi	‘sibling of opposite sex-in-law’
utʃi	‘child’
nawantu	‘daughter’
utʃinu	‘son of brother of male’
ahiku	‘nephew’ (archaic/jocular)
nuwasu	‘niece’ (archaic/jocular)
tihanʒki	‘grandchild’

Table 4.9: Suffixing kinship nouns

In fact, there are more suffixing than vowel-changing kinship nouns in my corpus: all of the regular vowel-changing kinship nouns I am aware of are listed in table 4.10:

ROOT	GLOSS
kai	‘sister of female’
sai	‘brother-in-law of male’
uma	‘sibling of opposite sex’
awi	‘child of <i>uma</i> or spouse of child’

Table 4.10: Vowel-changing kinship nouns

There are three exceptional kinship nouns: *yatsu* ‘brother of male’ has the partially-suppletive vowel-changing 1PL/3 form *yatʃi*, while *duku* ‘mother’ and *apa* ‘father’ are unmarked for second person possessor but suffixing for other persons.

Vowel-changing body-part nouns are more common than suffixing forms; a selection is presented in table 4.11:

ROOT	GLOSS
baku	‘thigh’
ditsipi	‘chest’
iha	‘shit’
intaʃi	‘hair of the head’
iyãʃi	‘body’
kaŋkahi	‘lower leg’
nantʃiki	‘fingernail, claw, hoof’
nuhi	‘nose’
numpa	‘blood’
suwɨ	‘throat’
tʃiŋkuni	‘elbow’
tikiʃi	‘knee’
uhahi	‘pubic hair’
ũhi	‘body hair’
wɨnu	‘mouth’
yapi	‘face’

Table 4.11: Vowel-changing body-part nouns

One noun, *yawaã* ‘dog’ can be marked as either class.

Possession is never obligatory or inherent: nouns of both classes can appear outside of a possessive construction. Possession can also be indicated with the possessive suffix on the possessor noun or pronoun; this forms a kind of relative clause modifying the possessum, which is unmarked. This strategy is obligatory for at least two nouns when the possessor is human: *duka* ‘leaf’ and *tsuntsu* ‘snail’. The reason for this is that *duka* has the extended meaning ‘labia’ and *tsuntsu* the extended meaning ‘vulva of an animal’; use of the pertensive-marked forms implies these meanings, so the unmarked form is used to avoid embarrassing *double entendres*.

4.5 Derivational morphology, second level

Derivational suffixes do not typically cooccur, however there is evidence for the following subordering within slot C:

- (2) Root - ATTRIB - POSS - NEG / DIM

The following examples illustrate these orderings:

- (3) a. *mídaufu*
mi-nau-tʃau
1SG-POSS-NEG
'not mine'
- b. *mínauf*
mi-nau-utʃi
1SG-POSS-DIM
'my little one'
- c. *apáŋtinuʃ*
apa-hĩ-tinu-utʃi
father-PERT:1PL/3-ATTRIB-DIM
'a child who has a father (living)'
- d. *utʃíŋtinnau*
utʃi-hĩ-tinu-nau
child-PERT:1PL/3-ATTRIB-POSS
'belonging to a parent'

There are no examples of similative *-mamtin* or the SAP marker *-ti* cooccurring with other suffixes of slot C, nor of negative and diminutive cooccurring.

4.5.1 Attributive

The attributive suffix *-tinu* gives the meaning 'possessor of X', where X is the root noun. Attributive is suffixed to a stem marked as possessed by a first-person plural or third-person possessor, either with the suffix *-hĩ* (PERT:1PL/3) or with root apophony and nasalisation according to its class. The following examples illustrate attributive marking with a suffixing noun (4) and a vowel-changing noun (5).

(4) utʃiŋtin
utʃi-hĩ-tinu
child-PERT:1PL/3-ATTRIB
‘a parent’(6:2:51)

(5) núwintin
nuwĩ-tinu
woman:PERT:1PL/3-ATTRIB
‘a married man’

Attributive marking is only possible with nouns, as adjectives and pronouns cannot be possessed.

When followed by the negative suffix *-tʃau*, attributive appears as *-tu*:

(6) aháŋtutʃu
aha-hĩ-tu-tʃau
garden-PERT:1PL/3-ATTRIB-NEG
‘one who does not have a garden’

(7) núwintutʃu
nuwĩ-tu-tʃau
woman:PERT:1PL/3-ATTRIB-NEG
‘an unmarried man’

And the final /u/ changes to /a/ when followed by the copula suffix:

(8) núwinnai
nuwĩ-tinu-i
woman:PERT:1PL/3-ATTRIB-COP:3:DECL
‘he has a wife’

This suggests that the suffix must be complex, composed of **-tu* plus the subject nominaliser *-inu*, which always fuses with the preceding vowel and appears as *-ina* when followed by the copula suffix.

4.5.2 Possessive

The possessive suffix *-nau* combines with nouns, pronouns and adjectives and marks a possessor.

(9) a. isaíasnau
 isaías-nau
Isaías-POSS
 ‘Isaías’ one’

b. húu mínauwai
 hu mi-nau-ai
 PRX 1SG-POSS-COP:3:DECL
 ‘this is mine’

(10) ÿãwãã ínu maáf̣makum
 [yawaã ii-nau] ma-a-tʃa-ma-ka-umi
 [dog 1PL-POSS] kill-HIAF-NEG-RECPAST-POLINT-2SG:PAST
 ‘have you killed our dog?’ (6:5:74)

The following example comes from a story in which dogs and men swapped penises.

Note that the speech verb is functioning as a narrative modality marker (see §8.7.8).

(11) yamáí ÿãwããnuanú ínu ahakú táwai
 yamai [yawaã-nau-a=nu] [ii-nau] a-haku ta-wa-i
 now [dog-POSS-COP:3=ANARel] [1PL-POSS] COP-NARRNR say+IMPFV-3-DECL
 ‘then that which was the dog’s, was ours, so the story goes’ (6:10:24)

The possessive suffix may be added to nouns and pronouns, including the interrogative pronoun (examples 12(a), (b) and (c) respectively).

(12) a. huhú isaíasnau
 [huhu] [isaías-nau]
 [PRX]cs [Isaías-POSS]cc
 ‘this belongs to Isaías’ (Obs)

b. mínau pinihán̄
 [mi-nau] [piniha-hu]
 [1SG-POSS]cs [bowl-PERT:1SG]cc
 ‘my bowl’/ ‘the bowl is mine’

c. yánauwaita
 ya-nau-aíta
 who-POSS-COP:3:INT
 ‘whose is it?’

The examples in (12) a and b are appositive equative/attributive clauses. A second potential translation for (b) would be ‘the bowl is mine’. This construction does not appear as an NP argument; in that case, the genitive form would be used for the possessor.

This shows that the form *minau* in 12(b) is not a determiner. Unlike other NP modifiers, however, it can precede rather than follow the noun, presumably influenced by the similar genitive form, which always precedes the noun – see §5.5.

The possessive form can take the copula suffix, which can be added to nominals and pronouns but not determiners.

- (13) *mínauwai*
 mi-nau-ai
 1SG-POSS-COP:3:DECL
 ‘it is mine’

So the possessive-marked form functions in most respects as an adjective, but has the distinctive property of being able to precede its head.

4.5.3 Negative

The negative suffix *-tʃau* combines with nouns and adjectives. With adjectives it may form antonym pairs.

- (14) a. *piŋkiha*
 ‘good, beautiful’
 b. *piŋkiha-tʃau*
 good-NEG
 ‘bad, ugly’

Negation of the predicate nominal (CC) is the only way to negate equative/attributive clauses, as in the following example:

- (15) *pákitʃauwaithi íiyaithi*
 [paki-tʃau-aita-hi-i] [ii-aita-hi-i]
 [white.lipped.peccary-NEG-COP-1PL-DECL] [1PL-COP-1PL-DECL]
 ‘we’re not peccaries, we’re us (i.e. people)’ (4:2:10)

The same suffix combines with verb stems to form negative relative clauses. Although historically composed of negative *-tʃa* plus the relativiser *-u*, there is evidence to

show that synchronically it is morphologically simple in both its nominal and verbal forms: the verbal negator *-tʃa* only appears with verb roots, but the negative relativiser *-tʃau* appears with verbal, nominal and adjectival roots, so it must be a synchronically independent suffix.

4.5.4 Diminutive

The diminutive suffix *-utʃi* is clearly related to the noun *utʃi* ‘child’. Diminutive implies smallness or emotional connection or both.

- (16) a. natsáʉʃ
 natsa-utʃi
 youth-DIM
 ‘youth’
- b. ʃíiŋmaʉʃ
 ʃiihama-utʃi
 pretty-DIM
 ‘pretty’

Diminutive applies to nouns, adjectives and adverbs.

- (17) ãũʃáũʃ
 ãuʉa-utʃi
 outside-DIM
 ‘outside’

The use with adverbs may be influenced by the local Spanish. Diminutive marking with adverbs (e.g. *aquicito* ‘here-DIM’; *despuécito* ‘later-DIM’) is a marked regionalism in Peru, associated with Andean and Amazonian Spanish (R. Zariquiey B., pers. comm.).

The emotional connotation of the diminutive suffix has a parallel in verbs with the attenuative Aktionsart marker *-sa* (see §7.3.1.1).

As mentioned in §4.3, the diminutive suffix appears in slot A, preceding pertensive morphology, when the two markers cooccur.

4.5.5 Similative

The similative suffix *-mamtin* combines with nominal roots and the anaphoric pronoun *nu* to give the meaning ‘similar to X’.

- (18) a. *aíntsmamtin*
aínsu-mamtin
 person-SIMIL
 ‘like a person’
- b. *himpianúmamtin*
himpí-a = nu-mamtin
 hummingbird-COP:3=ANARel-SIMIL
 ‘one that is like a hummingbird’

Example (b) illustrates the use of similative-marked *nu* in a relativising construction. A native speaker has told me that the use with *nu* is the only “correct” one, and that all forms with *-mamtin* suffixed directly to a noun root (as in example a) are contractions of forms like example (b). The suffix is not common in my data, so I cannot elaborate on this claim.

4.5.6 SAP marker

The SAP marker *-ti* attaches to the final element of an NP and marks reference to a plural speech act participant.

- (19) *utʃitʃ ʃiyáku áhabiahi*
utʃi-ti-ʃa ʃiya-ka-u aha-amaia-hi-i
 child-SAP-ADD go:PL-INTS-REL COP:PL-DISTPAST-1PL-DECL
 ‘we children went too’ (2:2:20)

- (20) *íik húwĩ íi núwati máinahi*
ii-ka hu-ĩ ii nuwa-ti ma-ina-hi-i
 1PL-FOC PRX-LOC 1PL woman-SAP bathe-PL:IMPFV-1PL-DECL
 ‘we women are bathing here’ (6:9:20)

When the referent is second-person plural, *-ti* is followed by the second person plural marker *-humí*.

- (21) *átum áinautihum*
atumi a-ina-u-ti-humi
 2PL COP-PL:IMPFV-REL-SAP-2PL
 ‘you all’

The person hierarchy evidenced in other areas of the grammar can be seen at work here. The hierarchy works on two levels: at the first level, SAP outranks non-SAP (i.e. 1/2>3); at the second level, within SAP first-person outranks second person (1>2). Thus we see that SAP referents are marked with *-ti* while non-SAP referents go unmarked; and within SAP, first person is unmarked, attesting to its privileged position over second person.

The SAP marker appears with nouns and the relative-clause plural marker *ainau*. It is not attested with any other relative clause. It also appears with the ablative-marked pronoun *iinia* ‘one of us’ in its adjectival use. One of the first person plural pronouns, *hutii*, may have historically come from the proximal demonstrative *hu* plus the SAP marker, which would have the meaning ‘we here’.

4.6 Case marking

Aguaruna is a nominative–accusative language, and uses inflectional suffixes to mark core and peripheral cases. Subjects of transitive and intransitive verbs (A and S) take nominative case, which is unmarked; this is also the citation form of the noun. Objects (O and E) are marked with the accusative suffix. Nominal morphology does not distinguish O from E. Non-core cases are: comitative; locative; ablative; instrumental and vocative. The inflectional suffixes are generally mutually exclusive, except that ablative can cooccur with other case markers: locative and ablative typically appear together in that order, and the ablative marker also functions as an adjectivaliser, and in that role it can be followed by other case suffixes. There is also a genitive form, which is not strictly a case as it marks relations within the NP rather than grammatical relations. Genitive has developed historically from accusative marking and is discussed in the same section (§4.6.2).

Although nominative case is not marked with a suffix, the lack of marking is incompatible with other suffixes (apart from adjectivalising ablative marking); so an NP in subject position cannot carry any of the inflectional suffixes listed above.

Case markers are generally suffixed to the final element of an NP, unless a demonstrative pronoun is present – then all elements are case-marked. Full details of marking patterns conditioned by NP structure are in Chapter 5.

4.6.1 Nominative

Nominative case is not marked formally. Nouns and pronouns in subject position appear in the unmarked citation form. The examples in (22) show a noun and a pronoun in subject position.

- (22) a. núwa hapímkuʃin iŋkíau
nuwa hapimuku-utʃi-na iŋki-a-u
woman broom-DIM-ACC put-IMPV-REL
'the women put their brooms (in baskets)' (6:2:60)
- b. wíi iwasán díik ... tipístáhai
wi iwa-sa-nu díik ... tipí-sa-ta-ha-i
1SG wake-SBD-1SG:SS watching lie.down-ATT-IFUT-1SG-DECL
'I will lie awake watching' (6:2:5)

Example (23) illustrates the noun *tsampaunum* 'manioc leaves' in its citation form.

- (23) núna tsanímpa dukín "tsampáunum" múuntak túu ahakú áinawai
[nu-na tsanima-na dukĩ-na] tsampaunumi muunta-ka tu
[ANA-ACC manioc.plant-ACC leaf:PERT:1PL/3-ACC] tsampaunumi adult-FOC say
a-haku a-ina-wa-i
COP-NARRNR COP-PL:IMPV-3-DECL
'the elders used to call those manioc leaves "tsampaunumi"' (6:2:22)

The name in apposed name NPs also appears in citation form, see §5.6.

4.6.2 Accusative

The accusative case marks object NPs; the accusative suffix is *-na*. Both O and E arguments are marked with the accusative suffix, although they can be distinguished by other criteria, as described in §11.3.

An interesting property of Aguaruna is that there is not a complete overlap between syntactic accusative case and morphological accusative marking. When the subject is first person plural or second person singular or plural, only first person singular objects take accusative case. The verbal object marking remains the same.

- (24) a. atáʃ yuwáttahi
 ataʃu yu-a-tata-hi-i
 chicken eat-HIAF-FUT-1PL-DECL
 ‘we will eat chicken’
- b. tsabáu yuwáta
 tsamau yu-a-ta
 banana eat-HIAF-IMP
 ‘eat a banana!’
- c. mína naŋkimhuáta
 mi-na naŋkima-hu-a-ta
 1SG-ACC throw-1SG.OBJ-HIAF-IMP
 ‘throw me!’ (Obs)
- d. mína suhustá
 mi-na su-hu-sa-ta
 1SG-ACC give-1SG.OBJ-ATT-IMP
 ‘give (it) to me!’

Compare 24(a, b), in which the objects have no accusative marking, with (c), in which the first person object appears in the accusative form. Note also (d), in which the indirect first person object is accusative-marked. The factors conditioning non-accusative-marked objects are discussed in detail in §11.3.2.1.

An optional but common phonological process of word-final nasal deletion may affect the post-apocope reflex of the accusative suffix, [n]. The accusative suffix apparently historically marked possessors in possessive NPs, but synchronically the form with deleted nasal has developed into a distinct genitive marker, which I describe in the following sections.

4.6.2.1 The Genitive form of the noun

An overt possessor is not required within a possessive NP. When the possessor NP is expressed, it directly precedes the possessed noun, and typically appears in the genitive form, giving an NP of the form [*possessor*.GEN *possessed*-(PERT)-PERSON]_{NP}. In most examples genitive is not marked with a suffix, but is distinguished from the unmarked root by non-application of apocope and accent shift in nouns of 2 or 3 vowels.

(25) a. waʃí yakahĩ
 [waʃi yaka-hĩ]
 [monkey:GEN arm-PERT:1PL/3]
 ‘the monkey’s arm’ (6:2:27)

b. ataʃú yumihĩ
 [ataʃu yumi-hĩ]
 [chicken:GEN water-PERT:1PL/3]
 ‘chicken broth’

c. nátsatsama dukín
 [natsatsama dukĩ-na]
 [Santa.Maria.plant:GEN leaf:PERT:1PL/3-ACC]
 ‘leaves of the Santa Maria plant’ (6:2:26)

In all examples, the genitive form is identical to the accusative form except that it lacks the final /n/:

NOMINATIVE	ACCUSATIVE	GENITIVE	GLOSS
wáʃi	waʃín	waʃí	‘monkey’
ataʃ	ataʃún	ataʃú	‘chicken’
nátsatsam	nátsatsaman	nátsatsama	‘Santa Maria plant’

Table 4.12: Accusative and genitive forms

In fact, it appears that the genitive form has derived historically from the accusative form, and the possessor in a possessive NP was originally marked with the accusative suffix. The evidence for this hypothesis is:

1. Dropping of final nasals is well attested, particularly from accusative forms that directly precede their governing element
2. Pronominal possessors are always marked accusative
3. Lexical noun possessors may be marked with accusative if the NP is a verbal object

The phenomenon of word-final nasal deletion has already been shown to operate widely (§2.2.6.1), and needs no further discussion here. In the following two sections I shall elaborate on points (2) and (3) above, which relate to the overlap between accusative and genitive marking.

When the possessor is a singular pronoun, it is marked with accusative case, and clearly carries the suffix *-na*.

	NOMINATIVE	ACCUSATIVE/GENITIVE
1SG	wíi	mína
2SG	ámi	ámina
3SG	níi	nína

Table 4.13: Accusative/genitive forms of singular pronouns.

This phenomenon can be explained phonologically, as none of the singular pronouns undergoes apocope in the accusative form, and consequently nasal deletion cannot apply.

The example below illustrates the phenomenon of case agreement when the NP has a determiner. In this example, the possessor is a complex NP *nu nuwa* (ANA woman) ‘that woman’, and we see that the anaphoric pronoun takes accusative case, to agree with the genitive marking of its head noun.

- (26) *núna nuwá patahí*
 [[nu-na nuwa] pata-hĩ]
 [[ANA-ACC woman:GEN] family-PERT:1PL/3]
 ‘that woman’s family’ (8:1:67)

The following example shows a possessive object NP ‘that (man) Kagkap’s wife’; accusative case is marked throughout the NP, including the possessor (Kagkap):

- (27) *núna kaṅkapiṅ nuwĩn intsámhuinauḷkam*
 [nu-na kaṅkapi-na nuwĩ-na] intsamahu-ina-u-ḷakama
 [ANA-ACC Kagkap-ACC woman:PERT:1PL/3-ACC] have.sex-PL:IMPFV-REL-ADD
 ‘also those who were having sex with Kagkap’s wife’ (6:4:17)

4.6.2.2 Historical Development

Both the phonological similarities and the interchangeability suggest that genitive is historically derived from accusative.

So how could a marker of possessor arise from accusative? Accusative in Aguaruna is used not only for patient-like objects, but also for recipient like (E) objects – in effect, it is a marker of core non-subject NPs. Thus historically, the accusative suffix may have been used to mark the possessor of a possessed noun, in a ‘benefactive’ sense. Then dropping of

the final /n/ would have led to a reinterpretation, with the ‘possessor’ forms becoming a new genitive.

The diagram in figure 4.2 shows the historical development of the suffix *-na*, and its split into modern accusative, which marks object NPs, and genitive (after losing the final /n/), which marks possessors in possessive NPs, and some object NPs.

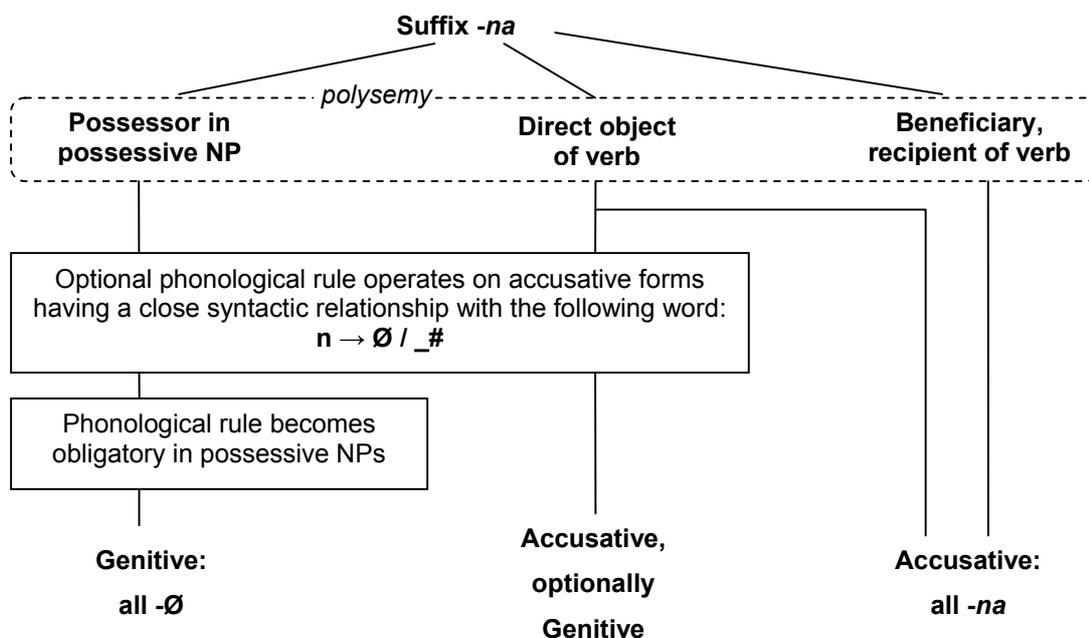


Figure 4.2: Development of accusative suffix *-na*

The pronominal forms *mi-na* 1SG-ACC and *ni-na* 3SG-ACC, in which the accusative suffix is added to a monosyllabic root, are not of the right phonological shape to have their final vowel elided. Thus, they have not undergone the split of genitive from accusative. Their genitive and accusative forms are identical, and both show the *-na* suffix. The second person singular pronoun *ami-na* (2SG-ACC) and distal demonstrative *au-na* (DST-ACC) show the same behaviour, although their final vowels are in a position to be elided. This is most likely through analogy with the other singular pronouns.

The two areas where we find genitive forms (*possessor-possessum* and *object-verb*) involve a close syntactic relationship, in which the genitive form immediately precedes its syntactic head. This surface contiguity brings about a close phonological relationship, which allowed the final /n/ to be dropped. In the case of N-N contiguity, the genitive form

developed as a marker of possessive constructions. In contrast, N-V constructions gave rise to genitive-marked object.

4.6.2.3 Some further considerations

Proper names borrowed from Spanish do not undergo accent shift, although they do show non-application of apocope. When the name ends in a consonant in Spanish, word-final /a/ is added (essentially an underlying form with final /a/ is “reconstructed”):

NOM	GEN	GLOSS
dóris	dórisa	<i>Doris</i>
árias	áriasa	<i>Arias</i>

Table 4.14: Genitive forms of Spanish names

Accusative is not marked on these name forms. Native proper names behave as regular nouns (most names *are* regular nouns, for example animal names).

Occasional examples of possession marked only by a genitive pronoun appear in my data. That is, the possessum does not carry the usual pertensive marking.

- (28) a. mína núwa
 [mi-na nuwa]
 [1SG-ACC woman]
 ‘my wife’ (6:1:50)

- b. mína hĩũqã
 [mi-na hĩũqã]
 [1SG-ACC house]
 ‘my house’

The example in (28a) comes from a text, while (28b) was given as a translation of Spanish *mi casa* ‘my house’. This example is equally acceptable as the form in (29), which does show the expected pertensive morphology.

- (29) mína hĩũqãŋ
 [mi-na hĩũqã-hu]
 [1SG-ACC house-PERT:1SG]
 ‘my house’

Both examples have three potentially relevant properties in common:

1. First person singular possessor

2. Overt possessor pronoun with accusative (=genitive) form
3. Inalienably possessed possessum

Non head-marked possession is likely to be limited to certain constructions, particularly those with a very low possibility of ambiguity. They are certainly rare. Of the three properties listed above, any or all could trigger the possibility of non-head-marked possession; or it could simply be pragmatically conditioned. In any case, more examples are needed before we can engage in anything other than speculation.

4.6.3 Comitative

Comitative case, marked with the suffix *-haĩ*, forms an oblique NP and is typically used as a coordination strategy to link two subject NPs, as in example (30) below. The subject of the verb is first person singular, as evidenced by the agreement on the verb, showing that the comitative-marked NP is not part of the subject.

- (30) *mína nuwáhãĩ taáttahai*
 [*mi-na nuwa-haĩ*] *ta-a-tata-ha-i*
 [1SG-ACC wife-COMIT] *come-HIAF-FUT-1SG-DECL*
 ‘I will come (back) with my wife’

Corbera (1994:117ff) notes that the verb may be conjugated as plural in such constructions, as in the following example (Corbera’s example 18 (1994:118), adjusted to fit the current analysis):

- (31) *nĩ yatĩ-haĩ ikama wi-ina-wa-i*
 3SG brother:PERT:1PL/3-COMIT forest:LOC go-PL:IMPFV-3-DECL
 ‘he and his brother are going into the forest’

Examples like this one, with plural-marked verbs, do not appear in my corpus of spontaneous speech.

In the following example the comitative marked NP is more like an object semantically, although the verb is etymologically reciprocal, coming from *mau* ‘kill’ + *-nai* RECIP (§7.5.5).

- (32) *maanihakuĩ hũwĩĩyã aĩnts kanúshãĩ*
maani-haku-i [*hu-ĩ-ia aĩntsu*] [*kanusa-haĩ*]
fight-NARRNR-COP:3:DECL [*PRX-LOC-ABL person*] [*Santiago.River-COMIT*]
 ‘the people from here used to fight with (the people from) the Santiago River (i.e. Huambisas)’ (6:8:6)

Similarly the verb *tʃitʃa* ‘converse’ takes a comitative-marked NP referring to the conversation partner, which is typically not equally agentive, rather, more like an addressee (see §11.3.4).

Comitative case is also used to mark the standard of comparison in a comparative construction, as in the following example (repeated from §3.4.4.3):

- (33) *húu óya imá múuntai áuhãĩ apátkam*
 [hu oya] ima muunta-i [au-hãĩ (apatkama)]
 [PRX pot] INTENS big-COP:3:DECL [DST-COMIT (COMP)]
 ‘this pot is bigger than that one’

The comparative particle *apatkam* is optional, and has arisen historically from a subordinate clause with which the comitative marked NP was a constituent: *au-hãĩ apatu-ka-ma* (DST-COMIT compare-INTS-NON.A/S>A/S) ‘having compared (this pot) with that one’. The comitative marked NP would have been coordinated with an understood object NP, the comparand. Synchronically, comitative case is sufficient to mark the standard of comparison. In a comparison of equality, as in the following example, the comitative case is ambiguous: it could be marking standard of comparison, as in (33), or it could be marking coordination as in (30):

- (34) *útʃi kasáuk túntʃihãĩ bítʃkai*
 [utʃi kasa-a = au-ka] [túntʃi-hãĩ] bítʃka-ai
 [child thief-COP:3=DST_{Rel}-FOC] [witch.doctor-COMIT] equal-COP:3:DECL
 ‘a child who is a thief is the same (i.e. as bad) as a witch-doctor’ (1:45:51)

OR

‘a child who is a thief and a witch-doctor are the same’

The ambiguity exists only for the linguist: it is clear that such examples hold no semantic ambiguity. It does illustrate, however, how comitative case could readily come to mark the standard of comparison.

4.6.4 Locative

There are two locative markers: *-numa* and *-(n)ĩ*. The choice of suffix is morphologically conditioned: *-(n)ĩ* appears only on demonstratives and following

pertensive suffixes, while *-numa* is the default, appearing elsewhere.⁷⁶ Both suffixes can be used to express motion towards or into:

- (35) a. *húwĩ taáta*
hu-ĩ ta-a-ta
 PRX-LOC come-HIAF-IMP
 ‘come here’
- b. *hiɥahũĩ wíɥahai*
hĩɥa-hu-ĩ wi-a-ha-i
 house-PERT:1SG-LOC go-IMPV-1SG-DECL
 ‘I’m going to my house’
- c. *wãánum tʃaát akunáu*
waã-numa tʃaat akuna-u
 cave-LOC SYM CAUS:enter:PFV-REL
 ‘he made it go *zip!* into the cave’ (6:2:48)
- d. *ahánum wíɥahai*
aha-numa wi-a-ha-i
 garden-LOC go-IMPV-1SG-DECL
 ‘I’m going to the garden’ (6:1:35)

And both can be used to express location:

- (36) a. *húwĩ ukúkĩ*
hu-ĩ uku-ka-mĩ
 PRX-LOC leave-INTS-RECPAST:3:DECL
 ‘he left it here’ (6:2:31)
- b. *hiɥahũĩ puháwai*
hĩɥa-hu-ĩ puha-wa-i
 house-PERT:1SG-LOC live+IMPV-3-DECL
 ‘he is at my house’

⁷⁶ Corbera (1994:119ff) suggests that *-numa* is a ‘general locative’, expressing the spatial relation of ‘being inside’ or ‘being in a place’, while *-(n)ĩ* is adessive, apparently expressing location ‘nearby’. It is certainly tempting to try to isolate a semantic distinction between the two, but the data do not support it.

c. piʉaknúm tipistá
 piʉaka-numa tipi-sa-ta
 bed-LOC lie-ATT-IMP
 ‘lie down on the bed’

d. wawiknúm puhúhai
 wawiku-numa puhu-ha-i
 Wawik-LOC live-1SG-DECL
 ‘I live in Wawik (village)’

The locative suffix *-numa* has some extended uses. In the following example it expresses an instrumental-type meaning:

(37) nawínum miná minákuan mesónes taáwabiahai
 [nawi-numa mina mina-kawa-nu] mesones
 [foot-LOC REDUP arrive+IMPFV-REPET-1SG:SS] Mesones.Muro
 ta-aw-amaia-ha-i
 come-HIAF-DISTPAST-1SG-DECL

‘arriving on foot, I came to Mesones Muro (town in Imaza district)’ (Text 2:15)

And in the following example it expresses reason when suffixed to a relativised clause:

(38) yáakat puhústasan wakíʉamunum tíu áyahai
 [yaakata puhu-sa-tasa-nu waki-a-mau-numa] ti-u
 [city live-ATT-INTENT-1SG:SS want-IMPFV-NON.A/S:REL-LOC] say+LOAF-REL
 a-ia-ha-i
 COP-REMPAST-1SG-DECL

‘I said (it) out of a desire to live in the city’ (2:2:75)

The following example shows a locative-marked action nominal expressing an imminent action:

(39) árias witánum puháwai
 arias wi-ta-numa puha-wa-i
 Arias go-ACTNR-LOC live+IMPFV-3-DECL
 ‘Arias is about to go’

The ablative case suffix *-ia* is typically added to a locative-marked stem, as in the following example:

(40) tʃapínmaya

tʃapi-numa-ia
Chapi-LOC-ABL

‘from the village of Chapi’

This double case marking is discussed in §4.6.6.

4.6.4.1 Exceptional locative marking

Seven nouns mark locative not with a suffix, but instead with accent shift; the following table is an exhaustive list of such exceptional locative forms in my corpus:

NOMINATIVE	LOCATIVE	GLOSS
áũʦa	ãũʦá	‘porch’
hĩũʦa	hĩũʦá	‘house’
hínta	hintá	‘path’
íkam	ikám	‘forest’
náin	naín	‘hill’
namák	namaká	‘river’
núŋka	nuŋká	‘ground’

Table 4.15: Exceptional locative forms

These forms could be considered ‘prototypical’ locatives, in that they are more likely to take locative case, and a corresponding semantic role, in an utterance, due to their semantic content. All are of relatively high frequency

(41) kaŋkáp naín wahakmá antúkui

kaŋkapi nainta waha-kamã antu-ka-u-i
Kagkap hill+LOC stand-TERM:3:SS hear-INTS-REL-COP:3:DECL

‘When Kagkap got to the top of the hill, he heard (people calling him)’ (6:4:69)

The accent shift is of the ‘simple accent shift’ pattern (§2.7.2), typically triggered by suffixes, and suggests that a historically present case marker has been lost from these words, leaving only the accent shift (compare genitive marking (§4.6.2.1), where accent shift correlates with the historical presence of accusative suffix).

4.6.5 Instrumental

The instrumental suffix is *-(a)i*.

(42) *kámarai dakumkámi*

kamara-i dakuma-ka-mi
camera-INSTR imitate-AKT-HORT

‘Let’s take a photo with the camera.’

(43) *íkímtãĩyãĩ kasán maámhai*

[*íkíma-tãĩ-ai*] [*kasa-na*] *maa-ma-ha-i*
[sit-NON.A/S:NR-INSTR] [thief-ACC] kill+HIAF-RECPAST-1SG-DECL

‘I killed the thief with a wooden stool’

Instrumental-marked nouns form oblique NPs, and function adverbially. The instrumental suffix is fairly uncommon in texts.

The following example is unique in my corpus, showing a non-instrument use of instrumental marking:

(44) *díkás apahuíyai suhumánkathai*

dikas [*apahui-ai*] *suhumana-ka-ta-ha-i*
truly [god-INSTR] convert-INTS-IFUT-1SG-DECL

‘I will certainly convert to God (i.e. Christianity)’ (2:2:207)

4.6.6 Ablative

The ablative suffix *-ia* marks a source or origin. It can be suffixed directly to locational nouns, as in the following examples:

(45) *muháya*

muha-ia
mountain.range-ABL

‘from the mountains’

(46) *kanúsia*

kanusa-ia
Santiago.River-ABL

‘from the Santiago River’

But with regular nouns it must follow a locative suffix.

- (47) kuwáʃat aínsu tíkiʃ nuŋkánmaya
 [kuwaʃata aínsu tíkiʃi nuŋka-numa-ia]
 [many person other land-LOC-ABL]_{NP}
 ‘many people from other lands’

- (48) belénnumiaŋ minám
 belen-numa-ia-ka mina-mi
Belén-LOC-ABL-POLINT arrive+IMPFV-2
 ‘are you arriving from *Belén* (village)?’

Ablative-marked nouns may function as oblique NPs:

- (49) haántʃin ukukíu asán mína hiuʃahũĩyã utithái
 [haantʃi-na uku-ki-u asa-nu]
 [clothes-ACC leave-TRF-REL COP:SBD/SEQ-1SG:SS]
 [mi-na hiuʃã-hu-ĩ-ia uti-ta-hai]
 [1SG-ACC house-PERT:1SG-LOC-ABL fetch+LOAF-IFUT-1SG-DECL]
 ‘having left my clothes behind, I’ll go and get them from my house’ (Text 2:16)

But they may also function as derived adjectives, and take case marking.

- (50) wawiknúmian wainkámhai
 [wawiku-numa-ia-na] waina-ka-ma-ha-i
 [Wawik-LOC-ABL-ACC]_o see-INTS-RECPAST-1SG-DECL
 ‘I saw the (person) from Wawik village’

Note that even when functioning adjectivally, the ablative-marked noun tends to be clause-initial or clause-final, and often forms a discontinuous NP with its head; so it has not entirely lost its properties as an oblique NP (see further examples in §5.7).

Ablative-marked nouns also occasionally take subordinate clause person suffixes, a property shared with derived nouns and some adverbs.

- (51) iʃámainnumian hiinkímhai
 iʃa-mai-nu-numa-ia-nu hiina-ki-ma-ha-i
 fear-POT-NR-LOC-ABL-1SG:SS go.out-TRF-RECPAST-1SG-DECL
 ‘I got out of danger’

(52) tʃapínmayamík minám

tʃapi-numa-ia-mi-ka mina-mi
Chapi-LOC-ABL-2SG:SS-POLINT arrive+IMPFV-2

‘are you arriving from *Chapi* (village)?’

And they may take the copula suffix:

(53) wíka páblo puhámunmayaithai

wi-ka pablo puha-mau-numa-ia-ita-ha-i
1SG-FOC *Pablo* live-NON.A/S:REL-LOC-ABL-COP-1SG-DECL

‘I am from where Pablo lives’

An adjective formed with the ablative suffix may then take the locative suffix *-numa*:

(54) ámina nuḡkíminĩãnmayamík minám

ami-na nuḡkĩ-mi-nĩ-ia-numa-ia-mi-ka mina-mi
2SG-ACC land:PERT-2-LOC-ABL-LOC-ABL-2-POLINT arrive+IMPFV-2

‘are you arriving from your country?’

All these morphological properties are unique for a case-marked nominal. All can be subsumed under a general description of “agreement”: either case agreement with the head of an NP, or person agreement with the subject of a clause, and arise because the ablative suffix may function as an adjectivaliser and a case-marker.

4.6.7 Vocative

Vocative is unlike other nominal forms. Although it does enter into the system of oppositions with other inflectional suffixes, as its presence excludes the other case markers, a vocative-marked noun functions like an interjection: it does not play any grammatical role in the sentence, and may appear as a stand-alone utterance.

Although Payne (1990b) gives vocative forms for a variety of nouns, consultants I worked with felt that it was compatible only with human referents. Spontaneous examples in my data are all personal names and kinship terms; vocative forms of relativised and nominalised verbs were also given in elicitation sessions.

Vocative is marked productively with suppression of apocope, and there are two unproductive suffixes that appear with certain kinship terms. All vocative-marked nouns typically involve accent shift to the final syllable, but this is not obligatory and is probably a product of the typically shouted delivery rather than a morphological process.

The first unproductive suffix is *-ta*. This suffix normally takes the accent, and is never subject to apocope. Table 4.16 illustrates surface nominative and vocative forms of the only two nouns that take this suffix in my data.

NOMINATIVE	VOCATIVE	GLOSS
útʃi	utʃitá	‘child’
yátsu	yatsutá	‘brother’

Table 4.16: Vocative formed with *-ta*

The second suffix *-wa* appears only with *apa* ‘father’ and *duku* ‘mother’. As with other vocative forms accent typically shifts to the final syllable.

NOMINATIVE	VOCATIVE	GLOSS
ápa	apawá	‘father’
dúku	dukuwá	‘mother’

Table 4.17: Vocative formed with *-wa*

These two forms are rarely used for addressing one’s parents in the modern language, having been replaced with *papá* and *mamá* from Spanish. They are still used as terms of respect when addressing ones elders, and among Christians, *apa-wa* (father-VOC) is used in prayers:

- (55) sií apawá
 sií apa-wa
 thank.you father-VOC
 ‘thank you, Father’ (common prayer formula)

The only productive vocative form is marked with suppression of apocope and, typically, accent shift to the final vowel. The following table presents some examples.

	NOMINATIVE	VOCATIVE	GLOSS
a.	tihɨkás	tihɨsá	‘female name’
b.	díitʃ	diitʃí	‘uncle’
c.	páblo	pabló	<i>Pablo</i>
d.	dóris	dɔrisá	<i>Doris</i>

Table 4.18: Vocative formed with suppression of apocope and accent shift

Note in example (a) that suppression of apocope allows syncope to operate on the vowel of the third syllable.

Nowadays most personal names are from Spanish. These follow the same pattern of accent shift to the final vowel, thus in example (c) *Pablo* [páblo] becomes [pabló]. Where a Spanish name does not end in a vowel, final /a/ is added, simulating suppression of apocope (example d).

When used as terms of address, kinship terms typically appear with the pertensive suffix, indicating first-person possession. The pertensive-marked forms also show suppression of apocope and accent shift.

(56) a. yatsún̄
yatsu-hu
brother-PERT:1SG
'my brother'

b. yatsuhú
yatsu-hu
brother-PERT:1SG+VOC
'my brother!'

The accent shift discussed above seems to be a practical consideration, based on the common situation of calling out someone's name, often at a distance. In conversation, vocative forms often show no accent shift, as in the following example:

(57) ãhúm simón̄ka wainiámi
ãhum simon̄ka wai-nai-a-mi
later *Simon*+VOC see-RECIP-HIAF-HORT
'see you later, Simon' (Obs)

4.6.7.1 Familiar vocative

The vowel /u/ may be added to regular vocative forms to give a familiar vocative:

(58) a. mamá
mama
mother+VOC
'mum!'

- b. mamáu
 mama-u
 mother+VOC-FAM
 ‘mummy!’

With Spanish proper names ending in a consonant, /u/ replaces the final /a/ that is usually added:

REGULAR VOCATIVE	FAMILIAR VOCATIVE	GLOSS
dorisá	dorisú	<i>Doris</i>
simonḡká	simonḡkú	<i>Simón</i>

Table 4.19: Familiar vocative in Spanish names

4.7 Restrictive *-kI*

The restrictive suffix *-kI* restricts the noun or pronoun, and can be translated into English as ‘only’. There are two allomorphs, *-ki* and *-kĩ*, and the choice of allomorph depends on the final vowel of the stem to which the suffix is attached: *-ki* following /i/ and *-kĩ* elsewhere.

Some examples follow.

- (59) núnikmatãĩ níḡki huwák...

nuni-ka-matãĩ nĩ-kI huwa-a-kũ
 do.that-INTS:SEQ-1/3:DS 3SG-RESTR be.left-IMPV-SIM:3:SS

‘so while she was left alone...’ (6:1:25)

- (60) núwak puhumatí amĩk utitá

[nuwa-ka puhu-ma-ti] ami-kI uti-ta
 [woman-FOC live-DUR-JUSS] 2SG-RESTR fetch+LOAF-IMP

‘let the woman stay (here), you fetch (the water) by yourself!’ (6:4:46)

Restrictive in combination with the intensifier *ima* gives the sense of ‘only’:

- (61) imá biĩknak yuwámhai

[ima biika-na-kI] yu-a-ma-ha-i
 [INTENS bean-ACC-RESTR] eat-HIAF-RECPAST-1SG-DECL

‘I only ate beans’

Further examples of this usage are in §3.4.4.

Restrictive appears on nouns, pronouns and some adverbs (see §3.7), but not adjectives or verbs. A particular idiomatic use of restrictive is with the textual cataphoric distal demonstrative *au*, used to preface an exclamation; see examples in §3.5.2.3.

The restrictive suffix is the only one that can appear in slot E, between case markers in slot D and the discourse suffixes in slot F. Restrictive can co-occur with suffixes from both slots, as in the following example where it is preceded by accusative *-na* and followed by additive *-fa(kama)*:

(62) *mína saínna_{ki} úhatsuk...*

[*mi-na sai-hu-na-ki-fa*]

uha-a-tsu-u-ka

[1SG-ACC brother.in.law-PERT:1SG-ACC-RESTR-ADD] tell-IMPV-NEG-REL-FOC

‘without telling even my brother-in-law...’ (2:2:73)

4.8 Discourse suffixes

The discourse-level suffixes form the outermost layer of nominal morphology. They do not form a system of oppositions, as the case markers do. They express meanings that are ancillary to the inflectional system, and can be added to nouns already carrying inflectional suffixes. The use of these suffixes is subject to semantic and pragmatic restrictions, not grammatical ones, although it may be conditioned to some extent by the mood or polarity of the controlling verb. Typically they express speaker attitude or aid in discourse organisation by highlighting new or unexpected information.

In addition to forming the outermost morphological layer in nouns, discourse suffixes may appear on pronouns, adjectives (only in a headless NP), adverbs and, with some limitations, subordinate verbs. The table below summarises the compatibility of discourse suffixes with word classes; restrictive is included in the table for comparison.

	NOUN	PRONOUN	ADJECTIVE	ADVERB	VERB (only subordinate)
RESTRICTIVE	✓	✓	–	✓	–
FOCUS	✓	✓	✓	✓	✓
ADDITIVE	✓	✓	✓	✓	✓
FIRST	✓	✓	–	–	✓

Table 4.20: Compatibility of restrictive and discourse markers with word classes

4.8.1 Focus *-ka*

The focus suffix *-ka* can be added to any noun or pronoun. Focus marking is typically associated with a definite referent. There is a difference in narratives between restating a participant that is already the subject of a string of clauses, typically using a pronoun, and reintroducing a participant into a narrative, typically using a full NP.

Pronominal restating is illustrated in the following example, the last line of Text 3, in which a man talks about hunting:

(63) *íik aáttsa wáittsa iuqamsá yúwaithi*
ii-ka aatusa [waitu-sa] [iuqama-sa]
 1PL-FOC thus+1PL [suffer-SBD+1PL:SS] [search-SBD+1PL:SS]

yu-u-aita-hi-i
 eat-REL-COP-1PL-DECL

‘and so, suffering while searching, we are ones who eat’ (Text 3: 23)

The following example shows focus marking on a full NP that reintroduces a participant as subject.

(64) *útʃi itʃinkám, dúka útʃik tsíkia tsíkikũã hákã tipisú túwahamĩ*
 [utʃi itʃina-ka-ma] [[nu-ka utʃi-ka] tsíkia
 [child pull.apart-INTS-NON.A/S>A/S] [[ANA-FOC child-FOC] REDUP

tsíkí-a-kawã ha-kã tipí-sa-u tuwahamĩ]
 jump-IMPV-REPET+3:SS die-INTS:SEQ+3:SS lie.down-ATT-REL NARR]

‘when (the devil) pulled the child apart, that child jumped about then lay down dead’ (6:2:49)

Focus marking has distinct functions in combination with particular constructions:

1. With full NP, introducing or reintroducing participant as new subject, obligatory in parenthetical clause; reintroducing definite object. Overt object in parenthetical clause does not take focus marking, but may take determiner if definite.
2. With pronoun, restating a current subject.
3. With negative verb, obligatorily marked on subject.

More than one noun in a sentence may carry the focus marker, including those marked with inflectional suffixes such as accusative or locative. In the following example both an accusative marked object and locative marked oblique NP are marked with the focus suffix.

(65) aĩntsnak kanúnmak tuntúnmitkainau

aĩntsu-na-ka kanu-numa-ka tuntuna-mitika-ina-u
person-ACC-FOC canoe-LOC-FOC make.noise-CAUS-PL:IMPFV-REL

‘they caused the people to make noise in the canoe’ (that is, they killed them so they fell into the canoe with a crash) (6:8:22)

Focus marking is obligatory with an overt subject of a negative clause:

(66) wĩka dƒkashai

[wi-ka / **wi] dĩka-a-tsu-ha-i
[1SG-FOC / **1SG] know-IMPFV-NEG-1SG-DECL

‘I don’t know’

The role of focus marking in narrative structure is discussed in greater detail in §13.4.

The focus marker is probably the same as, or the source of, the conditional suffix *-ka* that appears on subordinate clauses – see §9.6.

4.8.2 Additive *-fa(kama)*

The additive suffix *-fakama*, with short form *-fa*, combines the meaning of ‘also’ and ‘even’. That is, it indicates that the marked constituent is included in the situation described by the clause, and that this is somehow counter to what is expected.

The long and short allomorphs are apparently in free variation; the examples below are semantically identical.

(67) a. mináƒkam

mi-na-ƒakama
1SG-ACC-ADD

‘me too’ / ‘even me’

b. mináƒ

mi-na-ƒa
1SG-ACC-ADD

‘me too’ / ‘even me’

As is to be expected from a discourse-level suffix, the additive suffix may have a wider scope than the host constituent. In the following example from Text 3, the sense is not that ‘he in addition to someone else’ wants to know, rather it is one of ‘he wants to know, and so...’:

(68) nĩʃkam dīkátatus wakíʃau asámtāĩ, nína uháhai yamáĩ

[nĩ-ʃakama dīka-tatus wakiʃa-a-u asa-mataĩ]
 [3SG-ADD know:PFV-INTENT+3:SS want-IMPV-REL COP:SBD/SEQ-1/3:DS]

[nĩ-na uha-a-ha-i yamai]
 [3SG-ACC tell-IMPV-1SG-DECL now]

‘and because he wants to know, I am telling him now’ (Text 3:3)

There is typically an implication of unexpectedness in the use of additive; many examples are aptly translated into English as ‘even’.

(69) wimí dīkás káʃiʃ

wi-mi dīkas kaʃi-ʃa
 go:PFV-HORT really night-ADD

‘let’s go, even though it’s actually night’ (8:1:74)

When combined with a negative verb, the additive suffix is interpreted as ‘not even’:

(70) makíʃkiʃ ayamhúktʃahui

makitʃiki-ʃa ayamhu-ka-tʃa-aha-u-i
 one-ADD defend-INTS-NEG-PL-REL-COP:3:DECL

‘not even one defended (him)’

Additive also appears on subordinate verbs, marking concessive clauses – see §9.6

4.8.3 First *-a*

The ‘first’ suffix is *-a*. It is always the final suffix, and always takes the accent.

(71) nĩyǎ́ káʃikmas táǎ́...

nĩ-a kaʃikmas ta-ǎ́
 3SG-FIRST early come-HIAF:SEQ+3:SS

‘he having come first, early in the morning...’ (6:5:51)

(72) mantinná hukíthai

mǎ-tu-inu-na-a hu-ki-ta-ha-i
 kill-APPLIC-NR-ACC-FIRST take-TRF-IFUT-1SG-DECL

‘I’ll take the good hunting dog first’ Lit. *the killer*

‘First’ only appears with nouns, pronouns, and one type of subordinate clause, those marked with *-ma* ‘non-subject to subject’ switch-reference marker.

4.9 Mood/modality markers

Mood/modality markers are suffixes that mark constituents in clauses with particular moods or modalities. Their function is to single out a particular constituent as the focus of that mood or modality: interrogative clauses of all kinds take the uncertainty marker *-fa*, speculative modality takes the speculative suffix *-tsu*, and polar interrogative is marked with *-ka*. Interrogative and speculative are obligatorily marked elsewhere in the clause, either on the verb or with an interrogative lexeme. Polar interrogative may be marked with the suffix *-ka* on the verb or on a constituent.

The mood/modality markers appear on nouns, pronouns and adverbs, and may also appear on various types of subordinate clauses – see §9.7 for details. §11.5 has more general discussion on mood and modality as clausal properties.

4.9.1 Uncertainty *-fa*

The uncertainty marker *-fa* optionally marks NPs in interrogative clauses:

- (73) *yatsuhú amíʃ puhámik*
[yatsu-hu] [amí-ʃa] puha-mi-ka
[brother-PERT:1SG+VOC] [2SG-UNCERT] live+IMPFV-2SG-POLINT
'my brother, are you alive?' (typical greeting)

More than one constituent may be marked with the uncertainty suffix, as in the following example:

- (74) [kiiwi-ʃa] [yu-taĩ-ka-aita ii-ʃa]
[centipede-UNCERT] [eat-NON.A/S:NR-POLINT-COP:3:INT 1PL-UNCERT]
'do we (i.e. people) eat centipedes?' (6:1:21)

A single noun or pronoun marked with *-fa* can form a clause on its own, in which case accent falls on the uncertainty suffix itself, and apocope does not apply.

- (75) *eliʃá*
eli-ʃa
Eli-UNCERT
'(where is/what about etc.) Elí?'

This type of clause is highly contextually restricted, and cannot contain anything other than a single word.

4.9.2 Speculative *-tsu*

Speculative modality is marked with the verbal suffix *-tai* and the speculative *-tsu*, which appears on an NP constituent of the clause.

- (76) [piʃáknaŋ wainkámaŋtai]
piʃaka-na-tsu waina-ka-ma-ha-tai
bird-ACC-SPEC1 see-INTS-RECPAST-1SG-SPEC2
‘I probably saw a bird’

The speculative marker *-tsu* can also appear on the verb, where it takes the form *-tsa* and precedes the verbal suffix *-tai*. A full description of speculative modality marking is in §8.7.5.

4.9.3 Polar interrogative

The polar interrogative suffix *-ka* most commonly appears on verbs (§8.7.2). It can, however, appear on nouns, pronouns and adjectives.

- (77) huká
hu-ka
PRX-POLINT
‘this one?’

When the polar interrogative suffix co-occurs with a copula suffix, the interrogative precedes. This suggests that the practice of suffixing interrogative to nouns historically precedes the grammaticalisation of the copula suffix.

- (78) piŋkiŋkait
piŋkiŋka-ka-ita
good-POLINT-COP:3:INT
‘is it good?’

4.10 Copula suffixes

Copula suffixes mark predicate nominals in equative/attributive clauses. There are two copula suffixes available for SAP subjects, distinguished on the basis of tense: *-(a)ita* is present tense and *-ya* is remote past.

For third person subjects, there are three basic forms. Two correspond to the tense distinctions made with SAP subjects, namely present and remote past. Within the present tense form, however, third person distinguishes five variants, used with different modalities. The third person copula suffixes are all portmanteaux, with fused person marking. The remote past is *-yi*. There is also a third copula suffix available for third person subjects, the remote exclamative form *-ĩ*. This form is used to convey the same effect as exclamatory mood when the subject is not present.

Equative/attributive clauses with any tense value other than present or remote past use copula verbs rather than copula suffixes.

Table 4.21 summarises the forms of SAP and third person copula suffixes.

	DECL	NON-DECL	EXCLAM	POLAR INTERROG	CONTENT INTERROG	REMOTE PAST	NON-VIS
SAP	-(a)ita + subject					-ya + subject	—
3	-(a)i	-a	-(y)a	-(a)it	-(a)ita	-yi	-ĩ

Table 4.21: Copula suffixes

Negative and polar interrogative are expressed by nominal suffixes that precede the copula suffix.

In the sections below I discuss the properties of the various forms.

4.10.1 General copula suffix, SAP subject *-(a)ita*

The copula suffix has long and short allomorphs in all persons, distinguished by presence or absence of the initial /a/. Conditioning for this allomorphy is described in §2.6.1.16.

The *-(a)ita* form appears with SAP subjects, followed by person and mood suffixes.

4.10.2 Copula suffix, third person subject

The *-(a)i* form appears with third-person subjects in declarative mood. The full form *-(a)ita* surfaces when it is suffixed to an interrogative lexeme; this is in keeping with the general observation that apocope does not operate on the predicate when there is an interrogative lexeme in the clause, and shows that the basic form of the suffix is *-(a)ita*, and the final /t/ is lost in third-person forms.

- (79) ya-nau-aita
 who-POSS-COP:3:INT
 ‘whose is it?’

The polar interrogative suffix *-ka* precedes the copula suffix, which then undergoes apocope, and appears as *-ait*.

- (80) [pɪŋkɪŋkait]
 pɪŋkiha-ka-aita
 good-POLINT-COP:3:INT
 ‘is it good?’

The realisation of the final /t/ is highly variable, as it is always unreleased and glottalised. In addition to the pronunciation given above, some speakers feel that the correct pronunciation is [pɪŋkɪŋkaik] while for others it is [pɪŋkɪŋkai?]. Since the actual pronunciation is so heavily obscured, the ‘correct’ form only becomes an issue in writing.

Although all three pronunciations appear to be about equally represented among speakers I worked with, I prefer to transcribe the suffix as *-ait*, to reflect the etymology.

Plural cannot be marked on a predicate nominal other than with the SAP plural subject suffixes. So in third person forms, to specify plural subject the copula verb *a* must be used:

- (81) áiʃmaŋ áinawai
 aiʃmaŋku a-ina-wa-i
 man COP-PL:IMPFV-3-DECL
 ‘they are men’

The non-declarative form is *-a*. The /i/ of the copula suffix has been reinterpreted as the declarative suffix and dropped in non-declarative clauses. Note however that the non-declarative form always surfaces as *-a*, even where the short form of the declarative form *-i* appears:

- (82) a. [áiʃmaŋkui]
 aiʃmaŋku-i
 man-COP:3:DECL
 ‘he is a man’

- b. [àɪʃmaŋkuanú]
 aiʃmaŋku-a = nu
 man-COP:3=ANARel
 ‘one who is a man’

This shows that although it has historically arisen from the declarative form through dropping the final /i/, the non-declarative suffix is synchronically distinct – otherwise we would expect the non-declarative form of (82a) to surface as *aiʃmaŋku*. Rather than gloss this form ‘COP:3:NON.DECL’, I simply use ‘COP:3’ to contrast with the declarative form *-ai* glossed ‘COP:3:DECL’.

4.10.3 Exclamative copula suffix *-(y)a*

Exclamatory mood is generally zero marked, so identical to the non-declarative form. However, the exclamative copula suffix has slightly different allomorphy to the non-declarative form. The exclamative form never merges with a preceding vowel, and appears as *-ya* when it follows a stem-final /a/. Compare the examples below: (a) is declarative, and surfaces with the short form *-i*. (b) is non declarative and surfaces as *-a*, fusing with the preceding /a/. (c) however does not fuse, instead surfacing as *-ya*.

- (83) a. [túnai]
 tuna-i
 waterfall-COP:3:DECL
 ‘it’s a waterfall’
- b. [tùnanúu]
 tuna-a = nu
 waterfall-COP:NON.DECL=ANARel
 ‘that which is a waterfall’
- c. [túnaya]
 tuna-ya
 waterfall-COP:3:EXCL
 ‘it’s a waterfall!’

As with the non-declarative copula described above, the exclamative copula suffix shows a distinct pattern of allomorphy and is synchronically a separate suffix.

4.10.4 -ĩ

The past/non-visible copula *-ĩ* is functionally equivalent to the exclamative copula, but is used in contexts where the referent is not present, whether in space or time. This may be related to the third-person immediate past suffix *-ĩ*, or it may represent a mutation of the exclamative copula above.

(84) aĩntsuĩĩ

aĩntsu-ĩ

person-NONVIS.COP:3

‘it was a person!’

OR

‘it’s a person (not visible)’

4.10.5 Remote past copula *-ya*

The remote past copula has the same form as the remote past verbal suffix, and shows the same fusional third person singular allomorph *-yi*. It shows the same TAM restrictions as the other copula suffixes, only appearing in declarative and polar interrogative clauses. Unlike the other copula suffixes, the remote past copula suffix can take the third person plural suffix *-numi* – the same third person plural suffix appears with the verbal remote past suffix and with jussive and apprehensive verbs.

(85) piŋkiha-ya-numi

good-COP:REMPAST-3PL:DECL

‘they were good’

As with other copula markers, negative and polar interrogative precede the remote past copula suffix:

(86) a. piŋkiha-tʃau-ya-ha-i

good-NEG-COP:REMPAST-1SG-DECL

‘I was not good’

b. piŋkiha-ka-ya

good-POLINT-COP:REMPAST:3

‘was it good?’

Chapter 5: Noun Phrase

5.1 Introduction

The noun phrase is headed by a noun or pronoun. The NP can be specified with a **determiner**, which typically precedes the head noun, and modified with one or more **modifiers** which follow the head noun. Determiners are numerals, quantifiers, and a few adverbs. Modifiers are adjectives, a small set of human nouns that function as adjectives, and two types of relative clauses. The minimal NP consists of the head, or a modifier in a headless construction.

Complex NPs can be classified into three types:

1. Simple NP
2. Possessive NP
3. Apposed name NP

The canonical structure of a simple NP can be represented as in (1), where the modifier is one of: an adjective phrase; a small set of human nouns; a relative clause.

(1) [(Det) N (Modifier)₀]

More than one modifier can appear in an NP. Both determiner and modifier are optional, and the head itself can be omitted if it is recoverable from context. Only lexical heads may be modified with adjectives. Proper names may take a demonstrative determiner, but cannot be modified nor possessed. NPs headed by pronouns cannot include any modifiers except relative clauses.

Possessive NPs have the canonical structure:

(2) [(N:GEN_{Possessor}) N-PERT_{Possessum}]

The head noun is pertainive-marked to show that it is possessed, and the optionally included possessor is genitive marked. A variant on the canonical possessive NP includes a possessor NP marked with the possessive suffix; this is the only modifier allowed in a possessive NP.

The third NP type is the apposed name NP, with the following canonical structure:

(3) [N N_{Proper Name}]

This is different from a modified NP. As a general rule, only the final element of an NP is case-marked, so a simple NP of the form [N Modifier] takes case-marking only on

the modifier. An apposed name NP, however, takes case marking on the head, while the apposed name always appears in the unmarked citation form.

The elements of an NP are in apposition rather than in a hierarchical structure, and structurally discontinuous NPs are not uncommon.

The following criteria demonstrate that the NP is a valid constituent:

1. Phrase-level application of case marking
2. Case agreement throughout the NP when determiner is present or when discontinuous

Both of these criteria will be relevant for the discussion of NP constituency below.

In the following sections I shall describe the makeup of the NP. Details of the morphology are in Chapter 4.

5.1.1 Phrase-level suffixes

Case markers and discourse level suffixes apply at the phrase level (§§4.6ff). Such suffixes appear only on the final word in a complex NP.

- (4) a. [hiŋkai a-ina-u-**na**]
[seed COP-PL:IMPFV-REL-ACC]
‘the seeds’ (6:1:33)
- b. [tikitʃi ɪntsa-**na**]
[other stream-ACC]
‘another stream’ (6:2:77)
- c. [mi-na nuwa-**hāi**]
[1SG-ACC woman-COMIT]
‘with my wife’ (6:4:39)
- d. [ɪntsa tsihiŋka-**numa**]
[stream narrow-LOC]
‘in a narrow stream’ (2:6:104)
- e. [mi-na aha-hu-**ĩ**]
[1SG-ACC garden-PERT:1SG-LOC]
‘in my garden’

There are two exceptions to this pattern, however – both of them concerning the accusative suffix:

1. When a demonstrative determiner precedes the head of an object NP, **all** elements in the NP receive case marking (discussed in §5.2.1)
2. When a possessive NP is a verbal object, the possessor noun is marked with accusative rather than genitive, that is, both elements of the NP receive accusative marking (discussed in §4.6)

The discourse-level suffixes (emphatic *-ka*, additive *-fakama*) do not follow this pattern, and can appear on any nominal, regardless of the marking of other elements in the NP (or the clause). The restrictive suffix *-kV* only appears on NP heads.

5.2 NP operators

The determiners fall into three groups:

- demonstratives
- numerals (of which *makitfiki* ‘one’ frequently functions as an indefinite article)
- *tikitfi* ‘another’

They have in common the following properties:

1. Appear in non-head function in NPs
2. Have a delimiting function semantically, that is, they do not attribute any property to the head noun
3. Typically precede the head

Demonstratives and *tikitfi* ‘another’ can head NPs, while numerals can only appear modifying a noun. In addition to their role as determiners, numerals can also function as postposed modifiers and as adverbs. Quantifiers may precede or follow the head, and never take case marking; like numerals, they may also function adverbially.

The table below summarises the morphosyntactic properties of the determiners and quantifying adverbs.

	DEM	<i>tikitfi</i>	NUMERAL	QUANTIFIER	<i>kuwafata</i>
Can modify nominal	✓	✓	✓	✓	✓
Case agreement ⁷⁷	✓	–	–	–	–
Can head NP	✓	✓	–	–	–
Can modify verb	–	–	✓	✓	✓

Table 5.1: Morphosyntactic properties of determiners

5.2.1 Demonstratives

Unlike other NP modifiers (see §4.5), the demonstratives (anaphoric *nu*, proximal *hu*, distal *au*) show agreement with the head noun in accusative and locative case-marking.⁷⁸

- (5) [nu-**na** kãyuka-**na**] piit itsikĩ
 [ANA-ACC agouti-ACC] SYM CAUS+jump:LOAF:SEQ+3:SS
 ‘having made the agouti jump: “boing!”’ (6:1:55)
- (6) nuwa [nu-**na** yawaã-**na**] kamĩ pakihima-u-ai
 woman [ANA-ACC dog-ACC] truly fall.in.love.with:PFV-REL-COP:3:DECL
 ‘the woman actually fell in love with that dog’ (6:5:10)
- (7) [au-ĩ minaĩ] au-ĩ
 [DST-LOC 1SG+LOC] DST-NONVIS.COP:3
 ‘it’s there, where I live’ (6:2:94)
- (8) [nu-ĩ waã-**numa**] duhahu-ã
 [ANA-LOC cave-LOC] flood-HIAF:SEQ+3:SS
 ‘having flooded in that cave...’ (6:2:92)

The demonstratives can also head NPs, so it is possible that a construction as in (5) actually comprises two NPs in apposition – one headed by the demonstrative and the second by the lexical noun:

⁷⁷ See §5.2.1 for discussion.

⁷⁸ It is not yet clear whether the other cases also show this pattern of agreement. The discourse-level suffixes may also agree, cf. *nu-ka utfi-ka* (ANA-FOC child-FOC) ‘that child’.

- (9) [nu-**na**] [kāyuka-**na**]
 [ANA-ACC]_{NP} [agouti-ACC]_{NP}
 ‘that one, the agouti’

However there is a strong argument against the “two NPs” hypothesis: where an object NP is composed of the three elements [Demonstrative Noun Modifier], all three elements carry the accusative suffix:

- (10) [nu-**na** nihĩ-**na** akaŋkĩ-**na**]
 [ANA-ACC meat:PERT:1PL/3-ACC abdomen:PERT:1PL/3-ACC]

 inahũ-tu-kā
 cook-APPLIC-INTS:SEQ+3:SS

 ‘having cooked the meat from the abdomen’ (literally *that abdomen meat*) (6:5:56)

If such examples involved two NPs, i.e. [Demonstrative] [Noun Modifier], we would expect the [Noun Modifier] NP to mark accusative only on the final element.

Case agreement does not occur with numerals:

- (11) iŋku-ha-ma-ha-i [makitʃiki aĩntsu-**na**]
 meet-PLU-RECPAST-1SG-DECL [one person-ACC]

 ‘I met a person’

tikitʃi ‘another’ typically does not show case agreement, but may do so. The following example illustrates two instances of the same NP from two versions of the same story, told by different speakers; (a) does not show case agreement, while (b) does.

- (12) a. [tikitʃi ĩntsa-**na**]
 [other stream-ACC]

 ‘another stream’ (6:2:77)

 b. [tikitʃi-**na** ĩntsa-**na**]
 [other-ACC stream-ACC]

 ‘another stream’ (2:6:106)

5.2.2 *tikitʃi* ‘another’

tikitʃi ‘another’ shares almost all properties of the demonstratives: it can modify a following noun (12) or head an NP, as in the following example.

- (13) [nu **tikitfi** a-ina-u]
 [ANA **other** COP-PL:IMPFV-REL]
 ‘those others’ (6.4.126)

There are two morphosyntactic differences between *tikitfi* and the demonstratives:

1. As mentioned above *tikitfi* does not show case agreement with the head noun (79a)
2. When heading an NP, *tikitfi* may be modified by a demonstrative, as in example (79b) above

5.2.3 Numerals

Numerals (see §3.6.1 for a list) typically function as NP operators, and may precede or follow the noun, as the following examples show:

- (14) nu-ĩ [**makitfiki** aintsu] wa-kã
 ANA-LOC [**one** person] go.up-INTS:SEQ+3:SS
 [nu-na hiŋka-hĩ-na] akaki-a-kũ
 [ANA-ACC seed-PERT:1PL/3-ACC] drop-IMPFV-SIM+3:SS
 ‘one man having gone up there, he was dropping those seeds...’ (6:9:100)

- (15) [nuwa **makitfiki**] naŋkai-na usupa-hã
 [woman **one**] fruit-ACC crave-PLU:SEQ+3:SS
 hiina-ki-u tuwahaĩ
 go.out-TRF-REL NARR
 ‘a woman, having craved fruit, went out’ (6:1:1)

When a numeral is the final element in an NP it may take case marking (see examples in §3.6.1), but this is not obligatory. In (16), the Spanish numeral *cuatro* ‘four’ seems to be outside the NP – this can be seen from the positioning of the accusative suffix *-na*.

- (16) [mamayaki muunta a-ina = nu-na] **kwatro** hu-kĩ
 [fish.sp big COP-PL:IMPFV=ANARel-ACC] **four** take-TRF:SEQ+3:SS
 ‘having taken four of those big fish (*plateada*) ...’ (3.3.10)

When the numeral takes no case marking it is essentially functioning adverbially. Other examples show unambiguously adverbial uses of numerals, as in the following example where the two numerals cannot be associated with any NP, as there is no overt NP:

- (17) [yuha-sa-ta-humi] [himaha kampaatuma imani-ta-humi]
 [go:PL-ATT-IMP-2PL] [two three do.so.much:PFV-IMP-2PL]
 [yuha-ta-humi]
 [go:PL:PFV-IMP-2PL]
 ‘go together, in twos and threes, go together!’ (6:4:123)

We will see below that quantifiers show the same ambiguity with respect to NP membership.

5.2.4 Quantifiers

Quantifiers (see §3.6.2 for a list) have basically the same syntactic properties as numerals, that is, they may precede or follow an NP head or function adverbially. Unlike numerals, quantifiers never take case marking. The following example is similar to (16) above. The quantifier *mai* ‘both’ appears to be outside the NP, judging by the case marking. This suggests that the quantifier is syntactically an adverbial modifier of the verb, rather than an NP modifier, although semantically it is clearly associated with the NP.

- (18) [ikama wi-a-u-na] mai imiŋka-kã
 [forest+LOC go-IMPV-REL-ACC] both CAUS+disappear-INTS:SEQ+3:SS
 ‘having kidnapped both of the ones who went to the forest...’ (6:3:15)

Other examples show unambiguously that quantifiers, like numerals, may function adverbially. The verb *ayampa* ‘look around’ in the following example is intransitive, so *mai* ‘both’ cannot refer to an O argument; and we know from the context that the S is singular.

- (19) mai ayampã
 both look.around:PFV:SEQ+3:SS
 ‘(he) having looked around on both sides...’ (6:3:45)

Example (20) illustrates the use of *afi* ‘all’ as an NP operator:

- (20) aŋi aintsu a-ina-u
 all person COP-PL:IMPV-REL
 ‘all the people’ (6:4:5)

In this example the quantifier *afi* ‘all’ looks like a perfect example of a determiner: it directly precedes its head noun. But case-marking again shows that *afi* is not part of the

NP. Similarly to *mai* ‘both’ in example (18) above, the following examples show that *afi* cannot be part of the object NP, because it does not carry the accusative suffix.

- (21) nu-ĩ [aintsu utsau-taĩ-na-ƶakama] **afi**
 ANA-LOC [person throw.out.corpses-NON.A/S:NR-ACC-ADD] **all**
 waina-kã
 see-INTS:SEQ+3:SS
 ‘having seen the whole place there where human corpses were thrown out...’ (6:3:34)

- (22) [hu-na-ka] **afi** amu-tu-kã
 [PRX-ACC-FOC] **all** finish-APPLIC-INTS:SEQ+3:SS
 ‘having finished (eating) all of this...’ (6:4:116)

In the following example, *afi* is unambiguously adverbial. It cannot be referring to any NP because the verb is intransitive and S singular.

- (23) duti-hu-a-mataĩ [**afi** ha-ka-maia-ha-i]
 do.that-1SG.OBJ-HIAF:SEQ-1/3:DS [**all** die-INTS-INTPAST-1SG-DECL]
 ‘when that happened to me, I almost died’ (2:2:200)

In spite of the adverbial profile exhibited by quantifiers, they are semantically typically NP operators, and the following pair of examples demonstrates that the association of a quantifier with an NP is reflected syntactically: with two potential referents in the clause, *afi* ‘all’ is considered to be modifying the NP head that it directly precedes.

- (24) [**afi** utƶi a-ina-u] [tsamau-na] yu-a-aha-mĩ
 [**all** child COP-PL:IMPFV-REL] [banana-ACC] eat-HIAF-PL-RECPAST:3:DECL
 ‘all the children ate bananas’

- (25) [utƶi a-ina-u] [**afi** tsamau-na] yu-a-aha-mĩ
 [child COP-PL:IMPFV-REL] [**all** banana-ACC] eat-HIAF-PL-RECPAST:3:DECL
 ‘the children ate all the bananas’

Finally, the distribution of *kuwafata* ‘many’ is analogous to the other two quantifiers. In the following example, additive *-ƶakama* is suffixed to the relativised form *ainau* which shows that this is the boundary of an NP, and *kuwafata* must be outside that NP.

- (26) [aintsu a-ina-u-ʃakama] **kuwafata** wi-aha-u-ai
 [person COP-PL:IMPV-REL-ADD] **many** go:PFV-PL-REL-COP:3:DECL
 ‘many people also went’ (6:4:16)

Note that the quantifiers typically immediately precede, or more rarely follow, the head when functioning as NP operators, but typically directly precede the verb when functioning adverbially.

The word *ainau* frequently appears as a plural marker in modifier position, but this is synchronically a relative clause with the morphological structure *a-ina-u* (COP-PL:IMPV-REL). The following examples, in which the same verb stem *a-ina* (COP-PL:IMPV) is relativised with the postposed anaphoric pronoun *nu(nu)*, demonstrate that the word *ainau* is synchronically morphologically complex:

- (27) [nuwa-na intsamahu-inu] a-ina = nunu
 [woman-ACC have.sex-NR] COP-PL:IMPV=ANARel
 ‘those (men) who were having sex with the woman’ (6:4:43)

- (28) [kiiwi a-ina = nu-na] yu-a-u asã
 [centipede COP-PL:IMPV=ANARel-ACC] eat-IMPV-REL COP:SBD/SEQ+3:SS
 ‘as (the armadillo) was eating those centipedes...’ (6:1:19)

5.2.5 *tukĩ* ‘like’

The word *tukĩ* typically functions as a time word meaning ‘always’ (§3.7.4), but also may function as an NP operator meaning ‘like’. As an NP operator *tukĩ* always precedes the head noun.

The following two examples come from a story about a man who tries to kill a powerful witch doctor. As he approaches the intended victim’s house, he is described (29a) as being like a *macana* fish, which is known for rapidly zig-zagging through the water making it hard to hit with a machete – in the attacker’s case, he wants to be safe from marksmen. After entering the house, the attacker’s gun fails to fire, because the intended victim has spirit power which makes him invulnerable. The attacker then panics and flees, this time running straight back into the forest as fast as he can, like a hummingbird (29b).

- (29) a. [tuki kantaʃi] aku-hu-ka-u-ai
 [like fish.sp]_{NP} approach-APPL-INTS-REL-COP:3:DECL
 ‘he ran towards (the house) like a *macana* fish’ (6:13:53)
- b. [tuki hɪmpɪ] wakitu-ki-u-ai
 [like hummingbird]_{NP} go.back-TRF-REL-COP:3:DECL
 ‘he ran back like a hummingbird’ (6:13:73)

5.3 NP Modification

Adjectives and some nouns can modify the head noun in an NP, as in the following examples. Adjectives and nouns functioning adjectivally always follow the head noun, while relative clauses typically follow but may precede the head (§5.4).

- (30) a. [yawaã piŋkiha]
 [dog good_{Adj}]_{NP}
 ‘a good dog’
- b. [utʃi nuwa]
 [child woman_N]_{NP}
 ‘a girl’

Modifiers attribute some property to the head noun, unlike determiners which specify number or definiteness. Compound nouns, consisting of two noun roots, show quite different properties to modified NPs – see §3.3.7.

Modification within the NP is relatively uncommon in texts, adjectives instead typically function predicatively. When it does occur, however, attributive adjectival modification can be quite elaborate, as the following examples show

- (31) [yawaã-hĩ piŋkiha aiʃmaŋku duwihamama] a-haku-i
 [dog-PERT:1PL/3 good man fat] exist-NARRNR-COP:3:DECL
 ‘she had a good fat male dog’ Lit. *her good male fat dog existed* (6:5:5)
- (32) waina-ka-maia-ha-i [kuwaʃata aintsu ha-a-u
 see-INTS-INTPAST-1SG-DECL [many person be.sick-IMPFV-REL
 a-ina-u-na]
 COP-PL:IMPFV-REL-ACC]
 ‘I saw many sick people’ (2:2:143)

Both types of relativisation have extended uses that function at the level of discourse organisation. The most conspicuous is that of the relativiser *-u*, which is very commonly used to mark main clauses in narratives, and gives the implication of hearsay. Such relative clauses also function in clause-chaining, and there is a considerable functional overlap between relativisation and clause-combining – two subordinators also occasionally function as relativisers. Pronominal relativisation may be used to focus nouns.

Two minor relativisation strategies involve the subordinators *-ma* and *-tatamana*; both primarily function as subordinators but show examples that can be analysed as relativisation. These two subordinators index grammatical relations in the subordinate clause and the controlling clause, a property that they share with relative clauses. Indeed, it is likely that both *-ma* and *-tatamana* were historically primarily relativisers or nominalisers.

Relativisation operates at the level of the clause, and the relativisation includes the verb and any NP arguments other than that shared with the matrix clause (a gapping strategy). Either the S/A or most salient non-S/A argument can be relativised (as in (34a) and (b) respectively).

- (34) a. [ikam_yawaã-ka [aĩntsu-na yu-a-u-ka]]
 [jaguar-FOC [person-ACC eat-HIAF-REL-FOC]]_{NP}
 ‘the jaguar that ate a person’ (6:4:132)
- b. [nihamantʃi [yaha-mau-ʃakama]]
 [masato [prepare:PFV-NON.A/S:REL-ADD]]_{NP}
 ‘also *masato* (manioc beer) that had been prepared’ (6:1:33)

In example (35) the relative clause precedes the head noun; relative clauses are often used as a clause-combining strategy, and as such they tend to follow the same preference for iconic temporal/logical ordering as other clause-combining constructions.

- (35) [[ĩwantʃi yauntʃuki hu-ki-mau] nuwa]
 [[devil long.ago take-TRF-NON.A/S:REL] woman]_{NP}
 ‘women that the devil had taken long ago’ (6:2:60)

All other modifiers must follow the head noun, and this is the preferred position for relative clauses.

Examples where an NP consisting of a noun plus a relative clause takes accusative marking are very rare except with plural marking *a-ina-u* (COP-PL:IMPFV-REL), which behaves like any regular modifier in that it takes the accusative suffix while the head noun remains unmarked:

- (36) [hiŋkai a-ina-u-na] utua-kã
 [fruit COP-PL:IMPFV-REL-ACC] pile.up-INTS:SEQ+3:SS
 ‘having piled up the fruits...’ (6:1:33)

Among the few other examples of relative clauses in object NPs, marking is variable, and both elements may be marked accusative as in the following example:

- (37) [saipi-na iyã-ha-u-na] yu-a-u tuwahaĩ
 [peel-ACC fall-PLU-REL-ACC] eat-HIAF-REL NARR
 ‘he ate the (manioc) peelings that had fallen (on the ground), they say’ (6:1:23)

5.4.1 Relativisation with *-u*

Relativisation is a typical function of the suffix *-u* (see §10.3). The common argument is the subject (A/S) of the relativised verb, and typically a core argument of the matrix clause – subject in (34a), object in (36) above. Examples with antecedents other than third person are rare. The following example has a first person antecedent, but note that the relative clause is marked with the subordinate clause first person suffix, showing that in this instance it has been reinterpreted as a temporal subordinate clause:

- (38) [wi taka-a-ku-nu wi-u-nu] mina-ha-i
 [1SG work-IMPFV-SIM-1SG:SS go:PFV-REL-1SG:SS] arrive+IMPFV-1SG-DECL
 ‘I’m coming from work’

But the following example shows a headless relative with first-person common argument, with no verbal marking.

- (42) [yumi-numa yumi aima-ha-**mau**-na-ka] amu-a-ia
 [gourd-LOC water pour-PLU-NON.A/S:REL-ACC-FOC] finish-IMPFV-REMPAST

tuwahaṃĩ
 NARR

‘he finished the water that had been poured into the gourd, they say’ (3:1:25)

In this example, the relative clause modifies the object of the main verb. As is the usual pattern, only the final element in the object NP receives the accusative suffix. We also see in this example the fairly free word order within NPs: *yumi-numa* (gourd-LOC) is an oblique constituent of the relative clause, but it precedes the NP head *yumi* ‘water’.

As with the subject relativiser *-u*, *-mau* may be suffixed to the perfective or imperfective stem; compare the following two examples:

- (43) [ta-**mau**-na] antu-ka-ma-ha-i
 [say+IMPFV-NON.A/S:REL-ACC] hear-INTS-RECPAST-1SG-DECL

‘I heard what was being said’

- (44) [ti-**mau**-na] antu-ka-ma-ha-i
 [say+LOAF-NON.A/S:REL-ACC] hear-INTS-RECPAST-1SG-DECL

‘I heard (secondhand) what had been said’

The non-subject relativiser may also function as an action nominaliser, as described in §10.3.

5.4.3 Relativisation with encliticised relativiser

The encliticised relative clause construction in Aguaruna consists of a partially finite clause: tense and SAP subject are always marked, and there is never mood/modality marking; third person subjects are typically unmarked, but may be marked in present tense (as in examples 58 and 45 below); it is not clear what conditions the presence of third-person marking. The relative clause must be verb-final, and is directly followed by an encliticised relativiser that is marked for its role in the matrix clause. The relative marker may be one of: proximal demonstrative *hu*; distal demonstrative *au*; anaphoric pronoun *nu*; or a derivative of the intensifier *ima* (see the list in §3.7.6). The common argument may be any participant of the relative clause and the matrix clause, and may appear overtly in either clause (compare examples 52 and 53).

In the examples, encliticised relativisers are labelled with subscript “Rel”.

- (45) [nĩ ta-wa = nu-na-ka] wi dika-a-ha-i
 [3SG say+IMPFV:3=ANARel-ACC-FOC] 1SG know-IMPFV-1SG-DECL

‘I (already) know what he’s saying’

- (46) [au puha = au-ĩ] wi-a-ha-i
 [DST live+IMPFV:3= DSTRel-LOC] go-IMPFV-1SG-DECL

‘I’m going to where he lives’

- (47) [puhu-a = hu-na] hu-ki-ta-ha-i
 [white-COP:3=PRXRel-ACC] take-TRF-IFUT-1SG-DECL

‘I’ll take this white one’

The relativiser is inflected for its role in the matrix clause, and may take any role. It can even be verbalised with one of the pro-verb forming suffixes *-ni* or *-tika*, as in the following example, in which the layers of morphology function to make the referent *aĩntsu* ‘person’ more vague:

- (48) [aĩntsu-a = nu-ni-inu] mina-u
 [person-COP:3=ANARel-VR-NR] arrive+IMPFV-REL

‘something like a person (is) coming’ Lit: *one who does being-a-person* (8:1:73)

In the following example the relative clause is verbalised with the suffix *-ti(ka)* and becomes a sequential subordinate clause.

- (49) [kanu api-a-ku ituhu-taia = nu-tika-ã]
 [canoe burn-IMPFV-SIM:1PL:SS make-NORM=ANARel-VR-HIAF+3:SS]

‘(they) having done as we do, burning out a canoe...’ (6:2:53)

Various words formed from the intensifier *ima* also enter into such constructions; in that case the relativiser is not case-marked. The bare root *ima* itself cannot function as a relativiser. The following example shows nested relativisation: the verb *hapi* ‘drag’ is relativised with the non-subject relativiser *-mau*, then the copula suffix is added and the resulting equative clause is relativised with *iman* (INTENS.NR) ‘such a big one’.

- (50) [kanu hapi-ka-mau-a = iman] taha-a-kũ
 [canoe pull-INTS-NON.A/S:REL-COP:3=INTENS.NR_{Rel}] clear-IMPV-SIM+3:SS

akai-ki-u-ai
 go.down-TRF-REL-COP:3:DECL

‘(something) as big as a canoe being dragged has come down clearing a path through the undergrowth’ (Text 1:6)

- (51) uumi-i [hii-a = imau] tsahut ihũ
 blowgun-INSTR [eye-COP:3=INTENS.LOC_{Rel}] SYM stab:PFV:SEQ+3:SS

‘having stabbed it right in the eye with his blowgun...’ (6:4:86)

There are no restrictions on which participant of a pronominal relative clause is shared with its matrix clause. In the following example the O argument of the relative clause functions as the S argument of the matrix clause.

- (52) [wi aĩntsu-na waina-ka-ma-ha = nu-ka] tʃapi-numa
 [1SG person-COP:3 see-INTS-RECPAST-1SG=ANA_{Rel}-FOC]_S Chapi-LOC

puhu-u-ai
 live-REL-COP:3:DECL

‘the person that I saw lives in Chapi (village)’

In the following example an oblique instrumental participant in the relative clause is a copula subject in the matrix clause.

- (53) [[wi kutʃi-na ma-a-ma-ha = nu-ka] kutʃi-ka]
 [[1SG pig-ACC kill-HIAF-RECPAST-1SG=ANA_{Rel}-FOC] knife-FOC]_{CS}

[ami-nau-ĩ]
 [2SG-POSS-NONVIS.COP:3]_{CC}

‘the knife I killed the pig with is yours’⁷⁹

And the role that the relative plays in the matrix is similarly unconstrained, although here case-marking limits the potential for ambiguity. We have already seen nominative, accusative and locative marked examples as well as those with derivational morphology. The following examples show instrumental (54) and locative + ablative case marking (55):

⁷⁹ Note that *kútʃi* ‘pig’ and *kutʃi* ‘knife’ are distinguished by accent placement, so are not homophones, despite appearances.

(54) [kutʃi su-hu-sa-ma-umi = nu-i] kutʃi-na
 [knife give-1SG.OBJ-ATT-RECPAST-2SG=ANARel-INSTR]_{ObI} pig-ACC

ma-a-ma-ha-i
 kill-HIAF-RECPAST-1SG-DECL

‘I killed the pig with the knife you gave me’

(55) [ami namaka waina-ka-umi = nu-ĩ-ia-aita-ha-i]
 [2SG river see-INTS-2SG=ANARel-LOC-ABL-COP-1SG-DECL]

‘I live on the river you saw’ Lit: *I am from the river you saw*

A headless demonstrative construction formed on a copula-marked noun is often used to focus the noun, without adding any modificational information. See (51) above, and the following examples.

(56) [papin muunta-a = nu] wiŋka-ai
 [book big-COP:3=ANARel] blue-COP:3:DECL

‘that big book is blue’

(57) [ɪwantʃi-a = nu]
 [devil-COP:3=ANARel]

‘the devil’ Lit. *that which is the devil*

This focussing strategy is discussed further in §13.4.

This suggests that although some examples appear to be headed relative clauses, in fact the encliticised relativiser construction is always headless. Consider the following example:

(58) [ami-na] [apahui tuki puhu-wa = nu] yaĩ-pa-ka-ti
 [2SG-ACC]_O [god always live-3=ANARel]_A help-2.OBJ-INTS-JUSS

‘may God, who lives forever, help you’ (Obs)

Although it looks as if *apahui* ‘God’ heads an NP, with a relative clause following (‘who always lives’), by analogy with the other examples presented above this is better analysed as a whole clause that is relativised, in which the common argument just happens to be clause-initial. There is no evidence to suggest that in this example the common argument is extraposed.

5.5 Possessive NP

The possessive NP consists of a head noun marked with pertensive morphology and an optional possessor. Possessive NPs typically appear unmodified, but examples such as (31) above, with three modifying adjectives, and the following with a relative clause, show that there is no syntactic restriction on modification within the possessive NP.

- (59) [pata-hĩ a-ina-u]
 [family-PERT:1PL/3 COP-PL:IMPFV-REL]
 ‘his family members’ (Text 1:18)

The possessor NP, however, is restricted; it may not be modified, although it can take a determiner:

- (60) [[nu-na aĩntsu-na] iyãĩ-na] hu-ki-u-ai
 [[ANA-ACC person-ACC]_{NP Possessor} body:PERT:1PL/3-ACC] take-TRF-REL-COP:3:DECL
 ‘they took that man’s body’ (Text 1:36)

And nested possessive NPs are possible, as in the following example:

- (61) [[nĩ-na wiuqa-hĩ] hĩĩ-nĩ]
 [[3SG-ACC father.in.law-PERT:1PL/3+GEN] house+PERT:1PL/3-LOC]
 ‘at his father-in-law’s house’ (Text 2: 26)

To include a more complex possessor NP, an encliticised relativiser construction must be used, as in the following example. Note that the possessor NP is marked with accusative case, because the relative pronoun is its final element, and pronominal possessors are always marked with accusative (see below).

- (62) [[tsuŋki aiĩ datsautji-a = nu-na]
 [[mermaid+GEN husband+PERT:1PL/3 youth-COP:3=ANA_{Rel}-ACC]_{POSSESSOR}
 duku-hĩ]
 mother-PERT:1PL/3]_{NP}
 ‘the mother of [that youthful husband of the mermaid]’ (2:1:32)

The possessor appears with genitive marking, but takes accusative marking when:

1. The possessive NP is accusative marked (example 60)
2. The possessor is a singular pronoun (example 63)

- (63) [mi-na apa-hu]
 [1SG-ACC father-PERT:1SG]_{NP}
 ‘my father’

The possessor may be marked with the possessive suffix *-nau*, instead of the genitive form, in which case the possessum does not take pertensive morphology, as in the following example:

- (64) [mi-nau piniha]
 [1SG-POSS bowl]_{NP}
 ‘my bowl’

In effect this is a simple modified NP. The possessor-marked forms function adjectivally, and as such are expected to follow the noun, but often precede a possessum by analogy to genitive-marked possessors.

The construction with possessive-marked possessor and unmarked possessum is preferred for two nouns: *duka* ‘leaf’ and *tsuntsu* ‘snail’, as described in §4.4.

5.6 Apposed name NP

The apposed name NP consists of two coreferential elements: the head noun and a proper name. The relationship is not one of modification, but of identity. In addition to the semantic distinction, apposed name NPs differ morphologically from simple modified NPs in that the apposed name never takes any morphology.

- (65) [uma-hu tʃihĩap]
 [sibling-PERT:1SG Chijiap]
 ‘my brother Chijiap (♀ speaking)’ (8:1:90)
- (66) [yuwa-hu kāyuka]
 [sister.in.law-PERT:1SG agouti]
 ‘my sister-in-law, the agouti (♀ speaking)’ (6:1:27)

In the following example, the locative case marker *-numa*, which normally appears on the last element of the NP, is suffixed to the head rather than the phrase-final apposed name.

- (67) *iqku-nai-ka-u-ai* [*namaka-numa mahanu*]
 meet-RECIP-INTS-REL-COP:3:DECL [*river-LOC Marañón*]
 ‘they met at the river Marañón’ (6:8:15)

Also compare the following NP from example (113) in Chapter 3, in which the proper name *kanusa* (here referring to the Huambisa people who live on the Santiago River, rather than the river itself) follows the encliticised relativiser *nunu*.

- (68) [*tsumu-numa-ia* [*iwaha-a = nunu kanusa*]
 [*downriver-LOC-ABL enemy-COP:3=ANARel Santiago.River*]_{NP}
 ‘those enemies from downriver, (those from the) Santiago River’ (6:8:18)

Proper names do receive case markers and other morphology when they head NPs, as in the following example, from a story in which a devil drinks dry a number of streams then vomits up the Marañón and Santiago Rivers:

- (69) [*mahanu-na*] *kutut iya-a-kū nahana-u tuwahamĩ*
 [*Marañón-ACC*] SYM vomit-IMPV-SIM+3:SS create:PFV-REL NARR
 ‘vomiting “*kutut!*” (the devil) created the Marañón River’ (6:2:85)

The following example shows a discontinuous apposed name NP:

- (70) *iglésianmaya takatá suhusáhabi koordinađor deséntro sektoriál deséntro wawík*
 [*iglesia-numa-ia taka-ta-na*] *su-hu-sa-aha-abi*
 [*church-LOC-ABL work-ACTNR-ACC*]_O *give-1SG.OBJ-ATT-PL-DISTPAST:3:DECL*
 [*koordinađor de sentro sektorial de sentro wawiku*]
 [*coordinator of Centro Wawik*]_O
 ‘they gave me a church-related job, coordinator of Centro Wawik’ (2:2:285)

The name *Coordinador de Centro Sectorial de Centro Wawik* is part of the O NP, and is in apposition to the head noun *taka-ta* (work-ACTNR) ‘work’; but it is not marked with accusative case, in keeping with the pattern in apposed name NPs, but unlike other discontinuous NPs, which take case marking on both elements (see §5.7 below).

A possible use of a discontinuous apposed-name NP with the verb *anaiya* ‘name’ is discussed in §11.4.2.3.

5.7 Discontinuous NPs

NPs may be split into two discontinuous parts, typically appearing on either side of the verb. This is most common with object NPs, but example (73) below, with a discontinuous NP in S role, shows that subject NPs may also be split in this way. An example is the following, where two coreferential nouns are marked as objects of one verb.

- (71) [ami-na yawaĩ-mi-na] waina-ka-ma-ha-i [mantu-inu-na]
 [2SG-ACC dog:PERT-2-ACC] see-INTS-RECPAST-1SG-DECL [kill+APPLIC-NR-ACC]
 ‘I saw your good hunting dog’

OR

‘I saw your dog, the good hunter’

The final element could be considered an afterthought. In the following example, however, it is the head noun that is clause final, and does not appear to be an afterthought; rather, it has been moved to final position because the modifier ‘out of the food’ is in clause-initial, focused, position:

- (72) [yu-taĩ-numa-ia-na] hii-ki-ma-ha-i [duka-na]
 [eat-NON.A/S:NR-LOC-ABL-ACC] take.out-TRF-RECPAST-1SG-DECL [leaf-ACC]
 ‘I took the leaf out of the food’

The accusative marking shows that the two elements must form a single NP – the verb *hii* ‘take out’ is a simple transitive and only licences one object NP. By morphological criteria this is a single, discontinuous NP. Syntactically, however, the two elements are treated as discrete units, and both elements function as clausal participants.

Compare the following example, in which the head is clause-initial and marked with the polar interrogative suffix, while the modifying relative clause is in final position and marked with the uncertainty suffix:

- (73) útʃik áya wainkámuʃ
 [utʃi-ka] a-ia [waina-ka-mau-ʃa]
 [child-POLINT] COP-REMPAST:3 [see-INTS-NON.A/S:REL-UNCERT]
 ‘was it a child you saw?’

Relative clauses are commonly non-contiguous with their heads cross-linguistically, as ‘[a man] entered the room [who was wearing a black hat]’ (Baker 1996: 143). In the

Aguaruna example, however, the distinct marking on each of the elements suggests that they should in this case be considered separate syntactic units.

The two parts of a discontinuous NP may functionally simulate separate arguments as in the following example in which the possessor noun simulates a beneficiary:

- (74) numín tsupíktahai mína nuwánun
 [numi-na] tsupi-ka-ta-ha-i [mi-na nuwa-nau-na]
 [wood-ACC]_o cut-INTS-IFUT-1SG-DECL [1SG-ACC woman-POSS-ACC]_o
 ‘I’ll cut wood for my wife’ Lit. *I’ll cut my wife’s wood.*

As with the examples above, the morphology dictates that [*numi-na mína nuwa-nau-na*] (wood-ACC 1SG-ACC woman-PERT:1SG-POSS-ACC) ‘my wife’s wood’ must be analysed as one NP, as the verb is a simple transitive and cannot license more than one accusative-marked NP. Semantically, however, ‘my wife’ is functioning as a beneficiary type argument. The use of discontinuous NPs as a strategy to control the number of arguments in a clause is discussed in §11.3.

5.8 NP coordination

The basic coordination construction is simply to list the coordinate NPs. It is typically asyndetic, but may make use of the adverb *aatusa* ‘thus’ to mark the end of the list. A second NP coordination strategy uses the comitative case-marker *-haĩ*.

5.8.1 Listing coordination

Listing coordination typically has no overt morphological marker, and consists, as the name suggests, in simply listing the coordinate NPs:

- (75) kábau áinaun tsáaŋ áinaun híma áinaun tʃihunkán pasuhũã
 [kabau ainau-na] [tsaaŋku ainau-na]
 [termite.nest COP-PL:IMPFV-REL-ACC] [tobacco COP-PL:IMPFV-REL-ACC]
 [hima ainau-na] [tʃihunaka-na] pasu-hu-ã
 [chilli COP-PL:IMPFV-REL-ACC] [dry.leaf-ACC] put.in-APPLIC-HIAF:SEQ+3:SS
 ‘having put (into the cave) termite nests, tobacco, chillies and dry leaves (to set a fire and smoke out the devil)...’ (6:2:51)

In the following example, the first coordinate NP precedes the verb, forming a stylistically unmarked AOV clause, while three other NPs follow. The postverbal NPs thus

resemble afterthoughts, and note that they are not completely parallel, as the last NP is a superordinate term that includes the previous three.

- (76) *kāyuka-ka* [*mama-na-ka*] *utua* *utuama-ã* [*paampa-na-ka*]
 agouti-FOC [*manioc-ACC-FOC*] REDUP *pile.up-HIAF:SEQ+3:SS* [*plantain-ACC-FOC*]
 [*piria-na-ka*] [*aʃi yu-taĩ* *a-ina-u-na-ka*]
 [*banana.sp-ACC-FOC*] [*all eat-NON.A/S:NR COP-PL:IMPFV-REL-ACC-FOC*]
 ‘the agouti, having piled up manioc, plantains, bananas, all kinds of food...’ (6:1:31)

Although the listing construction is essentially asyndetic, it may include the adverb *aatusa* ‘thus’ to mark the end of the list. This is more common in examples such as the following, where the coordinate NPs are not contiguous.

- (77) *nĩ* [*yatʃĩ-na*] *ayã-u-ai*
 3SG [*brother:PERT:1PL/3-ACC*] *take.with:PFV-REL-COP:3:DECL*
 [*nuwĩ-na* *aatusã*]
 [*woman:PERT:1PL/3-ACC* *thus+3*]
 ‘he took his brother and his wife too’ (6:4:19)

Asyndetic coordination may also apply within the NP. In the following example, two nouns *koro* ‘religious song’ (< Sp. *coro*) and *imno* ‘hymn’ (< Sp. *himno*) share a single modifying adjective and relative clause:

- (78) [*koro imno yamahama unuima-ha-mau*] *kanta*
 [*song hymn new learn-PLU-NON.A/S:REL*] REDUP
kantama-ina-kawa *mini-ia-hi-i*
sing-PL:IMPFV-REPET+1PL:SS *arrive-REMPAST-1PL-DECL*
 ‘we arrived, singing songs and hymns that we had recently learned’ (2:2:223)

Similarly, in the following example three nouns share a single postposed plural marker *a-ina-u* (COP-PL:IMPFV-REL):

- (79) *naŋkámawwai píʃak tʃiŋki kúntin áidau tukután*
naŋkama-a-u-ai [[*piʃaka tʃiŋki kúntin a-ina-u*]
begin-HIAF-REL-COP:3:DECL [[*small.bird game.bird animal COP-PL:IMPFV-REL*]
tuku-ta-na]
shoot-ACTNR-ACC]
 ‘he began to shoot small birds, game birds and animals’ (4:3:74)

Asyndetic NP coordination can make it difficult to judge the transitivity of some verbs, and this is discussed in detail in §11.4.2.

5.8.2 Coordination strategy with comitative case

Listing coordination is typically used to coordinate object NPs, as in the above examples. Subject NPs, by contrast, do not normally appear in coordinate constructions. Comitative case marking can be used to functionally coordinate subject NPs. The comitative-marked NP becomes an oblique participant, and the verbal subject marking reflects only the grammatical subject, as in the following example in which the verb is marked for first person singular subject.

- (87) mi-na nuwa-haĩ ta-a-tata-ha-i
 1SG-ACC wife-COMIT come-HIAF-FUT-1SG-DECL
 ‘I will come (back) with my wife’

Other examples of comitative case marked NPs may be interpretable as subjects but are semantically better considered oblique participants, and in such constructions comitative case marking cannot be said to simulate coordination. In particular, the verb *tʃitʃa* ‘converse’ takes a comitative marked complement but frequently context suggests that the two NPs are not symmetrical subjects. Compare the following example, where the wife is not an equal subject in a conversation, rather she is the addressee:

- (80) dikatkau nuwa-haĩ tʃitʃa-sa kaʃini
 first woman-COMIT converse-ATT:SEQ+1PL:SS tomorrow

wikaiuqa-a-ku-nu wi-tata-ha-i tu-sa
walk-IMPV-SIM-1SG:SS go:PFV-FUT-1SG-DECL say-SBD+1PL:SS
 ‘first, having spoken to our wives, saying “tomorrow I will go walking (i.e. hunting)”...’
 (Text 3:5)

Comitative case may be used to coordinate object NPs, but as a general rule, comitative marking is preferred for coordination of subject NPs, and a listing construction for object NPs. The following example (a), where comitative case coordinates two object NPs, was judged infelicitous by native speakers, although grammatical. A more acceptable formulation would couch both object NPs in accusative case, as in (b) – a listing construction.

- (81) a. ?[ami nahana-mau-na] [wi nahana-mau-**hai**]
[2SG make:PFV-NON.A/S:REL-ACC] [1SG make:PFV-NON.A/S:REL-COMIT]

waina-ka-ma-ha-i

see-INTS-RECPAST-1SG-DECL

?‘I saw the one that you made with the one that I made’

- b. [ami nahana-mau-na] [wi nahana-mau-**na**]
[2SG make:PFV-NON.A/S:REL-ACC] [1SG make:PFV-NON.A/S:REL-ACC]

waina-ka-ma-ha-i

see-INTS-RECPAST-1SG-DECL

‘I saw the one that you made and the one that I made’

Chapter 6: Verb I: Introduction and overview

6.1 Introduction

The verb is the most morphologically complex word class in Aguaruna. It is almost entirely suffixing, with only one (unproductive) prefix slot. It is useful for the purposes of description to divide verbal suffixes into two morphological levels, which roughly correspond to derivation and inflection. At the second (“inflectional”) level, verbal forms fall into five groups:

1. Finite verbs (Chapter 8)
2. Inflecting subordinate verbs (Chapter 9)
3. Non-inflecting subordinate verbs (Chapter 9)
4. Relativised verbs (Chapter 10)
5. Nominalised verbs (Chapter 10)

Finite verbs are obligatorily inflected for person, tense and mood. A finite verb or predicate nominal is the minimum required constituent of a clause or sentence.

Subordinate forms imply, and require, the presence of a finite controlling verb. As a minimum definitional criterion subordinate verbs lack tense and mood, instead taking these from their controlling verb, and all subordinate verbs indicate switch-reference relations between the subordinate and the controlling verb. Subordinate verbs fall into two groups: inflecting subordinate verbs are marked for the person of the subject and also show canonical switch-reference marking (i.e. same-subject or different-subject). Non-inflecting subordinate verbs have no person-marking, and show non-canonical switch-reference marking, indexing the role of a common argument in both the subordinate and the controlling clause.

Relativised verbs modify NPs, and nominalised verbs head NPs. Both types retain some verbal properties, particularly with regard to argument structure, and relativised verbs may function as heads of finite and subordinate clauses. Both may also occasionally take verbal person marking, but this is never obligatory.

The five verb types represent a cline of decategorisation, as fewer verbal categories are marked from (1) to (5), and more non-verbal properties are evident. This idea is taken up more fully in Chapters 10 and 12.

This chapter and the following four describe the morphology of verb forms. The functions of main and subordinate clauses are described at length in Chapters 11 and 12.

6.2 Derivation versus inflection

The terms derivational and inflectional may be problematic, particularly for agglutinating type languages (Plungian 2001). For Aguaruna, the labels are best considered to represent prototypes. Within verbal morphology there are two levels, which can be labelled derivational and inflectional in that the first mainly consists of prototypically derivational morphemes, while the second mainly contains prototypically inflectional morphemes. Note that nominalisation, prototypical derivation because class-changing, is at level II – but it is completely productive so could be considered inflectional in Aguaruna.

6.2.1 Levels of morphology

For the purposes of this description it is useful to distinguish two main levels. The first consists of the sole prefix position and all suffix positions up to and including the negative suffixes (see Chapter 7). The verb root together with any affixes at this level form a stem which may take second level verbal morphology or be relativised or nominalised. In finite verbs level II is composed almost exclusively of inflectional tense, subject and mood markers. These three sets can all be considered obligatory, although only subject suffixes form an equipollent system, as tense and mood may be zero-marked. In inflecting subordinate verbs, level II consists of subordinating suffixes, person and switch-reference marking, and clause-level mood/modality markers.

The major suffix groups at level II, namely tense, subject and mood, are obligatory and do not change the basic semantics of the verb, thus fitting the inflectional prototype. The level I suffixes, by contrast, are not obligatory and many alter the semantics or valency of the verb, so these are prototypically derivational. Additionally, the criterion of distance from the root is relevant: cross-linguistically derivational morphemes tend to appear closer to the root than inflectional morphemes.

Figure 6.1 presents a simplified diagram of the two morphological levels.

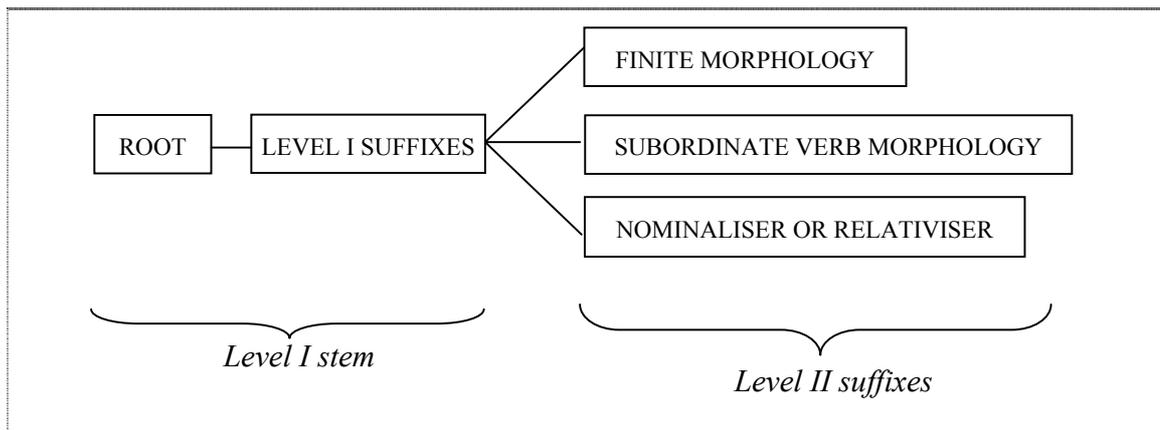


Figure 6.1: Levels of verbal morphology

The division is not entirely clear-cut: some level II suffixes are added to stems that cannot include the full complement of level I suffixes, so there is not a single “level I stem”; however, it is useful to divide the morphology this way for descriptive clarity.

6.2.2 Ordering of suffixes

It is clear that the vagaries of grammaticalisation have led to a number of different kinds of suffixing behaviour. There is some iconicity apparent, in that more prototypically derivational suffixes tend to be closer to the verb, and inflectional suffixes later in the sequence. Within the inflectional suffixes, there is a tendency for mood/modality to be word-final, which also reflects an iconicity, as these morphemes are relevant to the whole clause, while person marking is relevant only to the verb. A similar iconicity can be invoked in the case of clause-level mood/modality markers on subordinate verbs, and conditional and concessive markers that indicate interpropositional relations. The iconicity is not general, however, and the departures from it are not readily explained. Some suffixes that are semantically and functionally part of the same group show very different behaviours morphologically. Object-marking suffixes, for example, normally immediately follow the verb root, but second-person object is marked at level II when the subject is first person – perhaps this is an effect of the nominal hierarchy (see §7.5.6). In other cases, ordering is affected by the presence or absence of a particular suffix. For example the polar interrogative suffix *-ka* normally appears word-finally, as is typical for mood markers. However, when the immediate past suffix *-ma* is also present, it is immediately followed by the polar interrogative suffix, which is then followed by person marking suffixes.

Where possible, hypotheses are offered to explain such departures from the general patterns, but in many cases there is not sufficient evidence to justify any hypothesis. Future research, particularly internal reconstruction of Proto-Jivaroan, may illuminate some mysteries, others may remain obscure.

6.3 Verb conjugations

A number of morphological changes and phonological rules interact to define a total of five conjugations. The conjugations are based on variation in the root when forming the unmarked, perfective and imperfective stems. Potential and durative stems use the unmarked root form (see §7.3 for details of verb stems). The morphological phenomena that define the conjugations cannot be explained in purely phonological terms.

Unmarked verb roots may terminate in a single vowel, two identical vowels, or /a/ followed by a non-identical vowel. All verbs ending in /a/, /i/ and /i/ in the unmarked form, whether preceded by a vowel or not, fall into the first two conjugations. Some of those ending in /u/ fall into the first two conjugations, with the rest making up three “u-dropping” conjugations that lose the final /u/ in the perfective and imperfective stems.⁸⁰

The table below summarises the conjugation membership of roots based on their phonological shape:

CONJUGATION	FINAL VOWEL(S) OF UNMARKED ROOT					
	/i/, /ai/, /ii/	/i/, /ai/, /ii/	/a/, /aa/	/u/	/uu/	/au/
1	some	some	all	some	–	–
2	some	some	–	–	all	–
3A	–	–	–	some	–	–
3B	–	–	–	some	–	some
3C	–	–	–	–	–	some

Table 6.1: Root terminations and conjugation membership

There are some patterns based on phonological forms. All /a/ and /aa/ stems are first conjugation and all /uu/ stems are second conjugation. The single-/u/ stems are the most

⁸⁰ The question naturally arises, why “u-dropping” and not “u-adding”? I analyse it as loss of /u/ because the unmarked stem is taken as basic. Future research may show that this is not the case, and there is some evidence that the /u/ of the “u-dropping” verbs may in fact be an old “infinitive” marker (cf. §2.4.3, §6.3.5).

disparate, some falling in the first conjugation, the rest in the first and second u-dropping sets (3A and 3B). The first u-dropping set (3A) contains only /u/ verbs, the third (3C) only /au/ verbs, the second a mix of /u/ and /au/. We will see below that 3A and 3B are analogous to 1 and 2, as 2 and 3B add /a/ in the perfective stem, while 1 and 3A do not.

The first two conjugations between them contain about 90% of verbs, with the majority (perhaps 80% of the total) in the first conjugation. Of the third conjugation, 3C appears to be the largest by a small margin.

In the examples, verbs are quoted in three forms, showing the unmarked, perfective and imperfective stems respectively. The quoted perfective stems include the default Aktionsart suffix if the verb has one (§7.3.1), and imperfective stems include the imperfective marker *-a* (§7.3.2). Accents are shown in exemplified stems.

6.3.1 First Conjugation

The first conjugation is the most regular, in that there is a single root that remains unchanged in all stems; any changes to the stems can be accounted for by phonological rules:

1. If the root ends with two identical vowels, one is dropped in perfective and imperfective stems **unless** the root is underlyingly disyllabic (cf. *k#*, *dii*)
2. In monosyllabic roots ending in a vowel other than /a/, an epenthetic glide appears preceding the high affectedness Aktionsart suffix *-a* and imperfective *-a* (cf. *w#*)⁸¹
3. In /a/-final roots, imperfective *-a* typically fuses with final /a/ **unless** the root is underlyingly monosyllabic (i.e. monovocalic – cf. *ha*)

⁸¹ This could also be interpreted as vowel insertion and subsequent $V \rightarrow G/V_V$ (where V = vowel and G = glide)

/a/ stem

	UNMARKED	PERFECTIVE	IMPERFECTIVE	GLOSS
a.	áuṽa	auṽá-ha	áuṽa	‘write’
b.	hiiná	hiina-kí	hiína	‘go out’
c.	há	ha-ká	há-a	‘die’
d.	maá	ma-i ⁸²	ma-á	‘bathe’

Table 6.2: First conjugation verbs, /a/ final root

/i/ stem⁸³

	UNMARKED	PERFECTIVE	IMPERFECTIVE	GLOSS
a.	mahí	mahí-ha	mahí-a	‘clean up’
b.	kíí	kíí-ka	kíiṽ-á	‘burn (intr.)’
c.	wí	wí	wíiṽ-a	‘go’
d.	káí	káí	káíiṽa	‘have someone fold their knees to their chest’

Table 6.3: First conjugation verbs, /i/ final root

/i/ stem

	UNMARKED	PERFECTIVE	IMPERFECTIVE	GLOSS
a.	tsúpi	tsupí-ka	tsúpi-a	‘cut’
b.	kāhíi	kāhí-ha	kāhí-a	‘sleep (plural subject)’
c.	dií	dií-s	diy-á	‘look at’
d.	páí	páí	páy-a	‘roll tips of darts in venom’

Table 6.4: First conjugation verbs, /i/ final root`

⁸² Note that the ‘low affectedness’ Aktionsart suffix *-i(ni)* replaces the final /a/ of the root.

⁸³ Final /i/ becomes /i/ when preceding *-ki* TRF Aktionsart (even if an elided syllable intervenes)

/u/ stem

	UNMARKED	PERFECTIVE	IMPERFECTIVE	GLOSS
a.	ahakú	ahaku-há	aháku-a	‘lose a child’
b.	aáŋku	aáŋku-a	áaŋku-a	‘leave a space’

Table 6.5: First conjugation verbs, /u/ final root

Note that there are no /uu/ endings in the first conjugation. In the second conjugation, however, **all** /u/ stems end in /uu/.

6.3.2 Second Conjugation

Second conjugation verbs differ from the first conjugation in that their perfective form is characterised by the presence of stem-final /a/. There are no /a/ stems in this conjugation, and all of the /u/ stems end in /uu/. An interesting point to note is that the Aktionsart suffix associated with second conjugation verbs is almost always pluractional *-ha*. The phonological changes that characterise the second conjugation are:

1. /a/ is added to the root in the perfective stem; if root has more than two vowels, /a/ replaces the final vowel
2. If the root ends in two identical vowels, one is dropped in imperfective stems **unless** the root is underlyingly disyllabic (cf. first conjugation rule 1)

/i/ stem

	UNMARKED	PERFECTIVE	IMPERFECTIVE	GLOSS
a.	tamíi	tamiá-ha	tamí-a	‘become greasy’
b.	ahápi	ahápa	ahápi-a	‘throw away’
c.	aípi	aípa-sá	aípi-a	‘throw on the ground’

Table 6.6: Second conjugation verbs, /i/ final root

/i/ stem

	UNMARKED	PERFECTIVE	IMPERFECTIVE	GLOSS
a.	ahĩĩ	ahĩá-ha	ahĩ́-a	‘knock down’
b.	kĩĩ	kiyá-ha	kíy-a	‘become evening’

Table 6.7: Second conjugation verbs, /i/ final root

/u/ stem

	UNMARKED	PERFECTIVE	IMPERFECTIVE	GLOSS
a.	katsúu	katsuá-ha	katsú-a	‘ripen; harden’
b.	kuṅkúu	kuṅkuá-sa	kuṅkú-a	‘kiss; smell’

Table 6.8: Second conjugation verbs, /u/ final root

6.3.3 Third conjugation type A

The third conjugation is characterised by a final /u/ in the unmarked root that is lost in the imperfective stem.

The phonological rules are as for the first conjugation with the addition of:

1. Final /u/ is lost in IMPFV form

	UNMARKED	PERFECTIVE	IMPERFECTIVE	GLOSS
a.	puhú	puhú-sa	puh-á	‘be/live’
b.	a(ɥ)ú	a(ɥ)w-í	auɥ-á	‘cook in a pot’
c.	ka(ɥ)ú	ka(ɥ)ú-ha	kauɥ-á	‘rot (of meat)’

Table 6.9: Third conjugation type A verbs

Note in examples (b) and (c) that the underlying velar glide is lost between /a/ and /u/ in the unmarked and perfective stems (see §2.3.2.1).

6.3.4 Third conjugation type B

As with the other third conjugation verbs, final /u/ is lost in the imperfective stem. Unlike the 3A forms, final /u/ becomes /a/ in the perfective stem. This could be analysed as a combination of two processes: (1) loss of the final /u/, as in 3C verbs, and (2) addition of /a/, as in second conjugation verbs.

	UNMARKED	PERFECTIVE	IMPERFECTIVE	GLOSS
a.	kánu	kaná-ha	kán-a	‘sleep (singular subject)’
b.	kaŋkáu	kaŋkaá-ha	kaŋká-a	‘darn’

Table 6.10: Third conjugation type B verbs

6.3.5 Third Conjugation type C

The third conjugation type C is characterised by a final /u/ in the unmarked form that is not present in the perfective and imperfective stems; unlike 3B there is no added /a/ in the perfective stem. All 3C verb roots end in /au/ in the unmarked form.

The rules are:

1. In perfective and imperfective stems the /u/ of the unmarked stem does not appear; the root behaves as a regular (first conjugation) /a/ stem

	UNMARKED	PERFECTIVE	IMPERFECTIVE	GLOSS
a.	tupikáu	tupiká-ka	tupiká	‘run’
b.	máu	ma-á	má-a	‘kill’
c.	kakáu	kaká-ha	kaká	‘cause an argument’

Table 6.11: Third conjugation type C verbs

Some phonological peculiarities of 3C conjugation verbs:

The /u/ of the unmarked stem is replaced by derivational suffixes *-hu* / *-tu* APPLIC and *-miti(ka)* CAUS

- (1) a. tupikamitika
tupikau-mitika
run-CAUS
‘chase’
- b. mantu
mau-tu
kill-APPLIC
‘kill (game) for someone’

The presence of final /u/ apparently denasalises a preceding nasal domain, given that some forms where /u/ is replaced by applicative *-tu* show nasality, as in example (1b) above.

Both properties suggest that the /u/ of the unmarked stems is the reflex of a historical suffix.

6.3.6 Applicative, first person singular object suffix *-hu / -tu*

Verb stems that include the applicative or first person singular object suffixes *-hu / -tu* form a conjugation of their own, with the following rules:

1. Imperfective *-a* always fuses with final /u/
2. ‘Low affectedness’ Aktionsart *-i(ni)* always fuses with final /u/

These rules apply to all verbs ending in /hu/ and /tu/, even where the applicative suffix is not present.

UNMARKED	PERFECTIVE	IMPERFECTIVE	GLOSS
kantaúhu	kantaúhu-ka	kantáuh(a)	‘belch’
utú	uti < utu-i(ni)	utá	‘fetch’
tú	tí < tu-i(ni)	tá ⁸⁴	‘say’

Table 6.12: Applicative-type verbs ending in /hu/ and /tu/

This conjugation differs from 3A only in its treatment of *-i(ni)* Aktionsart.

6.3.7 Default conjugation?

The question that springs to mind when presented with a set of paradigms is “what is the default”? In the case of Aguaruna verb conjugations the answer seems fairly straightforward: the first conjugation is completely regular, and contains the overwhelming majority of verbs, so it must be the default. Another potential source of data is borrowed verbs. Typically, earlier borrowings from Spanish use the third person singular present form of the Spanish verb and the manipulative verbaliser *-ma*, and are indeed first conjugation /a/ stems. Some examples are:

- (2) a. kuita-ma (< *cuida*) ‘care for’
 b. diwi-ma (< *debe*) ‘owe’
 c. kanta-ma (< *canta*) ‘sing (in church)’

⁸⁴ Note “old people’s” imperfective form: *tua* < *tu-a* (say-IMPFV).

Contemporary borrowings simply take the third person singular present form of the Spanish verb as the root, without adding the verbaliser *-ma*. The only examples I have of such borrowings are *-ar* verbs in Spanish, so they become regular first conjugation /a/ stems in Aguaruna:

- (3) a. *frita* (< *frita*) 'fry'
b. *gana* (< *gana*) 'earn'

So it seems that the default conjugation is the first, and all examples of borrowed verbs, whether nativised with a verbaliser or borrowed directly, are /a/ stems.

6.4 Auxiliation

Aguaruna makes frequent use of auxiliary verb constructions, by means of which two verbs form a complex predicate. The full verb carries the semantic content of the predicate, while the auxiliary indicates aspectual distinctions and, to some extent, body posture. The auxiliary verb is typically finite, and is marked for tense, person and number, and mood/modality; it may also take a subordinate or other dependent form, as in example (20) below. The full verb typically appears in a dependent form, and for most examples it is impossible to tell simply by grammatical criteria whether it is auxiliation or general clause-combining. True auxiliary constructions can be shown by morphological evidence to form a single predicate, under the right combination of subject and object (§6.4.2), or when the full verb appears as an unmarked root (§6.4.3). Auxiliation is the only construction in which a bare verb root can appear, and it is clear that this must be a single complex predicate since neither finite nor subordinate clauses may be headed by a bare verb root.

There is apparently no semantic or structural distinction arising from the form of the full verb, whether dependent-marked or unmarked. There is, however, a two-way distinction between what I label **strong** and **weak** auxiliary constructions which can be observed in the treatment of transitive full verbs (§6.4.4).

There are three parameters of variation in auxiliary constructions:

1. Choice of auxiliary verb. The copula *a* is distinct from the other types.
2. Form of the full verb.
3. Strong versus weak auxiliation.

These parameters are apparently unrelated except that use of the copula *a* as auxiliary limits the possible forms for the full verb.

6.4.1 Auxiliary verbs

Six lexical verbs are used as auxiliaries – there are no exclusively auxiliary verbs. The copula *a* appears only with relativised full verbs, and forms compound tenses. Five others may be used with all the possible full verb forms described in §6.4.3, and add aspectual senses to the predicate. They are listed in table 6.13.

VERB	LEXICAL MEANING	ASPECT
puhu	‘live’	stative
wi	‘go’	intention
wikaiuqa	‘walk’	persistent action
waha	‘stand’	stative + posture
tipi	‘lie down’	stative + posture

Table 6.13: Verbs used as aspectual auxiliaries

The auxiliaries are not equally represented: *puhu* ‘live’ is much more common than the others, and appears more likely to form strong auxiliiation constructions.

6.4.2 Clause combining and auxiliiation

Given that the full verb may appear in subordinate form, one may wonder why this should be considered auxiliiation at all. Consider the following examples:

- (4) a. iháakun mináhai
 iha-a-ku-nu mina-ha-i
 visit-IMPV-SIM-1SG:SS arrive+IMPV-1SG-DECL
 ‘I have arrived to visit’ Lit: *I arrive visiting*
- b. máitasan wíuqahai
 mai-tasa-nu wi-a-ha-i
 bathe:LOAF-INTENT-1SG:SS go-IMPV-1SG-DECL
 ‘I’m going to bathe’

Example (4a) can be considered to be a clause-combining construction semantically. Both predicates have semantic content: I am both visiting and arriving. In (4b), the

relationship is a little less clear. Based on semantics, the independent verb ‘go’ could be considered to be functionally an auxiliary, parallel to the English intentional/future construction ‘I’m going to bathe’. The intentional suffix forms a subordinate verb in Aguaruna, and there is no way to express intention with just one, independent, verb. The question is whether the action of ‘going’ is seen as being a separate proposition, as ‘visiting’ is in example (4a), or whether it is there solely to provide a future and intentional sense. Note that there *is* a way to unambiguously indicate that ‘going’ and ‘bathing’ are separate propositions, using a sequential temporal clause as in the following example:

- (5) wínu máithai
 [wi-nu] mai-ta-ha-i
 [go:PFV:SEQ-1SG:SS] bathe+LOAF-IFUT-1SG-DECL
 ‘I’m going to bathe’ lit. *having gone, I’ll bathe*

Now consider example (6):

- (6) dosmilséistin gradwasyónnum wítasan puháhai
 dosmilseis-tin gradwasyon-numa [wi-tasa-nu puha-ha-i]
 2006-TIME graduation-LOC [go:PFV-INTENT-1SG:SS live+IMPFV-1SG-DECL]
 ‘I am intending to go to my graduation in 2006’ (2:2:297)

Here we clearly have an example of auxiliation. As above, this is an intentional subordinate construction, but in this example the finite verb is *puhu* ‘live’, the semantic content of which is not part of the proposition; it is there to provide a stative aspect to the predicate. A similar structure is used in example (7) below. Here, however, the full verb *tu* ‘say’ is marked with the non-temporal subordinator *-sa*, so there is no morphosyntactic motivation to use an auxiliary, as in the examples above.

- (7) tíma “ayú” tus puháu
 [ti-ma] [ayu [tu-sã puha-u]]
 [say+LOAF-NON.A/S>A/S] [ok [say-SBD+3:SS live+IMPFV-REL]]
- ‘when he said that (to her), she was saying “ok”’

The examples just discussed contain two predicates by morphological and syntactic criteria, but semantically appear to consist of just one predication. Now consider example (8):

(8) dakasú áyahai

daka-sa-u a-ia-ha-i
wait-ATT-REL COP-REMPAST-1SG-DECL

‘I was waiting (for someone)’

This is semantically an example of a single predication, namely a periphrastic past tense formed with two verbs. But in example (9) a second-person object is added, and here the morphological evidence shows that this is a single predicate:

(9) dakasú áyahami

daka-sa-u a-ia-hami-i
wait-ATT-REL COP-REMPAST-1SG>2SG.OBJ-DECL

‘I was waiting for you’

The combination of first person subject and second person object is marked with a level II suffix (§7.5.6), but the full verb in (9) is relativised and cannot take level II suffixes. So the object marker cannot appear on the full verb, and instead appears on the auxiliary verb. The auxiliary verb (copula *a*) cannot license an object argument, so the construction must derive its transitivity from the main verb. This example conclusively shows that we are dealing with a single, complex, predicate. Unfortunately such diagnostic cases are not common: only with first person subject and second person object is the object marked at level II. Compare the following example, with a first-person singular object which is marked at level I, so appears on the full verb:

(10) wáitkau áyumi

wai-tu-ka-u a-ia-umi-i
see-1SG.OBJ-INTS-REL COP-REMPAST-2SG:PAST-DECL

‘you saw me’

When the full verb consists only of the unmarked root, however, all object suffixes must appear on the auxiliary, as in the following example:

(11) auká túu wikáitam

au-ka [tu wikaiuʔa-tu-a-mi]
3-POLINT [say walk-1SG.OBJ-IMPV-2]

‘Is it him you keep talking to me about?’

We have seen that there are multiverbal constructions that consist of a full verb plus auxiliary, and morphology shows that they form a single predicate when either the object of

a transitive full verb is marked on an intransitive auxiliary, or when the full verb appears as a bare root (or both). Constructions that are semantically similar but have no morphological evidence for being a single predicate can be considered to be auxiliation constructions by analogy. In the following sections I consider the possible forms of the full verb and the distinction between strong and weak auxiliation, which hinges on the way mismatches in transitivity between full verb and auxiliary are handled.

6.4.3 Forms of the full verb

The full verb may be:

1. Relativised
2. Subordinated with *-ku* ‘simultaneous’
3. Unmarked root

Of the three possible forms, only the unmarked root is unambiguously auxiliation.

In the following example, there is only one clause, headed by the auxiliary verb. The full verb is relativised, and syntactically is part of the subject NP.

- (12) wíi anáau asán núna wíi ítsiŋhai
 [wi [ani-a-u asa-nu]] nu-na wi
 [1SG [think.about-IMPV-REL COP:SBD/SEQ-1SG:SS]] ANA-ACC 1SG
 itsiha-a-ha-i
 tell-IMPV-1SG-DECL
 ‘being one who remembers, I tell that (story)’ (6:3:55)

The following example with a relativised full verb shows that the object may come between the full verb and the auxiliary:

- (13) áuhtsuk papínak puhúyahai
 auha-tsu-u-ka papi-na-ka puhu-ia-ha-i
 study+IMPV-NEG-REL-FOC book-ACC-FOC live-REMPAST-1SG-DECL
 ‘I was not studying books’ (2:2:18)

In example (14), the verb *tɪpa-ĩ* (lie+IMPV:1SG/3-DS) ‘lying’ functions as an auxiliary to the semantically more contentful but morphologically simple *iwa* ‘be awake’.

(14) káhī máam ſinták iwá t̃páĩ

[kahī maa-ma] [ſinta-kũ]
 [sleep:PERT:1PL/3 kill+IMPFV-NON.A/S>A/S] [wake+IMPFV-SIM+3:SS]

[iwa t̃pa-ĩ]
 [be.awake lie+IMPFV:1SG/3-DS]

‘when he got sleepy (lit: *when his sleepiness was killing him*), waking up and lying awake’
 (6:2:8)

Note that the auxiliary verb may still require the applicative suffix, as in example (16).

6.4.4 Strong and weak auxiliation

In the following examples an intransitive auxiliary takes the applicative suffix when combined with a transitive full verb:

(15) isák yúwak puhúhakũĩ

isa-kã [yu-a-kũ puhu-ha-ku-ĩ]
 bite-INTS:SEQ+3:SS [eat-IMPFV-SIM+3:SS live-APPLIC+IMPFV-SIM:1/3-DS]

‘having bitten (the possum), (the jaguar) was eating it...’ (6:11:72)

(16) s̃nt̃ſi puyathúsan díi ik̃mtuyahai

s̃nt̃ſi puyathu-sa-nu [díi ik̃ma-tu-ia-ha-i]
 strongly take.interest-SBD-1SG:SS [look sit-APPLIC-REMPAST-1SG-DECL]

‘I sat looking at it with great interest’ (2:2:98)

In example (16), the full verb is the bare root *dii* ‘look’, showing that this is true auxiliation. But the use of the applicative suffix to license the zero-marked object shows that the auxiliary verb *ik̃ma* ‘sit’ has not been entirely semantically bleached, and still retains its lexical transitivity value.

So there are two levels of auxiliation that are potentially morphologically distinguished: strong auxiliation takes its transitivity from the main verb, while in weak auxiliation the auxiliary verb must agree with the main verb in transitivity; as all the verbs used as auxiliaries are intransitive, this means they require the applicative marker to increase their valency when used in weak auxiliation with a transitive main verb.

In general, the more contentful auxiliaries, particularly those referring to body posture, are less likely to form strong auxiliary constructions. The following examples illustrate weak auxiliation with the auxiliary *típí* ‘lie down’:

(17) ámina kuitámkun típíhami

ami-na [kuitama-a-ku-nu típí-hu-a-hami-i]
2SG-ACC [care.for-IMPV-SIM-1SG:SS lie.down-APPLIC-IMPV-1SG>2SG.OBJ-DECL]

‘I’m lying down looking after you’

(18) ámina kuitámhamak típítamui

ami-na [kuitama-hama-a-kũ típí-hu-tama-a-wa-i]
2SG-ACC [care.for-IMPV-2.OBJ-SIM+3:SS lie.down-APPLIC-2.OBJ-IMPV-3-DECL]

‘he’s lying down looking after you’

However there is not a clear division between verbs that can take part in strong auxiliation constructions; with *puhu* ‘live/be’, for example, the following strong example was judged ungrammatical (compare example 9 above, with copula *a* as auxiliary):

(19) ** daka-sa-u puhu-ia-hami-i
wait-ATT-REL live-REMPAST-1SG>2SG.OBJ-DECL

‘I was waiting for you’

But the following example of strong auxiliation has the same auxiliary verb, *puhu* ‘live’:

(20) ukúu puhám...

[uku-u puha-ma]
[leave-REL live+IMPV-NON.A/S>A/S]

‘when (the agouti) left (the woman) behind, (the woman said “I would like to see what it’s like over there”)’ (6:1:39)

The subordinator *-ma* indicates that a non-subject argument of the marked verb is the subject of the controlling verb. In this example, the subject of the controlling verb (the woman) is the object of *uku* ‘leave’, while the subordinating suffix is on the intransitive auxiliary *puhu* ‘be/live’.

Probably also of relevance is the fact that the construction in (19) requires the level II object suffix *-mí* while that in (20) makes use of the subordinator *-ma* that can readily be

used with intransitive verbs. So this may not really be a case of grammaticality versus ungrammaticality, rather that one construction is less immediately wrong sounding.

One could argue that only the strong type is true auxiliiation, while the weak type is actually clause combining. However, examples such as (16) provide strong evidence that weak auxiliiation constructions really are monoclausal, as the full verb appears as a bare root, which cannot head a clause of its own. Of course, there will always be a “grey area”, as mentioned above, of constructions that are syntactically clause-combining and semantically ambiguous.

Auxiliation sits on a semantic continuum, with combining of full clauses at one extreme and auxiliiation at the other, as in figure 6.2:

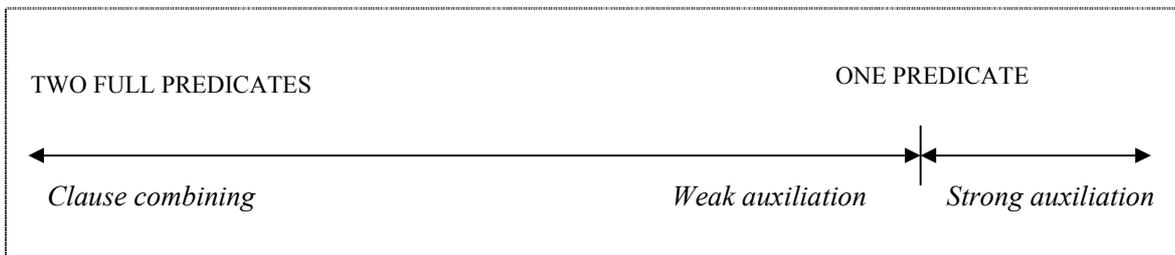


Figure 6.2: Clause combining and auxiliiation as an interrupted continuum

Note that the continuum is interrupted, as strong auxiliiation is morphologically distinct from clause combining, so although there may be a historical connection, synchronically clause combining and strong auxiliiation are not on the same continuum.

Chapter 7: Verb II: Derivational morphology

7.1 Introduction

In this chapter I discuss the verbal morphology at level I, the derivational level.

7.2 Morphological positions

Level one consists of one prefix position and nine suffix positions, as shown in figure 7.1:

A: Causative	<i>V-</i>
ROOT	
B: Causative	<i>-miti(ka)</i>
C: Valency	<i>-hu / -tu, -na, -ma, -ki,</i>
D: Reflexive	<i>-ma</i>
Reciprocal	<i>-nai</i>
E: Object	(see §7.5.6)
F: Aktionsart	<i>-ka, -sa, -ki(ni), -a(w), -i(ni), -ha</i>
Imperfective	<i>-a</i>
Imperfective plural	<i>-ina</i>
Potential	<i>-mai</i>
Durative	<i>-ma</i>
G: Negative	<i>-tsu, -tʃa</i>
H: Perfective plural	<i>-aha</i>

Figure 7.1: Suffix ordering at level one

A: Causative prefix *V-*

Causative may be marked by a prefixed vowel. The quality of the vowel is not predictable from the shape of the root; occasionally there is some attendant phonological change in the root. The causative prefix is unproductive; those verbs that do not have a prefixed causative form take a causative suffix (position B). The prefix and suffix are mutually exclusive, and there is no apparent difference in their semantics.

B: Causative suffix *-miti(ka)*

C: Valency

Slots C, D and E form the ‘valency group’, whose members tend to be mutually exclusive unless some grammatical relation holds between them.

The only fully productive suffix in slot C is applicative. In addition, certain other submorphemic units are incompatible with valency group suffixes: a group of verb roots ending in /na/ lose the final /na/ when a valency group suffix is added; the causative suffix *-mitika* loses its final /ka/ when a valency group suffix is added; the verbaliser *-tika* that forms pro-verbs from some grammatical morphemes loses its final /ka/ when a valency group suffix is added.

D: Reflexive and reciprocal

Reflexive may precede applicative (slot C) in cases where the object of the applicative is not the same as that indexed by the reflexive.

E: Object indexing

The object suffixes (position E) and reflexive and reciprocal (position D) are all mutually exclusive. Only one object may be indexed on a verb. Second person objects are indexed by a level II suffix when the subject is first person; the level II object suffix also forms part of this mutual exclusivity,

F: Aktionsart/Imperfective/Durative/Potential

Slot F is where the imperfective and perfective stems differ most markedly. Imperfective stems take either the imperfective suffix *-a* or the imperfective plural suffix *-ina* (which may contain the imperfective *-a*). Both of the level I plural suffixes (imperfective and perfective in slot H) pluralise the subject, but both also occasionally appear in examples with singular subject and plural object. See §7.8.1.1 for discussion. Perfective stems typically take an Aktionsart suffix, as described in §7.3.1.1 below. The potential suffix never co-occurs with either imperfective or Aktionsart suffixes, showing that it occupies the same slot.

The durative suffix appears suffixed to the unmarked root and is always followed by imperative, so it is impossible to say much about its formal properties with respect to ordering. However, it is functionally akin to the aspectual suffixes in this slot.

G: Negative

There are two negative suffixes: *-tsu* used with present tense verbs and *-tʃa* used elsewhere.

H: Perfective plural

The two plural suffixes (positions F and H) are mutually exclusive. Perfective plural *-aha* only appears with perfective roots. As with imperfective plural, it typically pluralises the subject but occasionally pluralises the object (see §7.8.1.1).

7.2.1 Sub-levels within level I

Within level I we can distinguish two sub-levels: the first stem is everything including the valency-changing and object suffixes.

The addition of a suffix from slot F completes the imperfective, perfective, potential or durative stem. For example, a present perfective can be formed by adding person suffixes directly to the perfective stem. Such forms cannot take any suffixes beyond slot F, and therefore cannot be negated or pluralised.

Finally the addition of negative and perfective plural slots forms the level I stem, to which can be added level II suffixes in finite verbs.

7.3 Aspect

Verbs have five stem types: in addition to the basic, unmarked form there are a perfective and an imperfective form.⁸⁵ Two minor stem forms are potential and durative. Perfective and imperfective forms are contrastive in present-tense independent clauses and relativised clauses, while in non-present tenses and dependent clauses the choice of root is morphologically conditioned, that is, certain suffixes always select one particular root form. The unmarked root appears with nominalisers, some dependent suffixes and one tensed form. The potential stem typically appears nominalised with the subject nominaliser *-inu*, but also may take tense and person markers to form a finite verb. The durative stem can only appear in imperative clauses.

⁸⁵ I follow the compilers of Uwarai et al. (1998) in listing the three major stems in the order unmarked, perfective, imperfective.

STEM	SUFFIX	COMMENTS
unmarked	none	
perfective	Aktionsart	may undergo vowel change in the root
imperfective	<i>-a, -ina</i>	singular/plural distinction
potential	<i>-mai</i>	all verbs become S=O ambitransitive
durative	<i>-ma</i>	only with imperative mood

Table 7.1: Verb stems

Perfective and imperfective are aspectual distinctions. Perfective is temporally bound; the action of the verb is seen as a completed whole. Imperfective is temporally unbound, that is, there is no reference to an endpoint (Dik 1989: 187, Comrie 1976: 3-4, 18)

A present perfective form refers to a just-completed action, while an imperfective form refers to an ongoing or habitual action: compare (2) and (3).

- (1) yutáĩ
yu-taĩ
eat-NON.A/S:NR
‘food’
- (2) yuwáhai
yu-a-ha-i
eat-HIAF-1 SG-DECL
‘I’m done eating’, ‘I’ve just eaten’
- (3) yúwahai
yu-a-ha-i
eat-IMPFV-1 SG-DECL
‘I’m eating’, ‘I eat’
- (4) yúinawai
yu-ina-wa-i
eat-IMPFV:PL-3-DECL
‘they are eating’
- (5) yumáinkait
yu-mai-inu-ka-ait
eat-POT-NR-POLINT-COP:3:INT
‘is it edible?’

- (6) yuumatá
 yu-ma-ta
 eat-DUR-IMP
 ‘keep on eating!’

Slot F contains suffixes that formally differentiate imperfective and perfective stems. The Aktionsart suffixes have been described by Larson (1963) as marking perfective aspect. The perfective sense must be inherent in the root itself, however, for the following reasons:

1. An Aktionsart suffix is not required to form a perfective stem
2. Perfective stems of second and third conjugation verbs differ phonologically from the unmarked root, regardless of the presence or absence of an Aktionsart suffix

So although the majority of verbs manifest formally distinct perfective and imperfective stems, the aspectual distinction is still present even in the absence of formal differentiation.

7.3.1 The perfective stem

A perfective root is typically followed by an Aktionsart suffix, and consequently previous analysts have considered the Aktionsart suffixes to be perfective aspect markers (Larson 1963: 15-16, 18; Corbera 1994: 268-9); however the evidence presented above shows that the perfective aspect is a property of the root itself rather than the suffix.

7.3.1.1 Aktionsart suffixes

Perfective forms of the root may be accompanied by one of the six Aktionsart suffixes listed in table 7.2, giving further information about the action of the verb.

SUFFIX	GLOSS	MEANING
<i>-ka</i>	intensive	intensive effort by A/S
<i>-ki(ni)</i>	transferred	associated change of location
<i>-sa</i>	attenuative	attenuative or diminutive
<i>-ha</i>	pluractional	plural action (iterative), or involving liquid – distributed? complex actions?
<i>-a(w)</i>	high affectedness	change of state of O or location of S
<i>-i(ni)</i>	low affectedness	no change of state for O or location of S

Table 7.2: Aktionsart suffixes

The vagueness of the glosses given reflects a real semantic vagueness to the suffixes themselves.

All of the Aktionsart suffixes except *-i(ni)* ‘low affectedness’ can take accent. The low affectedness suffix *-i* merges with the final vowel of the stem and the accent falls on the preceding vowel if the root is polysyllabic (see §2.6.1.3 for details).

The Aktionsart suffixes are mutually exclusive, and are apparently not all available for use with any given verb; a given verb will typically always appear with one Aktionsart suffix, or with none. The most common example of substitution of one suffix for another is with *-sa* ‘attenuative’, which frequently appears in imperative forms, and has the effect of softening the request.

The Aktionsart suffixes are semantically vague, and it is very difficult to pin down a meaning for each one. It may be that some are historically derived from two or more homophonous forms, for example the suffix *-ha* is used for iterative actions, but also appears with many verbs involving liquid (e.g. ‘rain’, ‘drink’, ‘wash ones hands’) and some others such as ‘sleep’ that do not appear to fit either category. In the following sections I illustrate the typical uses of each suffix, based on the two available sources of information: those verbs that take a suffix as their default, and the semantic effects of swapping Aktionsart suffixes while keeping the same verb root.

Attenuative *-sa*

The attenuative Aktionsart suffix has the semantic effect of reducing the force of the verb. A common use is to make requests more polite - compare (7a), with the default Aktionsart for the verb *umu* ‘drink’, and (b), where the default has been replaced with attenuative *-sa*:

(7) a. uwáŋta

uwa-ha-ta
drink-PLU-IMP
‘drink!’

b. uwásta

uwa-sa-ta
drink-ATT-IMP
‘drink!’ (more polite)

Native speakers consider the effect to be equivalent to the diminutive suffix on nouns, and the two forms frequently co-occur in clauses. The diminutive use is illustrated in (8):

- (8) a. *isástatui*
 isa-sa-tata-wa-i
 bite-ATT-FUT-3-DECL
 ‘it’ll bite (you)’ (said of a cute puppy or baby)
- b. *ámi nahánsamu*
 ami nahana-sa-mau
 2SG make-ATT-NON.A/S.REL
 ‘the little thing you made’ (cf. Sp. *la cosita que hiciste*)

In (8b) the perfective stem containing the attenuative suffix is relativised with the non-subject relativiser *-mau*. The nominal diminutive suffix *-utfi*, is not compatible with relativised verbs, so using attenuative Aktionsart is the only strategy available to achieve the same effect.

Attenuative may also convey a stative sense with bodily action verbs. Compare:

- (9) a. *waháita*
 waha-i-ta
 stand-LOAF-IMP
 ‘stand up!’
- b. *wahastá*
 waha-sa-ta
 stand-ATT-IMP
 ‘stand (there)!’

Intensive -ka

Use of the intensive suffix implies a high level of effort on the part of the subject. This is most clearly observed when *-ka* contrasts with other Aktionsart forms.

- (10) a. *tʃitʃastá*
 tʃitʃa-sa-ta
 speak-ATT-IMP
 ‘speak’ (i.e. ‘converse’)

- b. tʃitʃaktá
 tʃitʃa-ka-ta
 speak-INTS-IMP
 ‘speak’ (forcefully, e.g. giving a speech)

Other examples show iterativity rather than intensity of action. Compare:

- (11) a. kantamáta
 kantama-a-ta
 sing-HIAF-IMP
 ‘sing!’
- b. kantamkáta
 kantama-ka-ta
 sing-INTS-IMP
 ‘sing (many songs)!’

- (12) a. uwáŋta
 uwa-ha-ta
 drink-PLU-IMP
 ‘drink!’
- b. uwákta
 uwa-ka-ta
 drink-INTS-IMP
 ‘drink (a number of vessels)!’

Some verbs that take *-ka* as default are *tupikau* ‘run’; *antu* ‘listen’; *wa* ‘go up vertically’. Of particular note are the pro-verbs formed with *-ni*, that are used when the subject is more relevant to the context, and all take intensive *-ka* as their default Aktionsart marker.

Pluractional *-ha*

The suffix *-ha* is the most difficult to furnish with a single gloss. It is quite likely that this suffix arises historically from a merger of two suffixes representing something like ‘liquid action’ and ‘complex action’.

The pluractional suffix appears with many verbs involving water, such as *ikihVma* ‘wash one’s hands’, *yutu* ‘rain’, *umu* ‘drink’. This use may be considered to mark ‘liquid action’. The same suffix can also indicate plurality or repetition of an action:

- (13) a. *isáittawai*
 isa-i-tata-wa-i
 bite-LOAF-FUT-3-DECL
 ‘it will bite (him)’
- b. *isáŋtatui*
 isa-ha-tata-wa-i
 bite-PLU-FUT-3-DECL
 ‘it will bite (him) (repeatedly)’

Another possibility is that the original sense is of process or non-punctual action. Some other verbs that typically take *-ha*, such as *hiŋka* ‘tie up’, *kanu* ‘sleep’, *tsawau* ‘wake up’ could be seen as fitting into this description.

The problem here is that the analyst ends up in the realm of circular argumentation – why should *tsawau* ‘wake up’, for example, be considered a process rather than a punctual event? The only evidence we have to suggest that Aguaruna speakers consider it so is that it takes the *-ha* Aktionsart suffix.

Given that Aguaruna /h/ represents a merger of Proto-Jivaroan */r/ and */h/, it is not improbable that the suffix *-ha* has arisen from a phonological neutralisation of two PJ suffixes **-ra* and **-ha*. Future comparative work should readily be able to test such a hypothesis.

Transferred action *-ki(ni)*

The transferred action suffix *-ki(ni)* is relatively straightforward in its semantics, adding the sense of ‘associated motion’. The word ‘associated’ is key: this suffix is not used with verbs whose *core* meaning involves motion; instead, it *adds* the sense of motion to a verb. The added meaning is that the action is completed in a different location from that in which it was begun.

A verb that typically takes *-ki(ni)* is *hu* ‘take’. An example with change of Aktionsart marker involves *tupikau* ‘run’, which typically takes *-ka* ‘intensive action’, but can take *-ki(ni)* to emphasise running to somewhere.

The vowel of *-ki(ni)* does not elide in word-final position, although it does do so word-internally.

High affectedness *-a(w)*

The high affectedness suffix accentuates the affectedness of the object when used with transitive verbs. Compare high-affectedness versus low-affectedness:

- (14) a. pelótan umpuáhai
pelota-na umpu-a-ha-i
ball-ACC blow-HIAF-1SG-DECL
'I blew up the ball' (change of state)

- b. hiín umpúihai
hii-na umpu-i-ha-i
fire-ACC blow-LOAF-1SG-DECL
'I blew on the fire' (no change of state)

Typical verbs that take high-affectedness are *yu* 'eat' and *mau* 'kill'. Note in particular *dutika*, the pro-verb with object relevance; by contrast, *nuni*, the subject relevant pro-verb, takes the intensive Aktionsart suffix *-ka*, which emphasises the subject's role in the action.

The 'high affectedness' marker may appear with intransitive verbs; typically verbs of motion such as *hũya* 'arrive'; *ta* 'come'. And in the following example, it appears on the intransitive *tĩpĩ* 'lie down', which takes attenuative *-sa* as its default:

- (15) íkamỹãwãã tĩpiámĩ
ikam_yawaã tĩpi-a-mĩ
jaguar lie.down-HIAF-RECPAST:3:DECL
'the jaguar submerged itself (in water)'

Low affectedness *-i(ni)*

Use of the low affectedness suffix is characterised by an unchanged state of the object of a transitive verb, as in example (14) above. When used with an intransitive verb (e.g. *maa* 'bathe'), the sense is again non-change of state, but of the S argument. Example (16) contrasts the verb *śa* in combination with (a) low affectedness, where it translates as 'bite', and (b) intensive *-ka*, in which case it translates as 'devour':

- (16) a. dápi utʃín isáinĩ
 dapi utʃi-na isa-*ini*-ĩ
 snake child-ACC bite-LOAF-3:PFV
 ‘the snake has bitten the child’
- b. íkamỹãwãã kutʃín isakĩ
 ikam_yawaã kutʃi-na isa-*ka*-ĩ
 jaguar pig-ACC bite-INTS-3:PFV
 ‘the jaguar has devoured the pig’

The verb *isa* is the only attested S=O ambitransitive verb, and examples in §11.4.3.1 show that the same two Aktionsart suffixes contrast in its intransitive uses: ‘low affectedness’ *-i(ni)* gives the sense of ‘burn oneself’ (where S might be a child who gets too close to the fire) while ‘intensive’ *-ka* gives the sense of ‘be consumed by fire’ (where S might be a piece of firewood).

Some typical verbs that take *-i(ni)* are *maa* ‘bathe’; *isa* ‘bite’; *tau* ‘dig (an animal) out (of the ground)’. The long form *-ini* appears when followed by some vowel-initial suffixes – see §2.6.1.3.

7.3.1.2 Exceptional perfective roots

In addition to the root alternations involving addition of /a/ and/or loss of /u/ that define the five conjugations, some other changes can affect perfective roots. The first is clearly phonologically motivated historically:

- (17) /i/ → [i] when *-ki* ‘associated motion’ Aktionsart is added

Others involve consonantal changes:

UNMARKED	PERFECTIVE	IMPERFECTIVE	GLOSS
ʃimu	ʃiya-ka go:PL-INTS	ʃim-a go:PL-IMPV	‘go (plural S)’
umu	uwa-ha drink-PLU	um-a drink-IMPV	‘drink’ ⁸⁶

Table 7.3: Consonant change in perfective roots

Note that these are both members of the 3B conjugation, with change of root-final /u/ to /a/ in perfective stems and loss of /u/ in imperfective stems (§6.3). These verbs must be lexically-marked exceptions, as there is no phonological motivation for the changes.

7.3.2 The imperfective stem

The imperfective stem is marked in singular forms with the suffix *-a*.⁸⁷ The imperfective suffix merges with the final vowel of a polysyllabic stem and normally appears as a separate syllable on a monosyllabic roots (although the verb *tu* ‘say’ is an exception to this rule, having imperfective stem [ta], not *[tuwa]⁸⁸). So in example (18), the combination of first person object *-hu* plus imperfective *-a* surfaces as [ha]:

- (18) íkamỹãwãã miníthawai
 ikam_yawaã mini-tu-ha-wa-i
 jaguar arrive-APPLIC-1SG.OBJ-IMPV-3-DECL
 ‘a jaguar is attacking me’ (6:4:56)

Also compare:

⁸⁶ In the case of *umu* ‘drink’ Uwarai et al. (1998) give *uma-ha* as the perfective stem; this is not supported by my own data.

⁸⁷ Corbera (1994: 253) considers the imperfective suffix to be a present tense marker, and incorrectly states that a lexically-conditioned set of verbs do **not** take *-a*; however, in the first of the two examples he gives, the underlying /a/ has been elided, and the second contains the imperfective plural *-ina*. So there is no evidence to suggest that *-a* is not a synchronically productive suffix.

⁸⁸ But cf. [túwamu] < *tu-a-mau* (say-IMPV-NON.A/S:NR) ‘that which is said’, used in a traditional story told by Benjamín Chamik (age approx. 70?) and noted as an ‘old pronunciation’ by Pablo Santiak (aged 43); the modern pronunciation is [támau].

- (19) a. táhai
 tu-a-ha-i
 say-IMPV-1SG-DECL
 ‘I say’
- b. túhamui
 tu-hama-a-wa-i
 say-2.OBJ-IMPV-3-DECL
 ‘(she) is saying to you’

Plural-subject imperfective takes the suffix *-ina*, which replaces (or incorporates) the imperfective *-a*.

- (20) a. yúwawai
 yu-a-ha-i
 eat-IMPV-1SG-DECL
 ‘I eat’
- b. yúinawai
 yu-ina-wa-i
 eat-PL:IMPV-3-DECL
 ‘they eat’

Note that perfective stems mark plural subject with a separate suffix *-aha* in slot H. The semantic effects of the two suffixes are apparently identical. Plural marking with perfective *-aha* or imperfective *-ina* is not obligatory, and a verb form that has no formal plural marking is unmarked for number, and may have singular or plural subject. In first and second persons, singular and plural subject are distinctly marked at level II (§8.6).

7.3.3 The potential stem

The potential stem is formed with the potential suffix *-mai* attached to the unmarked root. Potential occupies the same suffix position as imperfective singular and plural and Aktionsart suffixes.

The potential stem makes all transitive verbs ambitransitive, of the S=O type; and note that they may still be used with no overt or specific object:

- (21) a. nĩ wainmáinai
 nĩ waina-mai-inu-ai
 3SG see-POT-NR-COP:3:DECL
 ‘she can see’
- b. píʃakak ʃíiŋ páan wainmáinai
 píʃaka-ka ʃíiha paan waina-mai-inu-ai
 bird-FOC well clearly see-POT-NR-COP:3:DECL
 ‘the bird can be easily seen’

Potential forms very commonly appear with the nominaliser *-inu*. This allows periphrastic forms giving further detail:

- (22) a. ʃíiŋ antúmain dikápiashai
 ʃíiha antu-mai-inu dikapi-a-tsu-ha-i
 well hear-POT-NR feel-IMPV-NEG-1SG-DECL
 ‘I can’t hear (it) very well’ lit. *I don’t feel able to hear it*
- b. dítak wíkamáin áinatsui
 dita-ka wíkaiɥa-mai-inu a-ina-tsu-wa-i
 3PL-FOC walk-POT-NR COP-PL:IMPV-NEG-3-DECL
 ‘they can’t walk’

Note in particular example (b) above, with a plural auxiliary verb. Because potential occupies the same slot as imperfective plural *-ina*, this is the only way to express both potential and plural meanings.

There are, however, examples where the form remains verbal:

- (23) a. íik wíkaɪbáitsuhi
 ii-ka wíkaiɥa-mai-tsu-hi-i
 1PL-FOC walk-POT-NEG-1PL-DECL
 ‘we can’t walk’
- b. wíka wainmáɪʃmaihai yakúmnak
 wi-ka waina-mai-tʃa-maia-ha-i yakuma-na-ka
 1SG-FOC see-POT-NEG-INTPAST-1SG-DECL howler.monkey-ACC-FOC
 ‘I couldn’t see the howler monkey’

The examples above also illustrate the selection of negative suffixes. Example (a) takes the imperfective negative suffix *-tsu*, as it is present tense. Example (b), on the other

hand, is past tense and takes the perfective negative suffix *-tʃa*. This alternation shows that the negative suffixes are conditioned by tense rather than aspect (see §7.7).

7.3.4 The durative stem

The durative stem is formed with the durative suffix *-ma* suffixed to the unmarked root. This stem only appears with imperative mood markers. Imperative marking typically appears with the perfective stem; the durative stem is used in a situation where the addressee is already performing the action of the verb and the speaker is leaving the scene. Such forms thus give a sense of “keep on doing VERB (in my absence)”. The most common exemplar is the usual leave-taking formula:

- (24) *puhumatá*
puhu-ma-ta
live-DUR-IMP
‘keep on living (in my absence)’

The following example may be used if a host is called away while a guest is eating:

- (25) *yuumatá*
yu-ma-ta
eat-DUR-IMP
‘keep on eating (in my absence)’

Although relatively uncommon aside from the formula in (24), there are apparently no limitations (other than contextual) on which verbs can take the durative stem. The following, for example, was uttered by a visitor who left while the host was playing a song:

- (26) *kitára awatumatá*
kitara awatu-ma-ta
guitar hit-DUR-IMP
‘keep on playing guitar (in my absence)’

Note that the final vowel of the root is always lengthened when the durative suffix is added.

7.4 Causative

There are two classes of semantically causative verb, with distinct morphology: prefixing and suffixing. Causative is the only prefixed morpheme in Aguaruna. Payne

(1990a) notes both a prefixed vowel and a suffix involving /mV/ as widespread forms marking causative in South American languages.

Both causative processes add an object argument, which is the original subject of the verb. In the case of transitive verbs, causative derivation creates a trivalent verb, with two objects, and the added object is treated as an E, while the original O remains an O. See discussion in §11.4.4.2.

7.4.1 Prefixed causatives

A group of verbs marks causative with a prefixed vowel. The quality of the prefixed vowel is not predictable from the shape of the root, and this process is not productive. The table below gives some examples:

ROOT	GLOSS	CAUSATIVE STEM	GLOSS
ta	‘arrive’	i-ta	‘bring’
yu	‘eat’	a-yu	‘feed’
tsiki	‘jump’	i-tsiki	‘make jump’
waina	‘see’	i-waina	‘show’

Table 7.4: Prefixed causative verbs

The prefixed causatives are the more frequent forms in terms of token frequency, and they tend to encode the most common causative concepts. Many can be translated into English or Spanish with a lexical causative – cf. ‘bring’, ‘feed’, ‘show’ above.

Some apparent prefixed causatives show root changes in addition to the prefix. *a-haku* ‘cause the death of a child’ must be derived from *ha* ‘die, be sick’. The verb *ha* means ‘be sick’ in progressive tenses but ‘die’ when the perfective stem *ha-ka* (be.sick-INTS) is used. The prefixed causative form is probably derived from the perfective stem rather than the unmarked root, as it refers to causing death, not illness.

a-ɪpɪ ‘lay down’ is a causative counterpart to *tɪpɪ* ‘lie down’. In this example, loss of the initial /t/ is apparently simply an irregular phonological change in a high-frequency verb.

7.4.2 Suffixed causative

For those verbs that do not have a prefixed causative counterpart, causative is formed with the suffix *-miti(ka)*:

- (27) a. utʃín tsiuʒáŋmitkatãĩ tupikáu
 [utʃi-na tsiuʒaha-**mitika**-taĩ] tupika-u
 [child-ACC cry-CAUS-SBD:1/3:DS] run+IMPFV-REL
 ‘when he_i made the children cry, he_j came running’ (6:2:42)
- b. díkatʃu ahakúi utʃíŋmitkatnak
 díka-tʃau a-haku-ai utʃiha-**mitika**-ta-na-ka
 know-NEG:REL COP-NARR:PAST-COP:3:DECL give.birth-CAUS-ACTNR-ACC-FOC
 ‘(they) didn’t know how to make her give birth’ (6:6:6)
- c. impímtikatakamã...
 impí-**mitika**-takama
 become.deaf-CAUS-FRUST+3:SS
 ‘trying in vain to deafen (him)...’ (5:3:41)

The final /ka/ of the causative suffix is **replaced** by an object suffix in the stem:

- (28) ámĩ mína duʃímtihamĩ
 amĩ mi-na duʃi-miti(ka)-ha-mi-i
 2SG 1SG-ACC laugh-CAUS-1SG.OBJ+IMPFV-2SG-DECL
 ‘you are making me laugh’

Similarly, the combination of applicative plus object suffix replaces the /ka/ of *-miti(ka)*:

- (29) kuŋkúumtihuʃtsata mína utʃíŋ
 kuŋkuu-miti(ka)-hu-tu-sa-ta [mi-na utʃi-hu]
 kiss-CAUS-APPLIC-1SG.OBJ-ATT-IMP [1SG-ACC child-PERT:1SG]
 ‘have my child kiss (somebody)’

This suggests that the causative suffix is historically morphologically complex, composed of at least two morphs /miti/ and /ka/, and that the /ka/ element formed part of the valency group (see §7.5).⁸⁹

The causative suffix occasionally surfaces as [mika] where [mitka] is expected:

- (30) *nínak nína nuwín ahápmikathai*
nĩ-na-ka [nĩ-na nuwĩ-na] ahapa-mitika-ta-ha-i
 3SG-ACC-FOC [3SG:ACC woman:PERT:1PL/3-ACC] discard-CAUS-IFUT-1SG-DECL
 ‘I’ll make him leave his wife’

That this is a surface-level simplification of the cluster /tk/ is apparent from the fact that neither of the vowels is elided, as if the cluster were still present. If the underlying form were */ahapa-**mika**-ta-ha-i/, we would expect the surface form to be **[ahá**pmikt**athai]. Similar simplification of consonant clusters is evident in the historical development of the desiderative suffix *-tata* < **-taŋta* / **-tatta* (§8.3.5.6) and frustrative *-takama* < **-tatkama* (§9.3.4). See also discussion in §2.5.2.2.

Causative marking downgrades the causee’s volition or choice. Where the causee has more volition, a speech report construction may be used:

- (31) *nĩ túhutmĩ nampiktá túsã*
nĩ tu-hu-tu-mĩ [nampi-ka-ta tu-sã]
 3SG say-APPLIC-1SG.OBJ-RECPAST:3:DECL [dance-INTS-IMP say-SBD+3:SS]
 ‘he had me dance / he asked me to dance’

Similar speech report constructions are used to express purpose, reason, volition and hope (see §12.5).

It is likely that the prefixed forms are older, and the suffix has been introduced more recently, given the following three facts:

1. The vowel of the prefixed form is unpredictable, suggesting a historical conditioning factor that is now lost.
2. Prefixed forms may show irregular root changes
3. Prefixed forms may show unexpected semantic narrowing

⁸⁹ Interestingly, the verbaliser *-tika* that appears on demonstratives to create demonstrative pro-verbs also loses its final /ka/ when an object suffix is present (§3.11.1.2).

Whether a given verb will take a prefixed or suffixed causative is lexically conditioned, but there is one verb that apparently may take both: *tsʰkʰ* ‘jump’ has the prefixed causative form *ʰtsʰkʰ* and the suffixed form *tsʰkʰ-miti(ka)*. The choice in this case seems to correlate with a semantic distinction: the prefixed form can typically be translated as ‘startle’, for example of a wild animal, while the suffixed form is more deliberate, for example one may get a dog to jump up as a game.

7.5 Valency and object marking

The valency-affecting suffixes in slot C, reflexive and reciprocal (slot D) and the object marking suffixes (slot E) together form the **valency group**. Members of these three slots are mutually exclusive except where there is a scope relationship between them, and the ordering of the suffixes reflects the scope relationship in the case of applicative and reflexive.

Of the valency-affecting suffixes in slot C only applicative is productive. Five further forms may be valency changing suffixes historically, although their productivity tends to be limited. All but one affect valency, and the one exception is in complementary distribution with the other valency group suffixes.

Two problem suffixes for the analyst are *-ma* and *-na*. It is clear that there are at least two homophonous suffixes of the form *-ma*: a verbaliser and the reflexive marker. And there are at least two homophonous forms *-na*: one is a detransitiviser, and the other apparently has no effect on valency, but acts as a placeholder, and is replaced when any valency or object suffix takes that slot. There is evidence for a third form *-na*, a verbaliser that derives intransitive verbs. The table below summarises the distinct functions of the two suffixes:

SUFFIX \ FUNCTION	<i>-ma</i>	<i>-na</i>
VERBALISER	derives transitive verbs from nouns	derives intransitive verbs from nouns
OBJECT MARKER	reflexive	no effect – functions as a placeholder in the object-marking paradigm
VALENCY CHANGER	–	detransitiviser

Table 7.5: Functions of suffixes *-ma* and *-na*

The verbaliser functions of *-ma* and *-na* are discussed in §3.11; in §7.5.2 I discuss the use of *-na* as a detransitiviser and as a placeholder in the object marking paradigm, and in §7.5.4 I discuss the reflexive marker *-ma*, and show that all these functions are distinct from each other and from the verbalising functions.

The minor valency suffixes I have encountered are listed in table 7.6 below. These are attested only in one or two verbs each. All three are described in §7.5.3.

SUFFIX	VALENCE CHANGE	OPERATION	PRODUCTIVITY
<i>-ki</i>	Increase	Transitiviser	Two examples
<i>-ka</i>	Increase	Causative	One example
<i>-pa</i>	Decrease	A → S detransitiviser	Two examples

Table 7.6: Minor valency-group suffixes

7.5.1 Applicative *-hu* / *-tu*

The applicative suffix *-hu* / *-tu* increases the valency of the verb by one. The two forms of the applicative suffix are in complementary, lexically-conditioned distribution. This differentiation also affects the level I object suffixes, and the phenomenon as a whole defines two verb classes which I label ‘*hu* verbs’ and ‘*tu* verbs’. The allomorphy of applicative and object suffixes is discussed in detail in §7.6 below.

The added argument is typically a beneficiary or maleficiary, although it may be a goal with intransitive verbs of motion.

(32) *mína túhutmĩ*

mi-na tu-**hu**-tu-mĩ
 1SG-ACC say-**APPLIC**-1SG.OBJ-RECPAST:3:DECL
 ‘he told me’

(33) *ámif mína ataşún yuhutũãĩ*

amitʃi mi-na ataşu-na yu-**hu**-tu-a-ĩ
 fox 1SG-ACC chicken-ACC eat-**APPLIC**-1SG.OBJ-HIAF-3:PFV
 ‘a fox ate my chicken’

(34) *ámína balán iŋkithámkamĩ*

ami-na bala-na iŋki-**tu**-hama-ka-mĩ
 2SG-ACC bullet-ACC put.in-**APPLIC**-2.OBJ-INTS-RECPAST:3:DECL
 ‘he’s loaded his gun (to shoot) you’

The following example comes from a story of a man who married a ‘mermaid’ (or water spirit). The couple go to live with the man’s mother, but one day when the man is out hunting the mother insults the mermaid, telling her that she reeks of fish. The enraged mermaid returns to live with her family at the bottom of the river, and when the man finds out what has happened he goes to join her, never to visit his mother again.

- (35) *datsáutʃi dukuhí datsantán tsuŋkín tʃitʃaŋkáuwai*
 [datsautʃi duku-hĩ] [datsanta-na] [tsuŋki-na]
 [youth:GEN mother-PERT:1PL/3] [shame-ACC] [mermaid-ACC]

tʃitʃa-hu-ka-u-ai
 speak-APPLIC-INTS-REL-COP:3:DECL

‘the youth’s mother spoke to the mermaid, making her ashamed’ (5:1:39)

Applicative can be added to simple transitive, ditransitive and intransitive verbs. When added to a ditransitive verb, a trivalent predicate is derived. Such a predicate is subject to the general restriction in Aguaruna whereby not more than one object slot of any given predicate may be filled by a speech act participant (described in §11.3.2).

7.5.2 Detransitiviser *-na₁* and ‘placeholder’ *-na₂*

An unproductive (but not uncommon) suffix *-na* reduces the valency of a verb, deriving an intransitive. Some verb stems apparently include the suffix *-na*, but never alternate with unmarked stems, and show no detransitivising effects.

7.5.2.1 O → S detransitiviser *-na₁*

The suffix *-na* derives an intransitive verb, whose S argument is the O argument of the corresponding transitive. Note the case frame of the verb in the following example: *aima* ‘fill N_{Loc} with O’ and the derived form *aim-na* ‘fill N_{Loc} (as contents)’.

- (36) a. *yumi-na tsapa-numa aima-ka-ta-ha-i*
 water-ACC cup-LOC fill-INTS-IFUT-1SG-DECL
 ‘I’ll fill the cup with water’
- b. *yumi tsapa-numa-ka aima-na-ka-mĩ*
 water cup-LOC-FOC fill-DETRNS-INTS-RECPAST:3:DECL
 ‘The cup is full of water (lit. *the water has filled (into) the cup*)’

In the following example *-na* alternates with the first person object suffix *-hu*.

- (37) a. kupi-**hu**-ka-ĩ
 break.bone-1SG.OBJ-INTS-3:PFV
 ‘He’s broken my bone’
- b. kupi-**na**-ka-ha-i
 break.bone-DETRNS-INTS-1SG-DECL
 ‘I’ve broken my bone’

Similarly, the verb *hii* ‘take out’ is transitive, while *hii-na* (take.out-DETRNS) ‘exit’ is intransitive.

7.5.2.2 Non-valency-changing *-na*₂

A small class of verb roots terminating in /na/ drop the /na/ when any suffix is added to the valency group slots – suggesting that these roots contain a suffix *-na*. If this is indeed a suffix, it is one that has no apparent semantic effect. There is no change in valency, and *-na* appears to be simply a placeholder for the valency group.

In (38a) the applicative marked verb takes two objects: the patient ‘fence’ and the affected party (perhaps maleficiary?) ‘sheep’. The form marked with *-na* in (38b) is still transitive, and takes a patient object (‘door’). This is clearly not an S=O intransitive counterpart of the form in (38a). (Note that I gloss ‘placeholder’ *-na* simply as NA.)

- (38) a. tadíʃan uwíŋ hiinàinanúna ípittahai
 [taniʃa-na] [uwíha hiina-ina = nu-na]
 [fence-ACC] [sheep go.out-PL:IMPFV=ANARel-ACC]
- ipi-tu**-ta-ha-i
 block-APPLIC-IFUT-1SG-DECL
 ‘I’ll block the fence so the sheep don’t get out’
- b. waitín ípintahai
 waiti-na **ipi-na**-ta-ha-i
 door-ACC block-NA-IFUT-1SG-DECL
 ‘I’ll block the door’

Example (39) shows a similar effect:

- (39) a. mináf batái ukuíthukta
 mi-na-ʃa batai ukui-**tu-hu**-ka-ta
 1SG-ACC-ADD chambira.fruit gather-**APPLIC-1SG.OBJ**-INTS-IMP
 ‘get some chambira fruit for me too’ (Obs)
- b. bataín ukuínkathai
 batai-na ukui-**na**-ka-ta-ha-i
 chambira.fruit-ACC gather-**NA**-INTS-IFUT-1SG-DECL
 ‘I’ll get some chambira fruit’

Both of the above examples involve *-na* alternating with the applicative suffix. But consider the following examples:

- (40) a. áu áidau mína waitkáḡmĩ
 [au a-ina-u] mi-na wai-**tu**-ka-aha-mĩ
 [DST be-PL:IMPFV-REL] 1SG-ACC see-**1SG.OBJ**-INTS-PL-RECPAST:3:DECL
 ‘they saw me’
- b. wíi wainkámhai áu áidaun
 wi wai-**na**-ka-ma-ha-i [au a-ina-u-na]
 1SG see-**NA**-INTS-RECPAST-1SG-DECL [DST COP-PL:IMPFV-REL-ACC]
 ‘I saw them’
- (41) a. áu waipákmĩ
 au wai-**pa**-ka-mĩ
 DST see-**2.OBJ**-INTS-RECPAST:3:DECL
 ‘he saw you’
- b. waínhami
 wai-**na**-a-hami-i
 see-**NA**-IMPFV-1SG>2SG.OBJ-DECL
 ‘I see you’

Examples such as (40b) and (41b) above show clearly that *-na* is not a transitivity-altering derivation. It seems rather to act as a ‘placeholder’ in the verb root, to be replaced if a suffix of the valency group requires that slot. That this is more of a morphological than a grammatical process is shown by example (41b), where *-na* remains when the second person object is marked with the portmanteau suffix *-hami* (1SG>2SG.OBJ).

A further example comes from the verb *bukuna* ‘suck’, which can be nominalised to give *bukuna-inu* (suck-NR) ‘one who sucks’ (may refer to a baby, mammals, a smoker and so on), but it may also be nominalised with a stem that includes the first person plural object suffix *-hatu* marking generic human object: *buku-hatu-inu* (suck-1PL.OBJ-NR) ‘insects that suck blood’.

- (42) a. ukúm bukutúinawai
 ukumpi buku-tu-ina-wa-i
 blackfly suck-1SG.OBJ-PL:IMPFV-3-DECL
 ‘blackflies (*mantablanca*) are sucking me! (i.e. biting me)’
- b. sigáro bukunámi
 sigaro buku-**na**-mi
 cigarette suck-NA:PFV-HORT
 ‘let’s smoke a cigarette’

Perhaps in these examples we have transitive roots that happen to end in /na/, and this syllable is dropped by analogy to valency-changing *-na* when a valency-group suffix is added. Table 7.7 lists all the ‘na’ verbs I have encountered. As far as I am aware, all verb roots terminating in /na/ show this behaviour.

ROOT	GLOSS
bukuna	‘suck’
ipina	‘fence in’
nahana	‘make’
ukuina	‘pick fruit’
unuina	‘teach’
waina	‘see’

Table 7.7: Verbs with ‘placeholder’ *-na*

7.5.3 Unproductive valency effects

Three further forms are involved in valency alterations, but are extremely limited in their application, and therefore may not be morphemes synchronically.

7.5.3.1 S → A transitiviser -ki

An apparent transitiviser *-ki* appears in only two verbs in my data: *dufi* ‘laugh’ is intransitive, while *dufi-ki* ‘laugh at’ is transitive. The same suffix alternates with the detransitiviser *-pa* (§7.5.3.3) in the pair *iha-pa* ‘defecate’ versus *iha-ki* ‘defecate on something’.

7.5.3.2 S → O causativiser -ka

The causative transitiviser *-ka* appears in only one verb in my data: *waitu* ‘suffer’ is intransitive, while *waitu-ka* ‘cause to suffer, annoy’ is transitive.

7.5.3.3 A → S detransitiviser -pa

The transitive verb *fiki* ‘urinate on O’ has an intransitive alternant *fiki-pa* ‘urinate’. The only other possible appearance of this suffix is in *iha-pa* ‘defecate’ < *iha* ‘shit’; but there is no zero-marked transitive, instead the suffix *-ki* (§7.5.3.1) is used: *iha-ki* ‘defecate on O’. Probably related are *iha-hii* ‘strain to defecate or give birth’; *iha-hu* ‘have diarrhoea’; and possibly related *iha-ki* ‘stain’ (note the difference in accent between *ihá-ki* ‘defecate on O’ and *iha-kí* ‘stain’ – see §2.7).

7.5.4 Reflexive

Where a singular subject and object are coreferential, the reflexive suffix *-ma* is used. Object marking never appears with the reflexive suffix, but subject marking does, suggesting that reflexive forms part of the object-marking component of the person and number system.

(43) [tímáʃmahai]

tímaʃi-ma-a-ha-i
comb-REFL-IMPV-1SG-DECL

‘I am combing my hair’

As noted above, the reflexive suffix may precede or follow the applicative suffix, depending on the scope of the applicative. The verb *#kí* ‘put down’ with the reflexive suffix becomes *#kí-ma* ‘sit down’. In example (44), the reflexive suffix is followed by the applicative suffix *-tu*:

- (44) [paámpaŋ ikímtukĩ]
 paampa-na iki-**ma-tu**-ka-ĩ
 banana-ACC put.down-REFL-APPLIC-INTS-3:PFV
 ‘he sat on the banana’

Compare the following example:

- (45) [kuitámhumkam wikaisám taáta]
 [kuitama-**hu-ma**-ka-mi] [wikaiuṣa-sa-mi] ta-a-ta
 [look.after-APPLIC-REFL-INTS:SEQ-2:SS] [walk-ATT:SEQ-2:SS] come-HIAF-IMP
 ‘come back safe!’ (lit: *come, having taken care of yourself, having gone*) (Obs)

Here the applicative suffix is **followed** by the reflexive suffix. The iconicity in the two preceding examples is clear: in (44), the applicative suffix applies the action of the reflexive-marked verb to another participant. That is, the subject puts himself down on the banana. In (45), by contrast, the reflexive suffix indexes the object of the applicative suffix itself.

One could say there are two reflexive suffixes: one is derivational, as it creates new lexemes whose meaning is not entirely predictable from the semantics of the underived verb. This suffix also appears closer to the verb, as it precedes the applicative. The second reflexive suffix is inflectional; it indexes the object of the verb in a contrastive paradigm with the other object-marking suffixes. As one would expect, this suffix appears further from the root.

Alternatively, one could analyse these two instances of *-ma* as the same suffix, noting that it may precede or follow the applicative suffix, depending on the scope of the latter.⁹⁰

Some examples indicate a reflexive suffix of the form *-mama*:

- (46) kaʃín dikápmamsathai
 kaʃini dikapa-**mama**-sa-ta-ha-i
 tomorrow test-REFL-ATT-IFUT-1SG-DECL
 ‘tomorrow I will try my luck (lit. *test myself*)’ (6:17:38)

⁹⁰ This analysis would leave aside the issue of the rather opaque semantics of *-ma* in examples like *ʃi-ma* ‘sit down’ – note that this is a more specific meaning than ‘put oneself down’, as it refers only to the action of sitting. To say ‘lie down’, for example, one would use a different verb, *tʃi*.

The following example from a traditional story refers to an old belief that a hunter would have bad luck if he had eaten beans prior to hunting. Although the character had eaten beans, he claimed he had not and went hunting anyway. The rest of the story describes how a jaguar ate him, providing a very clear moral for the audience.

- (47) [nĩ tumámiuwai yúwatʃu]
 nĩ tu-**mama**-i-u-ai yu-a-tʃau
 3SG say-REFL-LOAF-REL-COP:3:DECL eat-IMPV-NEG:REL
 ‘he_i said he_i hadn’t eaten (beans)’ (6:17:31)

7.5.5 Reciprocal

Like reflexive, the reciprocal suffix *-nai* also involves coreferentiality of subject and object, however in this case the members of the (necessarily plural) subject group perform the action on each other, rather than on themselves. Reciprocal is also in complementary distribution with the object-marking suffixes.

Reciprocal is more derivational than reflexive – some applications create new lexemes. For example, *mau* ‘kill’ becomes *maa-ni* ‘fight’ with the addition of the reciprocal suffix. While it is easy to see the semantic connection here, it is also apparent that *maa-ni* does not simply mean ‘kill each other’; consider example (48), in which the subjects (a woman and her husband) clearly did not kill each other – rather, they fought then resolved their problems.

- (48) aĩʃihã maá maániakũã nuwanũĩ tʃitʃáman ipĩkã huwáku
 [aĩʃi-haĩ maa maa-**nai**-a-kawã] nuwanu-ĩ
 [husband:PERT:1PL/3-COMIT REDUP kill-RECIP-IMPV-REPET+3:SS] ANA-LOC
 [tʃitʃama-na ipĩki-kã] huwa-ka-u
 [problem-ACC resolve-INTS:SEQ+3:SS] stay-INTS-REL
 ‘(the woman) fighting with her husband, they then resolved their problems’ (6:1:61)

And compare the following example, with specifically singular subject marking. This clearly shows that the form derived from *mau* ‘kill’ goes beyond simple reciprocal-marking, and has derived a new lexeme ‘fight’ with prototypically reciprocal meaning.⁹¹

⁹¹ The fact that the root changes from *mau-* to *maa-* also suggests this is more than simple suffixing.

- (49) *kaʃín wíi maániktathai*
kaʃini wi maa-nai-ka-tata-ha-i
 tomorrow 1SG kill-RECIP-INTS-FUT-1SG-DECL
 ‘tomorrow I’m going to fight’

But this could be considered an emergent property of the verbal number marking system, which does not contrast singular with plural, but unspecified number with plural. So we see examples like:

- (50) a. *maániawai*
maa-nai-a-wa-i
 kill-RECIP-IMPFV-3-DECL
 ‘they are fighting’ (two people)
- b. *maáinawai*
maa-nai-ina-wa-i
 kill-RECIP-PL:IMPFV-3-DECL
 ‘they are fighting’ (more than two people; a group)

The lexicalisation affects the semantics inasmuch as the subjects do not in fact have to kill each other for the verb *maani* ‘fight’ to be appropriately used.

Reciprocal contrasts with plural reflexive, in which a number of subjects perform the action on themselves, independently of each other. Compare the following examples of (a) simple transitive; (b) plural reflexive; and (c) reciprocal.

- (51) a. *tímaʃínawai*
tímaʃi-ina-wa-i
 comb-PL:IMPFV-3-DECL
 ‘they are combing (other people’s) hair’
- b. *tímaʃmainawai*
tímaʃi-ma-ina-wa-i
 comb-REFL-PL:IMPFV-3-DECL
 ‘they are combing their (own) hair’
- c. *tímaʃnáyainawai*
tímaʃi-nai-ina-wa-i
 comb-RECIP-PL:IMPFV-3-DECL
 ‘they are combing each other’s hair’

7.5.6 Object marking

Only SAP objects are indexed with verbal suffixes. Third person objects are always zero-marked. Furthermore, only one object is ever indexed on the verb. The choice of which object to mark obeys a person hierarchy with the ranking 1SG > 1PL/2 > 3, so if one SAP object is present, it will be indexed with a suffix. I have no natural examples with two SAP objects; even in elicitation such forms are very rare, and there exists a range of strategies to avoid them, by encoding one participant as something other than a grammatical object. There is no difference in object markers arising from the O/E distinction, but the distinction can play a role in deciding which semantic object will be encoded as something other than a grammatical object, as there is a general avoidance of higher-ranked O than E arguments. A full discussion of grammatical relations and their effects on object marking is in §11.3.

The object-marking suffixes themselves vary according to the verb class and the person and number of both subject and object, and their ordering with respect to other suffixes also varies depending on the participants involved. The forms of the object suffixes in the two classes are:

APPLICATIVE	1SG OBJECT	2 OBJECT	1PL OBJECT
-hu	-hu	-hama	-hama -pa -hatu
-tu	-tu	-tama -pa	-hama -pa -hatu -tama -tVpa

Table 7.8: Object suffixes

7.5.6.1 First person singular object

In the first group first person singular object is marked with *-hu*:

- (52) a. dakumhúkta
 dakuma-**hu**-ka-ta
 copy-1SG.OBJ-INTS-IMP
 ‘take my photo’ lit: *make a copy of me* (Obs)

- b. mína suhustá
 mi-na su-**hu**-sa-ta
 1SG-ACC give-**1SG.OBJ**-ATT-IMP
 ‘give it to me’

In the second group, first person object is marked with *-tu*:

- (53) a. isatkáttawai
 isa-**tu**-ka-tata-wa-i
 bite-**1SG.OBJ**-INTS-FUT-3-DECL
 ‘it’s going to devour me’ (6:4:91)
- b. ũỹúntusta
 ũyuna-**tu**-sa-ta
 accompany-**1SG.OBJ**-ATT-IMP
 ‘come with me!’ (6:1:46)

7.5.6.2 Second person object

In *hu* verbs with third person subject, second person object is marked with *-hama*:

- (54) a. [túhamui]
 tu-**hama**-wa-i
 say-**2.OBJ**-3-DECL
 ‘(she) says to you’ (6:1:42)
- b. [éikaṇmawɛi]
 aika-**hama**-wa-i
 do-**2.OBJ**-3-DECL
 ‘(it) is doing that to you’ (6:2:14)

The same relation in the *tu* group is marked with *-tama* or *-pa*. These variants are also apparently lexically conditioned, and appear to be roughly equally common.

- (55) a. súṅka duṣíktamui
 suṅka dushiki-**tama**-a-wa-i
Sugka laugh.at-**2.OBJ**-IMPFV-3-DECL
 ‘Sugka is laughing at you’

- b. wáipakmĩ
 wai-**pa**-ka-mĩ
 see-**2.OBJ**-INTS-RECPAST:3:DECL
 ‘he saw you’

There is no number distinction made in second person object marking when the subject is third person.

First person subject and second person object are marked with portmanteau level II suffixes. This is the only object marking that appears at level II.

- (56) [tímakham]
 ti-ma-ka-**hami**
 say+loaf-RECPAST-POLINT-**1SG>2SG**
 ‘did I tell you?’ (7:6:99)

The suffix *-hami* appears to be decomposable as first person singular subject *-ha* and second person *-mi*. When a first person plural subject acts on a second person singular object, the suffix is *-himi*, which would appear to be first plural *-hi* and second person *-mi*.

However, when the first person subject is singular and the second person object plural, the marker is still *-himi*, so it appears that the person distinction is neutralised at the expense of number marking. The marking is set out in tabular form below:

SUBJECT \ OBJECT	1SG	1PL
2SG	<i>-hami</i>	<i>-himi</i>
2PL	<i>-himi</i>	<i>-himi</i>

Table 7.9: Marking of first person subject / second person object

I analyse these as two portmanteau suffixes, which both indicate first person subject and second person object, and have a singular / plural distinction that is sensitive to either participant (cf. Larson 1963).

7.5.6.3 First person plural object

The choice of suffix for marking first person plural object is similarly lexically specified, and most of the markers are shared with second person object; but the distinction

between the two classes of verbs is almost completely neutralised. Both classes have verbs that take first person plural object markers *-hama*, *-pa* and *-hatu*, and in the *tu* class there are also verbs that take the markers *-tama* and *-tVpa*.

(57) a. húnaf ya hútihamawa
 hu-na-ʃa ya huti-hama-a-wa
 PRX-ACC-UNCERT who do.this-1PL.OBJ-IMPV-3
 ‘who is doing this to us?’ (6:3:18)

b. [amúpawai]
 amu-pa-a-wa-i
 terminate-1PL.OBJ-IMPV-3-DECL
 ‘(he) is killing us all’ (6:3:43)

As can be seen from the table above, first person plural object basically follows the forms of second person object, but with more variation in forms – although note that, as with all the object markers, any given verb will always take the same form. First plural object is the only one to break the pattern whereby the *hu* class takes objects in /h/ and the *tu* class takes objects in /t/.

When combined with second person plural subject, the *-hatu* form of first plural object may appear as *-ka-hatu*. The prefixed *-ka* also appears with third person plural subject, but only when the applicative suffix is present. It perhaps marks ‘plural subject/plural object’, or perhaps there is some more pragmatically conditioned motivation, such as topicality of the object vs. subject. Unfortunately such examples are vanishingly rare in actual recorded narratives, and elicited examples are of little use in investigating the role of context.

The first plural object markers may also mark generic human objects, as in *hintina-kahatu-inu* (teach-1PL.OBJ-NR) ‘teacher’ (lit. *one who teaches us*); *mã-kahatu-inu* (kill-1PL.OBJ-NR) ‘murderer’ (lit. *one who kills us*). That this is a generic object can be seen from the following examples. The first comes from a story in which the narrator’s father had killed a stranger, so the only way that the object of ‘kill’ could be construed as ‘one of us’ is in the generic sense of ‘a person’.

- (58) mína apáj maŋkaŋtuáu áyi
 [mi-na apa-hu] mǎ-kahatu-a-u a-yi
 [1SG-ACC father-PERT:1SG] kill-1PL.OBJ-HIAF-REL COP-REMPAST:3:DECL
 ‘my father was a murderer’ (2:2:17)

The following example was considered by speakers to be equivalent to a Spanish sentence with first-person singular subject, the understood object of the verb *ifama* ‘fear’.

- (59) iŋámkaŋtak tupikáawai
 iŋama-kahatu-a-kũ tupika-a-wa-i
 fear-1PL.OBJ-IMPV-SIM+3:SS run-IMPV-3-DECL
 ‘I made them run with fear’ Lit: *they are running, fearing a generic human.*

Although generic human object is typically marked with the *-kahatu* form, other markers may also appear, such as *-hatu* in the following example:

- (60) bukúhatin
 buku-hatu-inu
 suck-1PL.OBJ-NR
 ‘insects that suck blood’

It is clear that there is still much work required before we will gain a full understanding of the conditioning factors involved in the selection of object markers.

7.6 Verb classes: *hu* verbs and *tu* verbs

The applicative suffix and the level one object suffixes have a close morphological relationship, manifested in the selection of allomorphs. The allomorphs fall into two groups, characterised by the presence of an initial /h/ or /t/ in the applicative and first person singular object suffixes. On the basis of the forms selected, all verbs can be divided into two groups, as shown in table 7.10.

CLASS	APPLIC	1SG.OBJ	APPLIC-1SG.OBJ
1	<i>-hu</i>	<i>-hu</i>	<i>-hu-tu</i>
2	<i>-tu</i>	<i>-tu</i>	<i>-tu-hu</i>

Table 7.10: ‘Applicative’ and ‘first person singular object’ allomorphs

Note that the two homophonous forms never co-occur in a word. When a verb takes both applicative and first singular object suffixes, the object suffix switches its form, as shown in the fourth column of table 7.10, and in the examples below:

(61) a. wíi numín tsupínkathimí

wíi numi-na tsupi-**hu**-ka-ta-himí-i
1SG wood-ACC cut-**APPLIC**-INTS-IFUT-1>2:PL-DECL

‘I will cut wood for you (pl)’

b. áu tsupínkamĩ

au tsupi-**hu**-ka-mĩ
DST cut-**1SG.OBJ**-INTS-RECPAST:3:DECL

‘he cut me’

c. mínau númi tsupínuktahum

[mi-nau numi] tsupi-**hu-tu**-ka-ta-humí
[1SG-POSS wood] cut-**APPLIC-1SG.OBJ**-INTS-IMP-2PL

‘cut my wood for me’

(62) a. ãũãtak yuháawai

ãũa-**tu**-a-kũ yuha-a-wa-i
look.for-**1SG.OBJ**-IMPFV-SIM+3:SS go:PL-IMPFV-3-DECL

‘they’re looking for me’

b. nína ãũãtkámĩ

nĩ-na ãũa-**tu**-ka-mĩ
3SG-ACC look.for-**APPLIC**-INTS-RECPAST:3:DECL

‘he looked (for it) on someone’s behalf’

c. ãũãthúkámĩ

ãũa-**tu-hu**-ka-mĩ
look.for-**APPLIC-1SG.OBJ**-INTS-RECPAST:3:DECL

‘he looked for (it) on my behalf’

Because of the homophony of applicative and first person singular object, examples such as (61b) are ambiguous out of context; the example is repeated below with the second possible gloss:

(63) áu tsupínkamĩ

au tsupi-**hu**-ka-mĩ

DST cut-**APPLIC**-INTS-RECPAST:3:DECL

‘he cut (it) for someone’

OR

‘he cut me’ (with gloss as in 61b)

Typically, the out-of-context reading for an ambiguous form is as first person singular object (i.e. ‘he cut me’ in example (61b)). In form (62b) the third-person accusative pronoun *nĩ-na* (3SG-ACC) is used to avoid ambiguity. Of course, in actual use truly context-free examples are extremely rare.

The other object suffixes also take part in the pattern of allomorphy, but with a considerable amount of variation as shown in the following table.

APPLIC	2 OBJECT	APPLIC-2.OBJ	1PL OBJECT	APPLIC-1PL.OBJ
<i>-hu</i>	<i>-hama</i>	<i>-hu-tama</i> <i>-hu-tupa</i> <i>-hu-tuhama</i>	<i>-hama</i> <i>-(ka)-hatu</i> <i>-pa</i>	<i>-hu-tama</i> <i>-hu-tupa</i> <i>-hu-tuhama</i> <i>-hu-ka-hatu</i>
<i>-tu</i>	<i>-tama</i> <i>-pa</i>	<i>-tu-hama</i> <i>-tu-pa</i> <i>-tu-hupa</i> <i>-tu-hutVpa</i>	<i>-hama</i> <i>-(ka)-hatu</i> <i>-tama</i> <i>-pa</i> <i>-tVpa</i>	<i>-tu-hama</i> <i>-tu-ka-hatu</i> <i>-tu-hutVpa</i>

Table 7.11: Second person object and first person plural forms

Both the *hu* and the *tu* paradigms are fairly messy, and it is not clear what conditions the choice of suffix within each cell. However, there is some order. In general, *hu* verbs take a /t/-initial object suffix and *tu* verbs take a /h/-initial object suffix, with a switch of object suffix when preceded by the applicative suffix. The main offenders in the breakdown of this pattern are the suffix *-pa*, which appears in both classes, and the two first plural forms *-hama* and *-hatu* that cross into the *tu* class.

Most of the forms look as if they have /tV/ or /hV/ syllables added in alternating order, and this could give us a clue as to the historical development of the suffixes. For example, the second person form *-tu-hutVpa* could be broken down as *-tu-hu-tV-pa* (-APPLIC-?-?-2.OBJ). The fact that the syllables glossed with question marks look like the applicative suffix is suggestive. Context may again be the clue here: perhaps more instances

of the applicative suffix are added when a speaker wants to emphasise the topicality or non-typicalness of the object? It does appear to be a general rule that less prototypical objects are marked with more material. Much further work is required to gain a clear understanding of what conditions the choice of object marking suffix in each case.

7.6.1 Source of the allomorphy

There are two unusual aspects of this allomorphy that currently defy explanation. The first is the allomorphy itself: such variants are very unusual in Aguaruna morphology, which in general is agglutinating with fairly transparent phonological conditioning of allomorphy. There are two options:

1. The variants could arise from earlier phonological conditioning
2. The variants could arise from two different morphemes

Tables 7.12 and 7.13 give some examples of verbs from both sets, with accent position in the unmarked stem marked.

VERB	GLOSS	TRANSITIVITY
atʃí	grab	trans
atʃí	nail	trans
ahamá	make.garden	intrans
ahápi	throw.away	trans
ántu	listen	intrans
díi	look.at	trans
kuitáma	care.for	trans
súma	ask.for	trans
su	give	ditrans
suwimá	punish	trans
tsupí	cut	trans
tukú	pierce.ears	trans
tu	say	intrans/trans
umí	do	trans
untsú	call	trans
wi	go	intrans
yu	eat	trans

Table 7.12: *hu* verbs

VERB	GLOSS	TRANSITIVITY
siuqá	ask.for	ditrans
wainá	see	trans
isá	bite	trans
nihá	wash	trans
iuqá	look.for	trans
hiŋká	tie.up	trans
inahú	cook	trans
atʃihú	roast	trans
uhá	tell	trans
awí-tu	send	ditrans
ahákmatu	plant	trans
táu	dig.out	trans
ahá	make.garden	trans
ahí	throw.down	trans
íŋku	meet	trans
ayámhu	defend	trans
húwa	stay	intrans

Table 7.13: *tu* verbs

7.6.1.1 Phonological conditioning of the alternants

Both variants appear in essentially the same environments with respect to syllable structure, accent placement and final vowel of the root. The only potentially relevant exception is that there are no *tu* verbs with final vowel /i/, but this could well be an accident of the data, as verbs ending in /i/ are rare in any case. There is no apparent phonological conditioning on the allomorphy.

7.6.1.2 Semantic conditioning of the alternants

Semantically there are two possibilities: the allomorphy could be based on the semantics of the verb, or based on the semantic role of the participant referenced.

Simple transitive, ditransitive and intransitive examples appear in both groups, and as can be seen from the examples given in tables 7.12 and 7.13, neither type stands out as forming a semantic group distinct from the others. The object suffixes can refer to patient or recipient like objects, but this has no bearing on which class they are part of (cf. examples (52) and (53) above).

To summarise, there is no synchronic phonological or semantic conditioning of the variants, and all that can be said is that these are two lexically-conditioned allomorphs.

7.6.1.3 Relationship between applicative and object morphemes

The second element of the allomorphy problem is the relationship between the two homophonous forms ‘applicative’ and ‘first singular object’. Both show the same unusual allomorphy but this allomorphy is interrupted when both appear in the same word. There is a clear requirement for alternation of /h/ and /t/, which is carried over to some extent with the other object suffixes.

For the present, the only solution is to describe the two groups of forms and leave an explanation until more data, historical and comparative, can be added to the equation.

7.7 Negation

There are two verbal negative suffixes, the selection of which is conditioned by tense: *-tsu* appears with present-tense and remote past tense verbs (64), and *-tfa* appears elsewhere (65).

- (64) a. wíka búuttsuhai
 wi-ka buuta-tsu-ha-i
 1SG-FOC cry+IMPFV-NEG-1SG-DECL
 ‘I am not crying’
- b. wíka yúwashai
 wi-ka yu-a-tsu-ha-i
 1SG-FOC eat-IMPFV-NEG-1SG-DECL
 ‘I am not eating’
- (65) a. dakástʃattahai
 daka-sa-tʃa-tata-ha-i
 wait-ATT-NEG-FUT-1SG-DECL
 ‘I will not wait’
- b. wáinkatʃabiahai
 waina-ka-tʃa-amaia-ha-i
 see-INTS-NEG-DISTPAST-1SG-DECL
 ‘I didn’t see (any)’ (Text 2:12)

The negative suffix *-tʃa* also appears with simultaneous dependent marking:

- (66) kaʃín yútaʃkuiŋ wíka wítathai
 [kaʃini yuta-tʃa-ku-ĩ-ka] [wi-ka wi-tata-ha-i]
 [tomorrow rain+IMPFV-NEG-SIM-1/3:DS-COND] [1SG-FOC go:PFV-FUT-1SG-DECL]
 ‘if it doesn’t rain tomorrow, I will work’

Either negative suffix can appear with the potential stem, which marks neither tense nor aspect – see examples in §7.3.3.

7.7.1 Negative existential *atsu*

The negative existential verb is *atsu* ‘not be, not exist’. At first glance it looks like the existential verb *a* ‘exist’ plus the negative suffix *-tsu*, however the element */tsu/* is synchronically part of the root, as it *precedes* the imperfective suffix, which fuses with the root to give an imperfective stem *atsa*:

- (67) atsáwai
 atsu-a-wa-i
 exist:NEG-IMPFV-3-DECL
 ‘there {isn’t / aren’t} any’ (7:2:54)

This shows that /tsu/ cannot be the negative suffix *-tsu*, as that suffix *follows* the imperfective markers. The formal similarity clearly indicates a relationship, but it is impossible to tell whether the negative existential represents a historical fusion of *a* ‘exist’ and *-tsu* ‘negative’, or the negative suffix represents a grammaticalisation of the verb. However, the fact that there are two negative suffixes, and the *-tsu* form is not the default, suggests that it may be a relatively more recent grammaticalisation.

See also §11.6 for further discussion of negation at the clause level.

7.8 Plural

7.8.1.1 Plural marking of object

Normally plural marking refers only to the subject of the verb. Object marking is differentiated for singular and plural in the first person only. There are, however, occasional examples in my data of plural marking with a plural object.

- (68) nĩ ii-na antu-hu-tama-ka-**aha**-tata-wa-i
 3SG 1PL-ACC listen-APPLIC-1PL.OBJ-INTS-**PL**-FUT-3-DECL
 ‘he will listen to us’

The pronouns make it clear that this example has a singular subject and plural object. It seems that the plural marking refers to the more topical or focused participant, rather than the grammatical subject. Compare the examples below; (b) marks plural object, and also marks the object pronoun with the focus suffix *-ka*:

- (69) a. wi antu-hu-ka-ma-ha-i dita-na
 1SG listen-APPLIC-INTS-RECPAST-1SG-DECL 3PL-ACC
 ‘I listened to them’
- b. wi antu-hu-ka-**aha**-ma-ha-i dita-na-ka
 1SG listen-APPLIC-INTS-**PL**-RECPAST-1SG-DECL 3PL-ACC-FOC
 ‘I listened to *them* (as opposed to anyone else)’

A particularly interesting example is the following, in which the plural marker is the specifically third-person plural *-numĩ*, as required by the jussive mood, although it must refer to the second-person plural object.

- (70) apahui yaĩ-pa-ka-ti-**numĩ**
God help-2.OBJ-INTS-JUSS-**3PL**
'God bless you (plural)'

Such examples suggest that the plural suffix is referring to the more topical or relevant argument, rather than the syntactic subject. This could be related to the derivational nature of plural marking: as plural marking is not obligatory, it is only used where the plurality of a participant is noteworthy or counter to expectation. That plural marking typically refers to the grammatical subject simply reflects the fact that the most topical participant is typically encoded as subject. A similar phenomenon is found in the neutralisation of number in marking first person subject acting on second person object: when both are singular, the marking is *-hamĩ*, but if either, or both, is plural, the marker is *-himĩ* (§7.5.6.2).

More research is required to fully test the hypothesis that plural marking may be motivated by factors other than, or in addition to, the plurality of the subject.

Chapter 8: Verb III: Morphology of finite verbs

8.1 Introduction

The first level of verbal morphology contains all of the derivational suffixes, almost all of the object-marking suffixes, and the negative suffixes. The root plus any suffixes at this level form a stem to which nominalisers or inflectional suffixes may be attached.

The present chapter deals with the suffixes of level II, which can loosely be termed inflectional. Level II morphology in Aguaruna is characterised by two interesting tendencies. The first is fusion; this appears to be the only area of the grammar where truly fusional morphemes occur, particularly in third-person forms. Such a tendency is in contrast to the usually agglutinating nature of Aguaruna morphology.

The second characteristic is a tendency to recycle grammaticalisation paths. Consider the following examples:

- (1) a. yuwáttahai
yu-a-**tata**-ha-i
eat-HIAF-FUT-1SG-DECL
'I will eat'
- b. yuwátatahai
yu-a-**tata**-ha-i
eat-HIAF-**DESID**-1SG-DECL
'I want to eat'

The two forms 'definite future' and 'desiderative' have the homophonous form /tata/ at the morphemic level, but constitute a minimal pair at the surface level, based on whether or not syncope applies to the vowel of the first syllable. The reason for lack of syncope in the desiderative suffix is because it is a recently fused periphrasis from the following construction which couches an 'intentional future' marked verb in a speech report: *yu-a-ta-ha ta-ha-i* (eat-HIAF-IFUT-1SG say+IMPFV-1SG-DECL) 'I intend to eat, I say'. This is apparent from descriptions of other Jivaroan languages and other varieties of Aguaruna, where the desiderative suffix contains the phoneme /h/, the reflex of first person singular *-ha* – so example (1b) [yuwátatahai] 'I want to eat' appears as [yuwátat**h**tahai]. It is very likely therefore that the future form has derived from an earlier instance of the same fusion,

and synchronically forms an unexceptional part of the phonological word. So we have a contrast between two forms which represent two points on the same grammaticalisation path.

INTENTION > DESIDERATIVE > FUTURE

Furthermore, the periphrastic form mentioned above still exists, apparently with a more telic sense (§8.3.5.6), representing the initial point on the path. Craig (1991: 455) uses the term polygrammaticalization to describe “the phenomenon by which a single morpheme is the source of multiple grammaticalization chains”.

Similar examples are evident among past tense forms, where a periphrastic construction with the copula *a* as auxiliary coexists with two forms showing different levels of fusion, and all three forms differ semantically (see §8.3.4.3).

Historical grammaticalisation of various periphrastic forms can be seen to have increased the available tense morphemes, of which just three show evidence of greatest antiquity: immediate future *-ta*, recent past *-ma* and remote past *-ia*, along with the formally unmarked present tense. These three primary tense suffixes are discussed in §8.3.1.3, and subsequent sections describe how they underlie the other tense suffixes, showing clear evidence for historical layers of grammaticalisation.

8.2 Morphological positions

Level two consists of three suffix positions, as shown in figure 8.1:

ROOT + level I affixes

- A: (i) Tense
Desiderative
Imperative
Jussive
(ii) Apprehensive
(iii) Hortative
- B: Subject
Second person object / first person subject
- C: Mood/modality

Figure 8.1: Level two suffix ordering in independent verbs

A. The first slot is obligatorily filled. Slot A suffixes can be divided into the following three groups, based on their morphological properties:

- (i) Tense markers, including zero-marked present tense; also desiderative, imperative (second person only) and jussive (third person only), all historically derived from the immediate future tense marker. Suffixes of this group may be followed by person markers.
- (ii) Apprehensive. Apprehensive combines with the same person markers as set (i) for all persons, and may also combine with distinct person markers to form prohibitive (second and third person only) and negative jussive (third person only).
- (iii) Hortative never combines with any other level II suffix, and is only used with first person plural subject.

Imperative and jussive correlate historically with immediate future in the tense paradigm, but unlike immediate future they impart imperative mood to the clause, thus preventing any mood suffix from appearing. Apprehensive, prohibitive, negative jussive and hortative likewise impart mood to the clause and block the addition of any further mood marking.

B. Subject marking is obligatory. First and second persons have distinct singular and plural forms, third person marks plural only in jussive, apprehensive, prohibitive and remote past. Second and third persons take different markers depending on tense and mood, and some third person markers are fused with tense markers. Plural subject for all persons is optionally marked with level I suffixes (see §7.3.2, §7.8). Second person object is marked in this position ONLY when subject is first person. All other object suffixes, including second person object with third person subject, are at level I (§7.5.6).

C. Mood is obligatorily marked in finite clauses, and all clause types are marked with suffixes in slot C except imperative, marked in slot A, and some interrogative types which are marked on constituents of the clause. In those clause types slot C must be empty. Polar interrogative *-ka* normally appears in slot C, but in recent past, intermediate past and distant past tenses, the polar interrogative suffix immediately

follows the primary past suffix *-ma* of slot A, and may then be followed by the remote past suffix *-ia*, and subject suffixes.

Although a bare verb root can appear as the full verb in an auxiliary construction,⁹² any other verb form must have at least one suffix, indicating person of the subject. Tense and mood marking are also obligatory, but they may be zero-marked: a verb that has no overt tense suffix is interpreted as present; and in non-interrogative, non-imperative clauses lack of a mood/modality suffix indicates exclamative mood. Zero-marking thus forms a paradigm with the segmentally-marked suffixes of these two groups, and we can say that level II suffixes obligatorily mark finite independent verbs for person of the subject (and number for first and second person subjects), tense and mood.

There are some incongruities in level II morphology: desiderative appears as part of the tense paradigm (explained by origins in primary immediate future), and second person objects are marked at level II only with first person subjects (perhaps related to the nominal hierarchy, whereby the higher marked argument always precedes the lower, regardless of grammatical role). All other object markers are at level I. The quirky requirement that polar interrogative must immediately follow the primary recent past suffix invites speculation, but at present there is not sufficient evidence to form a viable hypothesis (§8.7.2).

8.3 Tense

8.3.1 General remarks

Tense is expressed by suffixes on independent verbs. There are four synthetic past tenses and two synthetic future tenses. Imperative, jussive and desiderative suffixes are historically based on a ‘desirable future’ suffix, and along with apprehensive and hortative are formally part of the tense paradigm. Lack of tense marking implies present tense.

We will see that degree of remoteness, definiteness and foregrounding of the action of a verb are all relevant to the selection of tense markers. The past tenses, in particular, show a fascinating interplay of degree of remoteness and foregrounding of the action.

⁹² Pace Corbera (1994: 220), who states that “a verbal root does not appear alone or bare” (*uma raiz verbal não aparece sozinha ou despida*).

8.3.1.1 Tense marked with nominalisations

Two nominalisers take part in tense marking: A narrative past nominaliser *-haku* is used in narratives to “set the scene”. The future subject nominaliser *-tinu* is composed of immediate future *-ta* and the subject nominaliser *-inu* and combines with the copula suffix to form the indefinite future. The use of nominalisers to mark tense adds a stative or subject-focussed sense that verbal forms do not have. Although not strictly part of the verbal tense paradigm, both nominalised forms are discussed here as they functionally fit into the paradigm.

8.3.1.2 Relativiser *-u* as finite verb marker

Verbs relativised with *-u* are widely used in narratives and conversation, and typically imply past tense and lack of firsthand knowledge. The relativised verb may appear with an auxiliary, or the relativised verb may head an equative/attributive predicate. In many examples a verb relativised with *-u* appears with no further marking, and although this could be formally analysed as a predicate nominal, it functions as a finite verb, with the suffix being a portmanteau marking “narrative past” tense and non-firsthand information source. See §13.6 for further discussion of source-of-information marking strategies.

8.3.1.3 Primary tenses

All of the synthetic tense markers can be related historically to three forms, the **primary** tense suffixes. The three primary forms are: *-ta* ‘desirable future’; *-ma* ‘recent past’ and *-ia* ‘remote past’. All three of these suffixes are used synchronically as tense markers, and also appear in historically complex morphemes.

The ‘desirable future’ suffix *-ta* creates a future stem, which appears to have been a separate word relatively recently. All future tense forms are based on the future stem. Past tenses are a little less straightforward.

As well as explaining certain properties of historically complex morphemes, an appreciation of the historical makeup of tense suffixes helps to explain the complexities of third-person marking, as shown in §8.6.2 below.

8.3.2 Present tense

Present tense is formally unmarked. In conjunction with the imperfective verb root, present tense expresses an ongoing or habitual action:

- (2) yúwahai
yu-a-ha-i
eat-IMPFV-1SG-DECL
'I am eating' OR 'I eat'

While simple present imperfective forms express habitual actions or states, progressive is typically expressed with constructions involving the simultaneous subordinator *-ku* and the auxiliary verb *puhu* 'live' (§6.4):

- (3) [maa-ku-nu puha-ha-i]
[bathe+IMPFV-SIM-1SG:SS live+IMPFV-1SG-DECL]
'I am bathing'

8.3.3 Perfective past

Just-completed actions can be expressed using the perfective form of the verb root in present tense. An immediate past reading arises from the perfective aspect of the verb.

- (4) mai-ha-i
bathe:LOAF-1SG-DECL
'I'm done bathing' OR 'I've just bathed'
- (5) waŋka aani-ʃa aika-umi
why thus-UNCERT do:PFV-2SG:PAST
'why have you done that?' (6:5:74)

Third person subject is marked with the suffix *-ĩ* in perfective forms:

- (6) a. wi-ĩ
go:PFV-3:PFV
'he's gone'
- b. ma-ini-ĩ
bathe-LOAF-3:PFV
'he's done bathing'

The same third person suffix may be etymologically part of the third-person recent past tense marker *-mĩ* (§8.3.4.1).

Similarly, the past-tense second person suffix *-umi* (see §8.6.1) appears with the perfective stem, as in the following example, suggesting that perfective verbs are in fact treated as past tense within the grammar.

- (7) ta-a-umi-ka
 come-HIAF-2SG:PAST-POLINT
 ‘have you come?’

8.3.4 Synthetic past tenses

There are four synthetic past tenses: **recent past**, **intermediate past**, **distant past** and **remote past**. The **narrative past** *-haku*, although functionally a tense-marker, is formally a nominaliser. There are also a number of periphrastic strategies involving auxiliary constructions, and verbs marked with the relativiser *-u* function as a non-firsthand information marker in traditional stories.

The past tense suffixes are shown in table 8.1. Recent past, intermediate past and distant past all appear with the perfective stem, while remote past *-ia* and narrative past *-haku* are suffixed directly to the unmarked verb root.

FORM	STEM	GLOSS	DISTANCE FROM PRESENT
-∅	perfective	perfective past	Just-completed action
-ma	perfective	recent past	Same day to a few days - relevant to present situation
-ma...ia	perfective	intermediate past	Same day to a few weeks - less relevance to present situation
-ama...ia	perfective	distant past	Months to years - relevant to event line of narrative
-ia	unmarked	remote past	Years - imperfective or stative sense
-haku	unmarked	narrative past	Years

Table 8.1: Past tense markers

No synthetic past tense marker takes the imperfective stem, but the relativiser *-u* may do so, including in its role as a *de facto* finite verb marker.

Comrie (1985) warns:

“In studying degrees of remoteness in tense systems, it is essential to ensure that the distinction under discussion has degree of remoteness as part of its meaning, rather than just as an implicature deriving from other features of its meaning.” (Comrie 1985:83-4)

Although native speakers characterise the distinction between the tenses in terms of distance from present, as illustrated in table 8.1, actual use shows that there must be other factors involved, and it is impossible to assign a meaning for each tense purely in terms of degree of remoteness. In particular (and in spite of the formal similarity) intermediate and distant past appear in quite different contexts. The major factor aside from the purely temporal is foregrounding of the state or event described. Recent past and intermediate past basically cover the same time periods, and are typically used in conversation. A foregrounded event is typically more recent than a backgrounded one. Intermediate past may appear on the verb ‘say’ marking narrative modality.

In firsthand narrative (for example Text 2), distant past and remote past are typically used, again contrasting in foregrounding; clauses that are part of the main event line will take distant past tense, while those that are scene-setting or parenthetical will take remote past.

The recent, intermediate and distant past forms imply firsthand information on the part of the speaker. Where the information is not firsthand (for example when telling a traditional story), verbs are typically relativised with *-u* which functions then as a general past tense + hearsay marker. Finally, narrative past marked with the nominaliser *-haku* is used for states or events furthest from the present, and does not appear to enter into the same distinctions, although it is typically used for backgrounded clauses.

The following table summarises the past tense markers on the basis of the parameters just described:

DISTANCE IN TIME	FOREGROUND		BACKGROUND
	FIRSTHAND	NON-FIRSTHAND	
- ↓	-ma	-u	-ma...ia
	-ama...ia		-ia
+ ↓	-haku		

Table 8.2: Past tense markers and narrative functions

Foreground and background correlate with relative time: a backgrounded event or state is situational, and therefore typically prior to a foregrounded event.

Recent past and remote past are the primary past forms, and intermediate past and distant past are apparently composed of the two primary suffixes in combination.

It is important to note that the current description may reflect limitations of the data, which consists almost entirely of narratives. The first-hand narratives are typically placed some years into the past. In normal conversation, where someone might relate a narrative about some events of the day before, presumably recent and intermediate past tenses would be used. The motivations for selecting different tenses are clearly more complex than simple distance in time, and much more work is needed, along with a greater variety of data, to fully understand the system.

8.3.4.1 Recent past tense *-ma*

The recent past tense suffix is *-ma*. The time period covered by recent past is anywhere from earlier the same day to a few days ago, and the situation described is relevant to the present.

- (8) a. yuwámkum
 yu-a-ma-ka-umi
 eat-HIAF-RECPAST-POLINT-2:PAST
 ‘have you eaten?’
- b. tímahai
 ti-ma-ha-i
 say+LOAF-RECPAST-1SG-DECL
 ‘I said’

The following example is from a story in which a man kills the family dog, cooks it and feeds it to his wife. It is not until he serves her the boiled head that the wife realises what she is eating and asks:

- (9) ÿãwãã íinu maáʃmakum
 [yawaã ii-nau] ma-a-tʃa-ma-ka-umi
 [dog 1PL-POSS] kill-HIAF-NEG-RECPAST-POLINT-2:PAST
 ‘have you killed our dog?’ (6:5:74)

The following table gives a paradigm for recent past with the verb *tsupi* ‘cut’.

PERSON	SINGULAR	PLURAL
1	[tsupíkma <i>hai</i>] tsupi-ka- ma -ha-i cut-INTS-RECPAST-1SG-DECL	[tsupíkma <i>hi</i>] tsupi-ka- ma -hi-i cut-INTS-RECPAST-1PL-DECL
2	[tsupíkmu <i>mî</i>] tsupi-ka- ma -umi-i cut-INTS-RECPAST-2SG:PAST-DECL	[tsupíkmu <i>humî</i>] tsupi-ka- ma -uhumi-i cut-INTS-RECPAST-2PL:PAST-DECL
3	[tsupíkma <i>ĩ</i>] tsupi-ka- mĩ cut-INTS-RECPAST: 3 :DECL	

Table 8.3: Paradigm with recent past suffix *-ma*

With third person subject in declarative clauses the fusional form *-mĩ* appears. Perhaps this form has arisen from a fusion of the third person suffix *-ĩ* that marks third person in immediate past forms with recent past *-ma*.

- (10) [yuwám*ĩ*]
 yu-a-*mĩ*
 eat-HIAF-RECPAST:3:DECL
 ‘he ate’

The form *-mĩ* only appears in declarative clauses, and recent past with third person subject appears as *-ma* in non-declarative clauses:

- (11) a. [yuwámak]
 yu-a-ma-ka
 eat-HIAF-RECPAST-POLINT
 ‘did he eat?’
- b. [timaháma]
 ti-ma-hama
 say+LOAF-RECPAST-CNTR.EX
 ‘he said it!’

8.3.4.2 Intermediate past *-ma...ia*

Intermediate past *-ma...ia* typically expresses a time longer ago than recent past. For events within the last few days, either tense may be used – my impression is that use of recent past rather than intermediate past implies that the speaker considers the event more relevant to the current context.

(12) ánumin yúwat núnak mína núwa ukuábia

anumin yu-a-t [nu-na-ka mi-na nuwa
EXPL eat-IMPV-? [ANA-ACC-FOC 1SG-ACC wife

uku-a-**maia**]
sow-HIAF-INTPAST:3]

‘you useless thing, eating what my wife sowed!’ (6:1:49)⁹³

The wife’s planting is not what is being talked about, so takes intermediate past. It is backgrounded, scene-setting or parenthetical. The following example shows that distance in time is not really relevant, as the elders told this story a long time ago, when the current speaker was a child. The important factors are that it happened in the past, and it is not what is currently the topic of discussion.

(13) núná múun áuḡmatin àhabianúna wíḡa táhai

[nu-na muunta auhumatu-inu aha-**maia** = nu-na]
[ANA-ACC elder tell-NR COP:PAST-INTPAST:3=ANARel-ACC]

wi-ḡa ta-ha-i
1SG-ADD say+IMPV-1SG-DECL

‘that (story) which the elders told, I also tell it (now)’ (6:2:95)

Intermediate past, like recent past, is rare in narratives. The above examples demonstrate this: the first is from reported speech in a narrative, so reflects the conversational context, and the second is the very last line of a narrative, a typical formula for ending stories; so it is not really part of the narrative, and also reflects a conversational usage as the narrator is addressing the audience directly.

⁹³ It is not clear what morpheme the final /t/ of the word *yuwat* represents.

The suffix itself is morphologically complex, at least historically, and is a combination of primary recent past *-ma* and primary remote past *-ia*. Three factors support this analysis:

1. The polar interrogative suffix *-ka* intervenes between the /ma/ and the /ia/ – this suffix always directly follows recent past *-ma*.
2. Diphthong reduction when the first vowel of the suffix would be in a position to be elided suggests a morphologically complex origin (see paradigms in tables 8.4 and 8.5).
3. The change of final /a/ to /i/ in third person singular, as happens with remote past *-ia*.

The tables below give the paradigms for postconsonantal and postvocalic allomorphs:

PERSON	SINGULAR	PLURAL
1	[tsupíkmaihai] tsupi-ka- maia -ha-i cut-INTS-INTPAST-1SG-DECL	[tsupíkmaihi] tsupi-ka- maia -hi-i cut-INTS-INTPAST-1PL-DECL
2	[tsupíkmayumi] tsupi-ka- maia -umi-i cut-INTS-INTPAST-2SG:PAST-DECL	[tsupíkmaihumi] tsupi-ka- maia -uhumi-i cut-INTS-INTPAST-2PL:PAST-DECL
3	[tsupíkmayi] tsupi-ka- mayi cut-INTS-INTPAST: 3:DECL	

Table 8.4: Paradigm with intermediate past suffix *-ma...ia* following consonant

PERSON	SINGULAR	PLURAL
1	[yuwábiahai] yu-a- maia -ha-i eat-HIAF-INTPAST-1SG-DECL	[yuwábiahai] yu-a- maia -hi-i eat-HIAF-INTPAST-1PL-DECL
2	[yuwábiumi] yu-a- maia -umi-i eat-HIAF-INTPAST-2SG:PAST-DECL	[yuwábiuhumi] yu-a- maia -uhumi-i eat-HIAF-INTPAST-2PL:PAST-DECL
3	[yuwábi] yu-a- mayi eat-HIAF-INTPAST: 3:DECL	

Table 8.5: Paradigm with intermediate past suffix *-ma...ia* following vowel

And table 8.6 shows a paradigm with polar interrogative (I have glossed the two elements of intermediate past separately as PAST₁ and PAST₂):

PERSON	SINGULAR	PLURAL
1	[untsúkmaiaŋ] untsu-ka- ma -ka- ia -ha all-INTS-PAST ₁ -POLINT-PAST ₂ -1SG	[untsúkmaiaŋ] untsu-ka- ma -ka- ia -hi call-INTS-PAST ₁ -POLINT-PAST ₂ -1PL
2	[untsúkmaium] untsu-ka- ma -ka- ia -umi call-INTS-PAST ₁ -POLINT-PAST ₂ -2SG:PAST	[untsúkmaium] untsu-ka- ma -ka- ia -uhumi call-INTS-PAST ₁ -POLINT-PAST ₂ -2PL:PAST
3	[untsúkmaia] untsu-ka- ma -ka- ia call-INTS-PAST ₁ -POLINT-PAST ₂ :3	

Table 8.6: Paradigm with intermediate past *-ma...ia* and polar interrogative *-ka*

Note that the forms following a vowel always contain the denasalised stop [b] – thus there exist surface minimal pairs such as the following (see §2.4.3 for discussion of the phonological implications):

(14) a. yuwámi
yu-a-mi
eat-HIAF-HORT
‘let’s eat’

b. yuwábi
yu-a-bi
eat-HIAF-INTPAST:3:DECL
‘he ate’

There is evidence that the recent past suffix *-ma* originated as a nominaliser (see §8.7.2). If this were the case, then an intermediate past form such as *yuwábiahai* could be considered a transparent grammaticalisation of **yu-a-ma a-ia-ha-i* (eat-HIAF-RECPAST BE-REMPAST-1SG-DECL). However, I have been told by a native speaker that this suffix is actually a contraction of a periphrastic form involving the past subject nominaliser *-u* and the verb ‘be’, as in (15):

(15) yuwáu áyahai

yu-a-u a-ia-ha-i
eat-HIAF-REL COP-REMPAST-1SG-DECL

‘I ate’, ‘I had eaten’

The construction in (15) exists synchronically as a periphrastic past tense.

8.3.4.3 Distant past *-ama...ia*

The distant past form consists of the syllable /a/ followed by the postvocalic allomorph of the intermediate past suffix *-ma...ia*. Table 8.7 illustrates the paradigm.

PERSON	SINGULAR	PLURAL
1	[untsukábiahai] untsu-ka- amaia -ha-i call-INTS-DISTPAST-1SG-DECL	[untsukábiahi] untsu-ka- amaia -hi-i call-INTS-DISTPAST-1PL-DECL
2	[untsukábiumĩ] untsu-ka- amaia -umi call-INTS-DISTPAST-2SG:PAST-DECL	[untsukábiumĩ] untsu-ka- amaia -uhumi-i call-INTS-DISTPAST-2PL:PAST-DECL
3	[untsukábi] untsu-ka- amayi call-INTS-DISTPAST.3-DECL	

Table 8.7: Paradigm with *-ama...ia* ‘distant past’ following consonant

As with intermediate past forms, the polar interrogative suffix *-ka* intervenes between the two elements /ma/ and /ia/:

PERSON	SINGULAR	PLURAL
1	[untsukámkayaŋ] untsu-ka- ama -ka- ia -ha call-INTS-PAST ₁ -POLINT-PAST ₂ -1SG	[untsukámkayaŋ] untsu-ka- ama -ka- ia -hi call-INTS-PAST ₁ -POLINT-PAST ₂ -1PL
2	[untsukámkayum] untsu-ka- ama -ka- ia -umi call-INTS-PAST ₁ -POLINT-PAST ₂ -2SG:PAST	[untsukámkayuhum] untsu-ka- ama -ka- ia -uhumi call-INTS-PAST ₁ -POLINT-PAST ₂ -2PL:PAST
3	[untsukámkaya] untsu-ka- ama -ka- ia call-INTS-PAST ₁ -POLINT-PAST ₂ :3	

Table 8.8: Paradigm with *-ama...ia* ‘distant past’ with interrogative

The distant past form has most likely arisen from a fused periphrasis, consisting of the perfective verb stem followed by the verb *a* ‘be’ inflected with the intermediate past suffix; so for example the periphrastic form **untsu-ka a-maia-ha-i* (call-INTS be-INTPAST-1SG-DECL) would fuse to form [untsúkabiahai] ‘I called’. I suggested above that intermediate past itself is probably a fused periphrasis; so the form [untsúkabiahai] ‘I called’ must ultimately go back to **untsu-ka a-ma a-ia-ha-i* (call-INTS be-RECPAST be-REMPAST-1SG-DECL), with two auxiliaries. One would expect that one of the processes of fusion would have happened first, so that there was never more than one auxiliary in any given construction at any stage of the language, but it is hard to say which came first.

One further oddity of distant past is in the combination with negative *-tʃa*. In the plural forms, the /a/ of negative *-tʃa* does not appear to have been elided, and epenthetic /w/ appears, as illustrated in table 8.9. The phenomenon is apparent where level I plural *-aha* is present too, thus I have included a third person plural form for comparison.

PERSON	SINGULAR	PLURAL
1	[maátʃabiahai] ma-a-tʃa- amaia -ha-i kill-HIAF-NEG-DISTPAST-1SG-DECL	[maátʃawabiahahi] ma-a-tʃa- amaia -hi-i kill-HIAF-NEG-DISTPAST-1PL-DECL
2	[maátʃabiumi] ma-a-tʃa- amaia -umi-i kill-HIAF-NEG-DISTPAST-2SG:PAST-DECL	maátʃawabiumĩ ma-a-tʃa- amaia -uhumi-i kill-HIAF-NEG-DISTPAST-2PL:PAST-DECL
3	[maátʃabi] ma-a-tʃa- amayi kill-HIAF-NEG-DISTPAST:3:DECL	[maátʃawahabi] ma-a-tʃa- a-aha-mayi kill-HIAF-NEG-A-PL-DISTPAST.3:DECL

Table 8.9: Paradigm with *-ama...ia* ‘distant past’ with negative

I don’t know what causes this. It is possible that the /w/ in the plurals is a reflex of the relativiser *-u*, so for example *maátʃawabiahahi* ‘we killed’ would be a contraction of *maátʃau abiahahi* (kill-HIAF-NEG-REL COP-INTPAST-1PL-DECL). But this hypothesis still cannot explain why the plurals would require a nominaliser where the singulars do not.

Some examples from texts:

(16) ayú tusán wayáwabiahai

[ayu tu-sa-nu] waĩ-aw-**amaia**-ha-i
[ok say-SBD-1SG:SS] enter-HIAF-**DISTPAST**-1SG-DECL

‘saying “ok” I went in’ (Text 2:22)

(17) ayú tíabiahai

ayu ti-**amaia**-ha-i
ok say+LOAF-**DISTPAST**-1SG-DECL

‘“ok” I said’ (2:2:68)

(18) táawabiahai

ta-aw-**amaia**-ha-i
come-HIAF-**DISTPAST**-1SG-DECL

‘I arrived’ (Text 2:15)

The following multi-line example contrasts distant past in line (d), as the foregrounded event, with remote past in its scene-setting function in lines (a) and (c):

(19) a. bolquete mini-yi

truck arrive-REMPAST:3:DECL

‘a truck arrived’

b. nuni-a-ku-ĩ

do.that-IMPFV-SIM-1/3:DS

‘when it did that...’

c. iwi-ia-hi-i

[tipi-sa-ti tu-sa]
raise.hand-REMPAST-1PL-DECL [lie.down-ATT-JUSS say-SBD+1PL:SS]

‘we raised our hands saying “may it stop!”’

d. tũha-ʃa naŋkaiɥa-tama-ki-abi

but-ADD pass-1PL.OBJ-TRF-DISTPAST:3:DECL

‘but it passed us by’ (2:2:233)

8.3.4.4 Remote past *-ia*

Remote past is used in narratives to refer to situations many years in the past, for example the childhood of an adult narrator. It is unlike the other tense suffixes in a number of ways: most noticeably, remote past is attached to the unmarked verb root, not the perfective stem, and its sense is stative or habitual. It is typically used to ‘set the scene’, as

in example (20) which comes from an old man’s reminiscence about taking part in vision quests as a boy.

(20) [tunanáf kahamín áyahai]

tuna-na-ʃa kahama-inu a-**ia**-ha-i
 waterfall-ACC-ADD dream-NR COP-**REMPAST**-1SG-DECL

‘I was dreaming of a waterfall too’ (i.e. ‘I saw visions of spirits’) (8:2:5)

(21) [núna múun áuŋmatuinakũĩ wáinkas táwa túyahai]

[nu-na muunta auhumatu-ina-ku-ĩ] wainakasã ta-wa
 [ANA-ACC elder tell-PL:IMPFV-SIM:1/3-DS] in.vain+3 say+IMPFV-3:EXCL

tu-**ia**-ha-i
 say-**REMPAST**-1SG-DECL

‘as the elders told that (story), I would say “they’re talking rubbish!”’ (6:2:88)

Third-person singular and remote past fuse to form the suffix *-yi*. Unlike other past forms, third-person plural forms are marked with the suffix *-numĩ*, and no level I plural marking is possible. The only other forms to take the third plural suffix *-numĩ* are jussive and apprehensive.

PERSON	SINGULAR	PLURAL
1	[máuyahai] mau- ia -ha-i kill- REMPAST -1SG-DECL	[máuyahi] mau- ia -hi-i kill- REMPAST -1PL-DECL
2	[máuyumĩ] mau- ia -umi-i kill- REMPAST -2SG:PAST-DECL	[máuyuhumĩ] mau- ia -uhumi-i kill- REMPAST -2PL:PAST-DECL
3	[máuyi] mau- yi kill- REMPAST :3SG:DECL	[máuyanumĩ] mau- ia -numĩ kill- REMPAST -3PL:DECL

Table 8.10: Paradigm with *-ia* ‘remote past’ following vowel

PERSON	SINGULAR	PLURAL
1	[máutsiahai] mau-tsu- ia -ha-i kill-NEG-REMPAST-1SG-DECL	[máutsiahi] mau-tsu- ia -hi-i kill-NEG-REMPAST-1PL-DECL
2	[máutsiumĩ] mau-tsu- ia -umi-i kill-NEG-REMPAST-2SG:PAST-DECL	[máutsiuhumĩ] mau-tsu- ia -uhumi-i kill-NEG-REMPAST-2PL:PAST-DECL
3	[máutsi] mau-tsu- ia kill-NEG-REMPAST-3.DECL	[máutsianumĩ] mau-tsu- ia -numĩ kill-NEG-REMPAST-3:PL-DECL

Table 8.11: Paradigm with *-ia* ‘remote past’ following consonant (negative *-tsu*)

The third-person singular form appears as *-ia* in non-declarative contexts:

(22) dúik múuntak túki minák áwa awatĩ táya túahamĩ

duik muunta-ka tuki [mina-kũ] [awa awatĩ]
olden adult-FOC always [arrive+IMPFV-SIM+3:SS] [REDUP hit+LOAF:SEQ+3:SS]

ta-**ia** tuahamĩ
come-REMPAST:3 NARR

‘the olden-day people always hit (the tree root) as they were coming (back home), it is said’
(6:2:21)

8.3.4.5 Narrative past *-haku*

The narrative past nominaliser appears suffixed to the unmarked stem. It is not very common except in narratives dealing with the remote past, particularly in a scene-setting function, as in example (23) where it appears in the first clause of a story.

(23) makitʃík múun ahakuí

makitʃiki muunta a-**haku**-i
one adult exist-NARRNR-COP:3:DECL

‘there was also a man’ (Text 1: 2)

(24) maanihakuí hũwĩyã aĩnts kanúshãĩ

maani-**haku**-i [hu-ĩ-ia aĩntsu] [kanusa-hãĩ]
fight-NARRNR-COP:3:DECL [PRX-LOC-ABL person] [*Santiago.River*-COMIT]

‘the people from here used to fight with (the people from) the Santiago River (i.e. Huambisas)’ (6:8:6)

A *-haku* nominalisation typically functions as the main verb of a sentence, with or without a copula suffix, and occasionally as a dependent verb, in which function it may take subordinate verb person marking. These properties are similar to those of the subject nominaliser *-u*.

-haku may appear suffixed to an auxiliary copula *a* to give *a-haku*. The following example illustrates *a-haku* (COP-NARRNR), and also illustrates the use of a separate copula verb to mark plural subject.

(25) *tsampáunum múuntak tú ahakú áinawai*

tsampaunumi muunta-ka [tu a-**haku** a-ina-wa-i]
tsampaunumi adult-FOC [say COP-NARRNR COP-PL:IMPFV-3-DECL]

‘the elders used to call (those manioc leaves) “*tsampaunumi*”’ (6:2:22)

As with other deverbal forms, *-haku* occasionally surfaces with subordinate marking, as in the following example taken from a man’s description of the preparation for battle he underwent as a youth. Note that the idiom ‘dreamed of a waterfall’ means he went to a waterfall and had dreams, that is, hallucinations produced by the psychoactive compounds in the plant preparations he was drinking.

(26) wíthai hintá aintú hakún datimá amú hakún baikuá amú hakún tsaṅkú amú hakún tunanáʃ kahamín áyahai

wi-ita-ha-i [hintá aintu **haku-nu**
1SG-COP-1SG-DECL [path+ACC follow NARRNR-1SG:SS]

[datima amu **haku-nu**
[ayahuasca+ACC drink NARRNR-1SG:SS]

baikua amu **haku-nu**
[angels.trumpet+ACC drink NARRNR-1SG:SS]

[tsaṅku amu **haku-nu**
[tobacco+ACC drink NARRNR-1SG:SS]

tuna-na-ʃa kahama-inu a-ia-ha-i
waterfall-ACC-ADD dream-NR COP-REMPAST-1SG-DECL

‘it is I, following the path,⁹⁴ drinking ayahuasca, drinking angel’s trumpet, drinking tobacco, I dreamed of a waterfall’ (8:2:1)

8.3.5 Future tenses

8.3.5.1 Preliminary remarks

The primary future tense is *-ta / -ti*. It appears as ‘immediate future’ in declarative verbs with first person subject, and appears to have originated in a ‘desirable future’ marker. With second and third person subjects it has the sense of desirable future, as it marks imperative and jussive respectively – the difference is that only in first person can it take a mood suffix.

The same primary future tense can appear with all persons in interrogative and speculative clauses; but in these clause types the sense of desirability is not apparent, and it is interpreted as a simple future tense.

Table 8.12 summarises the different senses of the primary future suffix in different clause types, and the person restrictions.

⁹⁴ ‘following the path’ i.e. following the metaphorical path of preparation for manhood and warfare. This is a standard Aguaruna idiom.

PERSON \ CLAUSE TYPE	DECLARATIVE	IMPERATIVE	JUSSIVE	OTHER
1	immediate future	-	-	future
2	-	imperative	-	future
3	-	-	jussive	future

Table 8.12: Interaction of primary future suffix *-ta* with mood

The immediate future is apparently the historical source of the definite and indefinite future, desiderative and intentional suffixes. The definite future, desiderative and intentional forms also involve the verb *tu* ‘say’ in their development, testifying to a considerable historical depth to the wide use of speech report constructions in Aguaruna.

The indefinite future is composed of the future subject nominaliser *-tinu* plus the verbalising copula suffix, and in this one can see that it has more of a stative meaning - the emphasis is on the subject, who will perform some action in the future, rather than on the action itself, as would be the case with verbal tense marking. The future subject nominaliser itself is derived from the primary future *-ta* and the general nominaliser *-inu*.

In sum, immediate future is historically the **only** future tense morpheme in Aguaruna, and all other future forms, as well as desiderative and intentional, have arisen from grammaticalised combinations of immediate future with other elements.

8.3.5.2 Immediate future

Immediate future is marked with the suffix *-ta*.

(27) *húna hukíthai*

hu-na hu-ki-ta-ha-i
 PRX-ACC take-TRF-IFUT-1SG-DECL

‘I’ll take this’

In **declarative** clauses, this form is only used with first-person singular subject – second and third-person forms imply imperative (§8.3.5.3) and jussive (§8.3.5.5) moods, respectively. The time specified is typically immediate; however, it can be used to indicate

a time further into the future, such as the following day.⁹⁵ Examples range from being more temporal to more intentional. Compare:

- (28) wíʃa diistáhai
 wi-ʃa dii-sa-**ta**-ha-i
 1SG-ADD see-ATT-**IFUT**-1SG-DECL
 ‘I want to see too!’ (6:1:41)

Examples of this suffix in non-declarative clauses are uncommon. I have some examples of its use in interrogative clauses with second and third person subjects:

- (29) a. wáŋka wahíŋmihãĩʃ wikaitámĩ
 waŋka wahi-hu-mi-haĩ-ʃa wikaituqa-**ta**-mi
 why sister.in.law-PERT-2-COMIT-UNCERT walk:PFV-**IFUT**-2SG
 ‘why do you want to go with your sister-in-law?’ (6:4:46)
- b. wáaŋ nĩĩʃ puhutí
 wãã-ki nĩ-ʃa puhu-**ti**
 why-INT:FOC 3SG-UNCERT stay:PFV-**IFUT:3**
 ‘why should she stay?’ (6:4:50)

- (30) wáŋka ahápaʃtami
 waŋka ahapa-tʃa-**ta**-mi
 why give.birth:PFV-NEG-**IFUT**-2SG
 ‘why aren’t you going to give birth?’ (6:6:34)

Note that the third person form is the same as jussive (§8.3.5.5).

The following example shows immediate future with first person subject giving an irrealis type sense to the clause:

⁹⁵ I have been told of at least one verb, *mini* ‘arrive’, that it does not have a immediate future form. Instead, one must use the present form *mina-ha-i* (arrive:IMPERF-1SG-DECL) ‘I am arriving’. I suspect that this is a pragmatic issue arising from the semantics of the verb in question. Crucially, *mini* means to arrive **at the addressee’s location**. So, when you are in a position to say anything about your arrival, you must already be in the vicinity of the addressee, and thus already be arriving – so present tense would be appropriate. The only time one could felicitously use the immediate future form of this verb is when the addressee is **not** present. Perhaps it will come into use when mobile phones make their way into Aguaruna society.

(31) wíʃa wáanuk áikathami

wi-ʃa waã-nu-ka aika-**ta**-hami
1SG-UNCERT why-1SG:SS-FOC do:PFV-**IFUT**-1SG>2SG.OBJ

‘why would I do that to you?’ (6:2:5)

And it is fairly common in clauses with speculative modality (see §8.7.5). Note that in non-declarative clauses the concept of desirability is lost, and the suffix simply indicates future tense.

8.3.5.3 Imperative

Imperative always appears with the perfective form of the root. There is no person suffix on a singular imperative form, and second-person subject is always implied.

(32) [ikímsata]

ikíma-sa-**ta**
sit-ATT-**IMP**

‘sit down!’

In plural forms imperative takes the second person plural suffix *-humí*.

(33) [ikímsatahum]

ikíma-sa-**ta**-humi
sit-ATT-**IMP**-2PL

‘sit down!’

Two incomplete verbs appear only in the imperative form: *haásta* ‘wait!’ and *ʃísta* ‘go on!’. The latter may be used to address people or dogs; there is also a (presumably related) interjection *ʃí* ‘down boy!’, used to scold dogs.

The two incomplete verbs apparently cannot be pluralised, nor do they appear in hortative or jussive forms. I have however heard the form *haásia* ‘wait!’ with the familiar imperative (§8.3.5.4).

8.3.5.4 Familiar imperative

The imperative second person forms sometimes appear in the familiar form, used with family and friends. The basic form is *-kia*, and this replaces the usual *-ta*. Unlike *-ta*,

-kia does not take accent (compare 35a and b); furthermore, it forces root accent (compare 36a and b).

- (34) a. [máikia]
mai-kia
bathe+LOAF-IMP:FAM
'have a bath!'
- b. [máita]
mai-**ta**
bathe.LOAF-IMP
'have a bath!'
- (35) a. [áiʃmaŋ ákia]
aiʃmaŋku a-**kia**
man COP-IMP:FAM
'be a man!'
- b. [áiʃmaŋ atá]
aiʃmaŋku a-**ta**
man COP-IMP
'be a man!'
- (36) a. [húkikia]
hu-ki-**kia**
take-TRF-IMP:FAM
'take (it)!'
- b. [hukíta]
hu-ki-**ta**
take-TRF-IMP
'take (it)!'

In some forms, the combination of attenuative Aktionsart *-sa* and familiar imperative *-kia* fuses into *-sia*. This form takes accent on the /i/ if the root has no inherent accent (see §2.7.1 for details of accent placement).

(37) a. [tʃitʃasía]
tʃitʃa-**sia**
speak-ATT+IMP:FAM
‘speak!’

b. [tʃitʃastá]
tʃitʃa-sa-**ta**
speak-ATT-IMP
‘speak!’

(38) a. [uwásia]
uwa-**sia**
drink:PFV-ATT+IMP:FAM
‘drink!’

b. [uwásta]
uwa-sa-**ta**
drink:PFV-ATT-IMP
‘drink!’

Not all examples of attenuative *-sa* plus familiar imperative *-kia* fuse into *-sia*:

(39) a. [yusákia]
yu-sa-**kia**
eat-ATT-IMP:FAM
‘eat!’

b. [awáttsakia]
awatu-sa-**kia**
hit-ATT-IMP:FAM
‘hit (it)!’

The fusion is phonologically conditioned: if the vowel of the suffix *-sa* is in a position to be elided, the fusional form occurs; otherwise, there is no fusion. Compare the following two examples: in (a), fusion occurs, but in (b) the first person singular object suffix is present, and shifts the suffix *-sa* into a position where it is not a target of vowel elision, so no fusion occurs.

- (40) a. diisía
 dii-sia
 see-ATT+IMP:FAM
 ‘look!’
- a. diínsakia
 dii-hu-sa-kia
 see-1SG.OBJ-ATT-IMP:FAM
 ‘look at me!’

The other Aktionsart suffixes never fuse with familiar imperative – cf. (36) above, with *-ki* ‘transferred action’ Aktionsart.

Although there is no evidence that familiar imperative is in the same morphological slot as imperative (because it is never followed by person suffixes), it is functionally equivalent and formally must be considered a variant of the imperative suffix. Therefore I consider it to fill the same slot.

8.3.5.5 Jussive

Third-person primary future implies jussive mood. Third person singular subject is marked with the suffix *-ti*:

- (41) waỹáti
 wāĩ-a-ti
 enter-HIAF-JUSS
 ‘let him enter!’

It may seem an unnecessary proliferation of terminology to label the third-person form ‘jussive’ when it could be considered third person imperative. There are examples, however, where the pragmatics of the situation preclude interpretation as a command; rather, it must be a wish or desire:

- (42) wíka yutúŋti tusán wakítuqahai
 wi-ka yutu-ha-ti tu-sa-nu waki-a-ha-i
 1SG-FOC rain-PLU-JUSS say-SBD-1SG:SS want-IMPV-1SG-DECL
 ‘I want it to rain’ Lit: *I want, saying “let it rain!”*

Plural jussive is marked with the suffix *-ta* and the third-person plural suffix *-numĩ*.

at the time the data were collected. It is quite plausible that the form *-tatta* represents an intermediate stage, where the [ŋ] has been replaced by [t] (regressive assimilation) before simplification to /tata/.

Whatever the history of the desiderative form, it appears consistently as /tata/ in my data, even where the verb *tu* ‘say’ appears as a separate phonological word (based on accent and pause):

- (47) *dítak núna intsamhúkta túidau ásaŋ*
 dita-ka nu-na intsamahu-ka-**ta** tu-ina-u asā-ka
 3PL-FOC ANA-ACC have.sex-INTS-**IFUT** say-PL:IMPFV-REL COP:SBD/SEQ+3:SS-FOC
 ‘they wanted to have sex with her’ (6:4:50)

The intentional subordinating suffix *-tasa* / *-tatus* on dependent verbs is a phonologically reduced outcome of the desiderative suffix followed by the non-temporal subordinator *-sa* (see §9.3.1).

8.3.5.7 Definite future

The definite future suffix is *-tata*. It is used when the speaker has a more-or-less specific future time in mind, and is typically accompanied by a time adverb.

- (48) a. [kaʃín wítathai]
 kaʃini wi-**tata**-ha-i
 tomorrow go:PFV-**FUT**-1SG-DECL
 ‘I will go tomorrow’
- b. [dosmilséistin taáttahai]
 dosmilseis-tin ta-a-**tata**-ha-i
 2006-TIME come-HIAF-**FUT**-1SG-DECL
 ‘I will come in 2006’

Definite future and singular desiderative are homophonous at the underlying level, both having the form *-tata*, but contrast in the application of syncope to the surface form. Desiderative never undergoes syncope, while definite future always does. The lack of syncope in the desiderative suffix must be due to the historical presence of [ŋ] or [t] closing the first syllable.

Like desiderative, the definite future suffix is most likely derived historically from immediate future *-ta* plus the verb *tu* ‘say’, but definite future is clearly a more fully

grammaticalised suffix: in addition to the application of syncope already noted, forms with definite future have a level I plural suffix on the perfective stem, while desiderative verbs mark plural on the reflex of the verb *tu* ‘say’. Note however that the definite plural suffix may be followed by the simultaneous subordinator *-ku*, as if it were an imperfective stem.

- (49) *núniktʃattakuik*
nuni-ka-tʃa-tata-ku-i-ka
 do.that-INTS-NEG-FUT-SIM-1PL-COND
 ‘if we don’t do that’ (Text 3:17)

It is not clear what the effect is of adding the simultaneous suffix to the definite future stem rather than the imperfective stem; perhaps it is construed as heightening the irrealis sense that the conditional marker brings to the clause.

8.3.5.8 Indefinite future

As mentioned above, indefinite future is in fact composed of the future subject nominaliser *-tinu* plus the verbalising copula suffix *-aita*. These two combine as *-tinaita* in most examples (as in 50a), but the two suffixes are split if the interrogative suffix *-ka* is present (50b).

- (50) a. *dakástinaithai*
daka-sa-tinu-aita-ha-i
 wait-ATT-FUT+NR-COP-1SG-DECL
 ‘I will wait’
- b. *taáʃtinkaitam*
taa-tʃa-tinu-ka-aita-mi
 return-NEG-FUT+NR-POLINT-COP-2SG
 ‘aren’t you going to come back?’

Semantically, the indefinite future contrasts with the definite future in that there is no specific time implied for the action of the verb. In addition, native speakers tend to consider indefinite future to indicate an action that is in the more distant future than the definite future – this most likely arises from the pragmatics, given that the precise time of occurrence is easier to know or predict for events that are closer.

In keeping with the general observation that nominalised verb forms tend to have a more stative or subject-focused reading than fully verbal forms, one can observe that the

indefinite future forms focus less on the action of the verb and more on the subject than the other future forms.

The future nominaliser can also be used without the copula suffix, as is always the case with predicate nominals.

- (51) [taáʃtin]
 ta-a-tʃa-**tinu**
 come-NEG-FUT+NR
 ‘won’t (you) come back?’

Synchronically, indefinite future is a nominalisation rather than a verbal tense suffix. The nominal properties of the future nominaliser *-tinu* are discussed in §10.4.2.

8.3.6 Normative

Normative fuses tense, person and mood in one suffix *-taia(m̃)*. The subject is always first person plural, and the verb is essentially timeless, a statement of “how we do things”. The first person plural subject can be seen when a normative-marked verb takes a same-subject subordinate clause, which is marked first plural, as in the following example:

- (52) hiŋkahá hukí tsukapsá minitáyam̃
 [hiŋka-ha] [hu-ki] [tsukapi-sa]
 [tie.up-PLU:SEQ+1PL:SS] [take-TRF:SEQ+1PL:SS] [carry.on.shoulder-SBD+1PL:SS]
 mini-taiam̃
 arrive-NORM
 ‘having tied it up and taken it we arrive carrying it over our shoulder’ (Text 3:15)

The distinction between the forms *-taia* and *-taiam̃* is not yet understood. Both appear as finite verbs or in non-finite positions. Text 3 is a description of hunting practices, and is most verbs in it take the normative form.

8.4 Apprehensive and prohibitive

8.4.1 Apprehensive *-(a)i*

Apprehensive is functionally the negative counterpart of jussive; unlike jussive, however, apprehensive can be used with all persons. Apprehensive is marked with the suffix *-(a)i*.

(53) [áimák ímamkimas intáhain̄ tus]

aima-a-kũ ímamkima-sã [inta-ha-i-ha tu-sã]
 fill-IMPV-SIM+3:SS take.care-SBD+3:SS [break-PLU-APPR-1SG say-SBD+3:SS]

‘Filling them carefully, lest he should break them’ (lit. ‘saying “may I not break them”’) (7:6:55)

Following the high affectedness Aktionsart suffix *-aw*, the long form *-ai* appears:

(54) [yuwáwaipa]

yu-aw-ai-pa
 eat-HIAF-APPR-2:INT/PROHIB

‘don’t eat it!’

The paradigm of apprehensive combined with person suffixes is illustrated in table 8.13.

PERSON	SINGULAR	PLURAL
1	<i>-i-ha</i> -APPR-1SG	<i>-i-hi</i> -APPR-1PL
2	<i>-i-mĩ</i> -APPR-2SG	<i>-i-humĩ</i> -APPR-2PL
3	<i>-ĩ</i> -APPR+3SG	<i>-i-numĩ</i> -APPR-3PL

Table 8.13: Apprehensive suffixes

First and second persons are marked with the regular independent person suffixes. Third person, however, is marked with nasality of the preceding vowel for singular, as in subordinate verbs, and the suffix *-numĩ* for plural, as in jussive and remote past forms.

The apprehensive forms cannot stand alone, and only appear in speech report constructions. The apprehensive suffix is also the basis of the prohibitive verb forms, discussed below, which can stand as independent utterances.

8.4.2 Prohibitive

Prohibitive is functionally the negative counterpart of imperative, however it is formally quite different, making use of the apprehensive suffix *-(a)i* (§8.4.1). Prohibitive only has second and third person forms. The suffixes *-pa* and *-hupa* are used to mark second person singular and plural respectively, as in content interrogative clauses (§8.6.1):

- (55) a. atʃikáipa
 atʃi-ka-i-pa
 touch-INTS-APPR-2:INT/PROHIB
 ‘don’t touch!’ (Obs)
- b. atʃikáinpa
 atʃi-ka-i-hupa
 touch-INTS-APPR-2PL:INT/PROHIB
 ‘don’t touch!’

However, second person plural may also be marked with the suffix *-pa* followed by the regular second person plural marker *-humí*, as in the following example; this is parallel to the positive imperative, marked with *-ta* for singular and *-ta-humí* (IMP-2PL) for plural.

- (56) wáinkam ihuípahum
 wainaka-mi ihu-i-pa-humi
 in.vain-2 stab-APPR-2:INT/PROHIB-2PL
 ‘don’t stab it in vain!’ (6:4:160)

Negative jussive forms also use the apprehensive suffix, and differ from apprehensive forms only in the addition of the third-person prohibitive marker *-ka*, as in the following examples:

- (57) a. hákaiŋka
 ha-ka-ĩ-ka
 die-INTS-APPR+3SG-PROHIB:3
 ‘may he not die!’
- b. hákainmiŋka
 ha-ka-i-numĩ-ka
 die-INTS-APPR-3PL-PROHIB:3
 ‘may they not die!’

The *-ka* of these forms does not appear anywhere else.

8.5 Hortative

Hortative expresses a suggestion or exhortation, and always implies first-person plural subject. Although functionally similar to imperative, it is formally quite distinct, being marked with the suffix *-mi*.

- (58) yuwámi
yu-a-**mi**
eat-HIAF-**HORT**
'let's eat!'

Hortative fuses person and mood in its meaning, and disallows any tense specification, and as a result it is impossible to say with certainty which slot it belongs to. It never co-occurs with a tense or mood suffix, and unlike imperative, it never takes a person suffix. There are, however, certain formal features that hortative shares with the suffixes of slot A. The main property is that hortative only occurs with perfective stems. This stem restriction is shared by the tense, imperative, jussive and apprehensive, but not by the mood/modality suffixes.

The second important property is that some slot A suffixes can impart imperative mood to the verb and thus block the addition of mood/modality suffixes, but no mood/modality suffix blocks the presence of tense suffixes. Since hortative cannot co-occur with either tense or mood suffixes, it has more in common with the other slot A suffixes that impart imperative mood than with the mood/modality suffixes.

Hortative may be pluralised and negated using the regular perfective plural marker *-aha* and the negative marker *-tʃa*:

- (59) a. [yuwáwaŋmi]
yu-aw-**aha**-mi
eat-HIAF-**PL**-HORT
'let's eat!' (addressing a group)
- b. [wítʃami]
wi-**tʃa**-mi
go:PFV-**NEG**-HORT
'let's not go'

A long form of the hortative suffix *-mita* is occasionally encountered:

(60) [wimíta]
 wi-**mita**
 go:PFV-HORT(LONG)
 ‘let’s go!’

This form almost certainly has its origin in the common device of reinforcing one’s own words by couching them as a speech report (§12.5.4), arising historically from a construction *wi-mi ta-ha* (go-HORT say+IMPV-1SG:EXCL) ‘let’s go, I say!’.

8.6 Subject

Subject is marked for all persons. Plural is obligatorily marked in first and second person. Level I plural suffixes may appear with all persons, however these are not obligatory. The obligatory SAP plural forms have been described as dual in some previous analyses, however my data suggest that they are not specifically dual: rather there is a tendency to interpret them as paucal in contrast to the plural-marked forms, particularly in elicitation contexts.

8.6.1 First and second person subject

Table 8.15 gives the first and second person suffixes for declarative, present tense verbs.

PERSON	SINGULAR	NON-SINGULAR
1	<i>-ha</i>	<i>-hi</i>
2	<i>-mí</i>	<i>-humí</i>

Table 8.14: First and second person markers on non-past declarative verbs

The second person non singular marker *-humí* can be analysed as a plural suffix **-hu* plus the second person marker *-mí*. The plural suffix:

1. only occurs with second person subject;
2. always directly precedes the second person suffix *-mí* or *-pa* (in interrogative and prohibitive clauses)
3. is independent of the plural suffixes *-ina* and *-aha*

Thus the sequence *-hu-mí* forms a de facto second-person plural suffix, parallel to the first plural *-hi*.⁹⁷

In past tense verbs, second person is marked with *-umí* singular and *-uhumí* plural, as shown in the following table:

PERSON	SINGULAR	NON-SINGULAR
1	<i>-ha</i>	<i>-hi</i>
2	<i>-umí</i>	<i>-uhumí</i>

Table 8.15: First and second person markers on past declarative verbs

The initial /u/ is presumably the reflex of some historical morpheme, but is synchronically unanalysable. It is independent of any past-tense marker. These forms provide a strong motivation to consider *-humí* and *-uhumí* to be morphologically simple suffixes synchronically: if *-hu* were synchronically a plural marker, we would expect the past tense form to surface as ***-hu-umí* (PL-2:PAST).

In content interrogative and prohibitive clauses, second person is marked with the suffixes *-pa* (singular) and *-hupa* (plural). Note that polar interrogative does not trigger this form – compare (a) and (b) below:

(61) a. *yáitpa*

ya-aita-pa
 who-COP-2SG:INT/PROHIB
 ‘who are you?’

b. *amikáitam*

ami-ka-aita-mí
 2SG-POLINT-COP-2SG
 ‘is it you?’ (standard greeting when not in the context of a house visit)

⁹⁷ 1PL *-hi* could have arisen from an earlier sequence **-hu* (PL) plus **-i* (1p), with a subsequent phonological merger of the sequence /u-i/ to /i/. The suffix *-i* marks 1PL in conditional clauses.

- (62) wahúk háapa
 wahuka ha-a-pa
 how be.sick-IMPV-2SG:INT/PROHIB
 ‘in what way are you sick?’ (Text 2:32)

The same suffixes are also used to mark second person subjects in prohibitive clauses (see examples in §8.4.2).

8.6.1.1 Plural SAP subject

First and second person distinguish singular from non-singular number at level II. First person plural has a fusional suffix *-hi*. The second person plural suffix is *-humi*. All persons can be optionally marked as plural with the level I suffixes *-ina* (imperfective) plural and *-aha* (perfective) plural. Forms marked only with the obligatory SAP plural forms generally have a paucal reading, as opposed to the plural reading of double-marked forms.

- (63) a. átum wáinhumi
 atumi waina-a-humi-i
 2PL see-IMPV-2PL-DECL
 ‘you (pl) are seeing’
- b. átum táuqamí
 atumi tai-a-humi-i
 2PL dig-IMPV-2PL-DECL
 ‘you (pl) are digging’

Corbera (1994: 235-6) analyses *-ina* as plural and *-hu* as dual, and claims that the plural suffix must co-occur with the dual. This would make the dual less marked than the plural, which goes against the markedness ranking presented in Corbett (2000). In fact, *-humi* is better described as ‘non-singular’, as its meaning is not restricted to dual. It means ‘more than one but not many’. The same holds for first person *-hi*.

8.6.2 Third-person suffixes

In contrast to first and second person, which use the same suffixes in finite verbs almost invariably, third person takes a range of suffixes. If we consider the variants that

appear with the three primary suffixes, the situation is relatively straightforward, as laid out in table 8.16:

PRIMARY SUFFIX	THIRD PERSON FORM:		
	DECLARATIVE	POLAR INTERROGATIVE, EXCLAMATORY	OTHER
NONE	<i>-wa / -u</i>		<i>-∅</i>
RECENT PAST <i>-ma</i>	<i>-mĩ</i>	<i>-ma</i>	
REMOTE PAST <i>-ia</i>	<i>-yi</i>	<i>-ia</i>	
IMMEDIATE FUTURE <i>-ta</i>	<i>-ti</i>		

Table 8.16: Third person singular subject marking with primary suffixes

The *-u* variant of the third-person suffix *-wa* appears when the preceding (stem-final) vowel is syncopated (see §2.6.1.13).

There are two splits based on mood/modality of the clause: *-wa / -u* appears in declarative, polar interrogative and exclamatory present-tense verbs, while third person is zero-marked in other clause types. Recent past and remote past do not mark third person in non-declarative clauses. Immediate future with third person subject (i.e. jussive) always appears as *-ti*.

The variants shown in table 8.16 hold for whichever primary suffix appears **last** in a grammaticalised sequence. Thus in the definite future and desiderative forms, which historically consisted of primary future *-ta* followed by a present tense form of the verb *tu* ‘say’, the final element has no primary suffix: so the third-person suffix used is the basic form *-wa ~ -u*.

As noted above (§8.3.3), third-person recent past may be decomposable as recent past *-ma* and a third person suffix *-ĩ*, alternating with *-∅* in non-declarative clauses. Similarly, third-person remote past and immediate future forms could be decomposed as a third person suffix **-i* added to remote past *-ia* (only appearing in declarative clauses) and immediate future *-ta*.

Table 8.17 summarises the variants of subject markers encountered. The forms in shaded cells are fusional, combining the tense suffix in the leftmost column with the person indicated.

ENVIRONMENT	SINGULAR			PLURAL		
	1	2	3	1	2	3
Present, definite future	<i>-ha</i>	<i>-mí</i>	<i>-wa / -u</i>	<i>-hi</i>	<i>-humí</i>	<i>-wa / -u</i>
Immediate future <i>-ta</i>			<i>-tí</i>	–		<i>-numĩ</i>
Immediate past $-\emptyset$		<i>-umí</i>	<i>-ĩ</i>	<i>-hi</i>	<i>-uhumí</i>	<i>-ĩ</i>
Recent past <i>-ma</i>			<i>-mĩ</i>			<i>-mĩ</i>
Intermediate/distant past <i>-(a)ma...ia</i>			<i>-(a)mayi / -(a)bi</i>			<i>-(a)mayi / -(a)bi</i>
Remote past <i>-ia</i>			<i>-yi</i>			<i>-numĩ</i>
Apprehensive		<i>-mí</i>	<i>-N</i>		<i>-mí</i>	<i>-numĩ</i>
Prohibitive		–	<i>-pa</i>	<i>-N-ka</i>	–	<i>-hupa</i>
Subordinate verb	<i>-nu</i>	<i>-mí</i>	<i>-N</i>	$-\emptyset / -i$	<i>-humí</i>	<i>-N</i>

Table 8.17: Subject markers and morphological environments

8.7 Mood and modality suffixes

Mood and modality are functional categories that do not always map neatly to formal morphological structures. The two form a single formal paradigm, and all finite clauses are obligatorily marked. For the most part, mood and modality are marked with verbal suffixes. Interrogative is a partial exception: interrogative mood may be marked on the verb OR elsewhere in the clause. In the latter case, the verb remains unmarked for mood. Imperative and jussive are formally marked in the same slot as the tense paradigm, due to their historical development from immediate future *-ta*, but they also impart mood to the clause, so no separate mood suffix appears on imperative or jussive verbs. Apprehensive, prohibitive and hortative also occupy the same slot as the tense suffixes, as described above (§8.3.6). These three suffixes impart mood to the verb and block the addition of any suffix in slot C.

A total of thirteen clause types can be recognised by their distinct morphological marking in independent verbs. They are listed in table 8.18:

MOOD	CLAUSE TYPE	MARKER
Indicative	Declarative	<i>-i</i>
	Counter-expectation	<i>-hama</i>
	Narrative	<i>tuwahamĩ</i>
	Speculative	<i>-tai</i>
Interrogative	Polar interrogative	<i>-ka</i> (or $-\emptyset$ if marked elsewhere in the clause)
	Content interrogative	suppression of apocope (clause contains interrogative word)
	Tag question	<i>-api</i>
Imperative	Imperative	(marked in slot A)
	Jussive	(marked in slot A)
	Hortative	(marked in slot A)
	Apprehensive	(marked in slot A)
	Prohibitive	(marked in slot A)
Exclamative	Exclamative	$-\emptyset$

Table 8.18: Formally marked moods/modalities

Of the thirteen types, eight are marked in slot C, as listed in table 8.19:

CLAUSE TYPE	SUFFIX
Declarative	<i>-i</i>
Counter-expectation	<i>-hama</i>
Narrative	$-\emptyset$ # <i>tuwahamĩ</i>
Speculative	<i>-tai</i>
Polar interrogative	<i>-ka</i> / $-\emptyset$
Content interrogative	suppression of apocope
Tag question	<i>-api</i>
Exclamative	$-\emptyset$

Table 8.19: Mood/modality suffixes in slot C

In non-interrogative, non-imperative clauses, zero-marked exclamative mood marking contrasts with the suffixed forms, so this can be considered *zero-marked* rather than unmarked. In other clause types with no verbal suffix (content interrogative and some polar interrogative clauses) there are formal indicators of clause type elsewhere in the clause – in such cases, then, the verb may be considered unmarked.

Interrogative and speculative modalities may mark other constituents in the clause in addition to the verb, as discussed below.

8.7.1 Declarative

Declarative mood is marked by the suffix *-i* (example 64). Following regular phonological rules, this suffix fuses with a preceding vowel /i/ or /i/ (65).

- (64) [nihámʃin kitámahai]
 nihamantʃi-na kitama-a-ha-i
masato-ACC be.thirsty-IMPV-1SG-DECL
 ‘I’m thirsty for *masato* (manioc beer)’

- (65) a. [níhamãʃ kitámahi]
 nihamantʃi kitama-a-hi-i
masato be.thirsty-IMPV-1PL-DECL
 ‘we are thirsty for *masato*’

- b. [kaʃín takástatmi]
 kaʃini taka-sa-tata-mi-i
 tomorrow work-ATT-FUT-2SG-DECL
 ‘tomorrow you will work’

The presence of the declarative suffix prevents apocope from applying, and its absence in non-declarative clauses may be inferred from the fact that final vowels do elide:

- (66) a. [numíʃ tsupíkmaŋ]
 numi-ʃa tsupi-ka-ma-hi
 wood-UNCERT cut-INTS-RECPAST-1PL
 ‘did we already cut wood?’
- b. [máakmík puhám]
 ma-a-ku-mi-ka puha-mi
 bathe-IMPV-SIM-2SG:SS-POLINT live+IMPV-2SG
 ‘are you bathing?’

Declarative is the functionally least marked mood, expressing a neutral statement of fact.

8.7.2 Polar interrogative

Polar questions are marked with the polar interrogative suffix *-ka*. The polar interrogative suffix is remarkably mobile; it can appear in two different verbal suffix positions and also on nominal constituents and subordinate verbs. When it appears on the verb, the polar interrogative suffix typically follows the person suffixes, as with other mood/modality markers.

- (67) a. minámik
mina-mi-**ka**
arrive+IMPFV-2-POLINT
'are you arriving?' (standard greeting when receiving guests)
- b. nihamáŋ áwak
nihamantŋi a-wa-**ka**
masato exist-3-POLINT
'is there any *masato* (manioc beer)?'

However, polar interrogative immediately follows the recent past suffix *-ma*, and thus *precedes* the person suffix in such cases:

- (68) yuwámkum
yu-a-ma-**ka**-umi
eat-HIAF-RECPAST-POLINT-2:PAST
'have you eaten?'

The polar interrogative suffix may appear on the full (formally subordinate) verb in an auxiliary construction, as in example (66b) above. As noted above, interrogative mood is marked only once in a clause, so in this case the finite verb takes no mood/modality marking. In the following example the polar interrogative suffix appears on a subordinate clause:

- (69) wíi numín tsupíktŋau asámtaiŋ támi
[wi numi-na tsupi-ka-tŋau asa-mataĩ-**ka**] ta-mi
[1SG wood-ACC cut-INTS-NEG:REL COP:SBD/SEQ-1/3:DS-POLINT] say+IMPFV-2
'are you saying I didn't cut wood?'

The polar interrogative suffix can also appear on nominals, and then precedes the copula suffix if present:

(70) a. [huká]

hu-**ka**

PRX-POLINT

‘this one?’

b. [amikáitam]

ami-**ka**-aita-mi

2SG-POLINT-COP-2

‘is it you?’ (standard greeting when not in the context of a house visit)

c. [pĩŋkiŋkait]

pĩŋkiha-**ka**-aita

good-POLINT-COP:3

‘is it good?’

Such examples suggest that the polar interrogative suffix only appears on predicate nominals, that is, heads of clauses. However, a nominal argument may also take the polar interrogative suffix, in which case the verb appears unmarked:

(71) a. [auká tu wikáitam]

au-**ka** [tu wikaiuŋa-tu-a-mĩ]

3-POLINT [say walk-1SG.OBJ-IMPV-2]

‘Is it him you keep talking to me about?’

b. [minaká túhutmi]

mi-na-**ka** tu-hu-tu-a-mi

1SG-ACC-POLINT say-APPLIC-1SG.OBJ-IMPV-2

‘are you talking to me?’

c. [tsabáuk uwáŋtatam]

tsamau-**ka** uwa-ha-tata-mi

chapo-POLINT drink-PLU-FUT-2

‘will you drink *chapo* (fermented banana drink)?’

The polar interrogative suffix takes the accent and does not undergo apocope when it is suffixed to a pronominal argument (examples a and b above).

8.7.3 Content interrogative

When there is a question word in the clause the verb is similarly unmarked for mood. In addition, apocope is suppressed for all verbs in a clause containing an interrogative lexeme:

(72) a. tuwí puhámi
tu-ĩ puha-mi
where-LOC live+IMPFV-2

‘where do you live?’

b. yáduwaita
ya-nau-aita
who-POSS-COP:3

‘whose is it?’

In content interrogative clauses second person subject is marked with the suffixes *-pa* (singular) and *-hupa* (plural) – see §8.6.1.

Nominal arguments are typically marked with the uncertainty suffix *-fa* in interrogative clauses, and an interrogative-marked nominal on its own can form a question (see §11.5.2 for further discussion):

8.7.4 Tag question

Tag questions are marked with the suffix *-api*, forming a question that expects a positive answer.

(73) a. ami-*fa* wi-a-mi-**api**
2SG-ADD go-IMPFV-2-TAG

‘you’re going too, aren’t you?’

b. piŋkiha-**api**
good-TAG

‘it’s good, isn’t it?’ (Obs)

(74) nĩ-*fa* yu-a-ta-ha-**api** tu-sã ta-a-u-ai
3SG-ADD eat-HIAF-IFUT-1SG-TAG say-SBD+3:SS come-HIAF-REL-COP:3:DECL

‘she also arrived thinking “I’m going to eat”’ (6:5:62)

The final /i/ is lost when an auxiliary verb is present:

- (75) d̥ikas aʃi aĩntsu-ti hina-tinu-**ap** a-ina-hi
 truly all person-SAP die:PL-FUT+NR-TAG COP-PL:IMPFV-1PL
 ‘truly, all of us mortals will die, won’t we?’ (2:2:205)

There is no marking of constituents triggered by tag questions, but examples such as (73b) and (75) show that, like polar interrogative, the tag question marker may be suffixed to a nominal argument of the clause. Tag questions are relatively rare in my corpus, being more common in conversation than in narrative. In particular, I have no examples where the verb has negative polarity, for example *you’re not going too, are you?*. There is no obvious reason why such a constructions should not be possible, and future research should test this.

8.7.5 Speculative

8.7.5.1 Forms of speculative

There are two speculative suffixes: *-tai* always appears on the verb, and *-tsu* / *-tsa* appears either on a nominal constituent (as *-tsu*), or on the verb (as *-tsa*). The difference between the two constructions is not clear to me, although the *-tai* verbal form may indicate less certainty than the *-tsa-tai* form. Note the distinction in translations given for the minimal pair in (76):

- (76) a. [numín tsupíktan̥satai]
 numi-na tsupi-ka-ta-ha-**tsa-tai**
 wood-ACC cut-INTS-IFUT-1SG-SPEC1-SPEC2
 ‘I think I’ll cut wood’
- b. [numinás tsupíktan̥tai]
 numi-na-tsu tsupi-ka-ta-ha-**tai**
 wood-ACC-SPEC1 cut-INTS-IFUT-1SG-SPEC2
 ‘perhaps I’ll cut wood’

That the *-tsa-tai* form is morphologically complex, at least historically, is shown by its potential for discontinuous realisation (cf. example 81 below). There is no clear division of meaning between the two elements. A very suggestive point, however, is that in a clause marked as speculative with the *-tai* form, nominal arguments are consistently marked with the nominal speculative suffix *-tsu*; so both of the speculative constructions involve a morpheme of the form /tsV/ in the clause. With *-tai* this is a suffix on a nominal argument,

and with *-tsa-tai* it is part of the verb.⁹⁸ Compare the examples in (77), which are apparently equivalent in meaning. The speculative suffix falls on the noun in (77a), but when the verb takes the simultaneous suffix *-ku* and forms part of an auxiliary construction in (77b), it takes the speculative suffix itself.

(77) a. [numinás tsúpiatai]

numi-na-**tsu** tsupi-a-**tai**
 wood-ACC-SPEC1 cut-IMPFV:3-SPEC2

‘perhaps he is cutting wood’

b. [numín tsúpiakus puhátai]

numi-na tsupi-a-ku-**tsu** puha-**tai**
 wood-ACC cut-IMPFV-SIM-SPEC1 live+IMPFV-SPEC2

‘perhaps he is cutting wood’

So there is good evidence that the nominal speculative suffix *-tsu* is cognate with the first element of the *-tsa-tai* speculative suffix.

8.7.5.2 Tense restrictions on speculative

The two forms apparently have the tense restriction that they only appear with the primary future suffix *-ta*. I have examples of past forms marked with recent past *-ma* and intermediate past *-ma...ia*.

8.7.5.3 Person marking with speculative

Speculative mood is not common in texts, and all of the forms except for third singular and plural were elicited.

Person is marked with *-ha* for first and *-mí* for second person, as in regular declarative clauses. The *-tai* forms do not mark third person:

⁹⁸ Note that the nominal speculative suffix *-tsu* is at the outermost morphological level, the same level as polar interrogative *-ka* and additive *-fa(kama)*, both of which also appear on verbs.

- (78) a. [pípínas wawiknúmak ayátai]
 pípína-tsu wawiku-numa-ka aya-**tai**
macana-SPEC1 *Wawik*-LOC-FOC exist:PL:IMPFV:3-SPEC2
 ‘surely there are *macana* fish in the Wawik River’
- b. [mína h̃ũḡahúis puhátai]
 mi-na h̃ũḡa-hu-ĩ-tsu puha-**tai**
 1SG-ACC house-PERT:1SG-LOC-SPEC1 live+IMPFV:3-SPEC2
 ‘he’s probably at my house’
- (79) a. [wainkámatai]
 waina-ka-ma-**tai**
 see-INTS-RECPAST:3-SPEC2
 ‘he probably saw’
- b. [wainkátitai]
 waina-ka-ti-**tai**
 see-INTS-IFUT:3-SPEC2
 ‘he will probably see’

Note however that the primary immediate future suffix *-ta* appears as *-ti* in third-person forms (cf. jussive).

Table 8.20 summarises the person marking with the *-tai* form of speculative mood.

PERSON	SINGULAR	PLURAL
1	<i>-ha</i>	<i>-hi</i>
2	<i>-mí</i>	<i>-humí</i>
3	<i>-∅</i>	<i>-∅</i>

Table 8.20: Person marking with *-tai* speculative

In *-tsa-tai* forms first and second person marking is the same, but third-person is only unmarked in past forms. In present forms, the regular *-wa* suffix is used.⁹⁹ In future forms, third person singular is marked with *-pa* and third plural with *-npa* (presumably underlying /nVpa/), both suffixed to the third person form of the primary future suffix *-ti*.

⁹⁹ But perhaps only with the copula verb *a*; further work is required to confirm this.

- (80) a. wainkátpastai
 waina-ka-ti-pa-**tsa-tai**
 see-INTS-IFUT:3-3SG-SPEC1-SPEC2
 ‘perhaps he will see’
- b. wainkáŋtinpastai
 waina-ka-aha-ti-npa-**tsa-tai**
 see-INTS-PL-IFUT:3-3PL-SPEC1-SPEC2
 ‘perhaps they will see’

In first and second person recent past forms, the person suffix intervenes between the two elements of *-tsa-tai*.

- (81) a. wainkámŋtsaŋtai
 waina-ka-ma-**tsa-ha-tai**
 see-INTS-RECPAST-SPEC1-1SG-SPEC2
 ‘perhaps I saw’
- b. wainkámŋsumtai
 waina-ka-ma-**tsa-mi-tai**
 see-INTS-RECPAST-SPEC1-2-SPEC2
 ‘perhaps you saw’

8.7.5.4 Speculative with copula

Example (82) was offered in elicitation as a possible response to a question such as “Have you seen my wife? She’s wearing red.”:

- (82) wainkámhai nuwán haantʃi kapántun nuŋkuáhun – dútsatai
 waina-ka-ma-ha-i [nuwa-na [haantʃi kapantu-na]
 see-INTS-RECPAST-1SG-DECL [woman-ACC [clothes red-ACC]
 nuŋkua-ha-u-na] **nu-tsa-tai**
 wear-PLU-REL-ACC] ANA-SPEC1-SPEC2
 ‘I saw [a woman wearing [red clothes]] – that must have been her’

Note that the speculative suffix *-tsa-tai* appears directly suffixed to the anaphoric demonstrative *nu*, with no copula suffix intervening. Compare (83), where the *-tai* form is suffixed to the nominal *pɨŋkʰa* ‘good’ plus the full (declarative) form of the copula suffix:

(83) swísanmayas imá piŋkihaitai

Suiza-numa-ia-**tsu** [ima piŋkiha-aita-**tai**]
Switzerland-LOC-ABL-SPEC1 [INTENS good-COP:3:DECL-SPEC2]

‘surely the one from Switzerland is better’ (referring to a knife)

This construction also contrasts with example (84) below, where the counter-expectation suffix follows the exclamative form of the copula suffix. As discussed in the noun chapter, it is likely that the exclamative copula suffix has arisen from a reinterpretation of the final /i/ of the copula suffix as the declarative suffix *-i*, however there is good evidence that the exclamative form of the copula is synchronically a separate suffix,¹⁰⁰ and this is what is combining with the counter-expectation modality, while speculative combines with the regular copula suffix.

8.7.6 Counter-expectation

Counter-expectation is marked with the suffix *-hama*. This suffix never undergoes vowel elision. Counter-expectation modality is used when the speaker judges that the information conveyed is new, surprising or counter to the expectation of the addressee. There is no value judgement attached – the situation described may be positive or negative. It is also often used with a mirative overtone, as in (84a), from a story in which a woman has been lost in the forest and suddenly finds herself back in her own garden, and (84b), from a story about a community whose members are being murdered, as they finally realise who is killing them:

(84) a. húu mína ahahuaháma

hu mi-na aha-hu-a-**hama**
PRX 1SG-ACC garden-1SG-COP-CNTR.EXP

‘this is my garden!’ (6:1:54)

¹⁰⁰ By reinterpreting final /ai/ as COPULA-DECLARATIVE, dropping the final /i/ gives zero-marked exclamative mood. Where the nominal stem after apocope is consonant-final, however, the copula takes the form /i/, and the exclamative copula *-a* can also be added to such forms. This is clearly not simply the combination NOUN-COPULA without the final /i/, so synchronically exclamative copula *-a* must be a separate suffix.

b. áuk amupaháma

au-ka amu-pa-**hama**
DST-FOC terminate-1PL.OBJ:3-CNTR.EX

‘he is killing us!’ (6:3:22)

(85) kamĩ núwi aikaḡháma

kamĩ nu-i aika-a-ha-**hama**
truly ANA-INSTR do-IMPV-1SG-CNTR.EX

‘really, it’s because of this that I do it’ (6:5:30)

(86) ámi húu humáinaitamhama

ami hu hu-mai-inu-aita-mi-**hama**
2SG PRX take-POT-NR-COP-2SG-CNTR.EX

‘you can take this’ (6:7:25)

Note that third person subject is unmarked in counter-expectation modality, as with speculative.

8.7.7 Exclamative

Exclamative mood is marked with no suffix. This form is used in exclamations, normally accompanied by raised voice. Exclamative mood is only possible in present tense.

(87) atʃikáipa táha

atʃi-ka-i-pa ta-ha-Ø
touch-INTS-APPR-2 say+IMPV-1SG-EXCL

‘“don’t touch it” I say!’

The following example (cf. example 21 above) is couched in a speech report.

(88) núna múun áuḡmatuinaḡĩ wáinkas táwa túyahai

nu-na muunta auḡmatu-ina-ku-ĩ wainakasã ta-wa-Ø
ANA-ACC elder tell-PL:IMPV-SIM:1/3-DS in.vain+3 say+IMPV-3-EXCL

tu-ia-ha-i
say-REMPAST-1SG-DECL

‘as the elders told that (story), I would say “they’re talking rubbish!”’ (6:2:88)

The nominal copula suffix has a third-person exclamative form *-a*, which appears to be the result of the form *-ai* being reinterpreted as COP-DECL. This interpretation is supported by the fact that the copula suffix appears as *-a* in some other non-declarative

Chapter 9: Verb IV: Subordinate verbs

9.1 Introduction

As noted at the beginning of the description of verbal morphology, subordinate verbs fall into two types, distinguished by the presence or absence of obligatory marking for person of the subject. The two types also differ in their switch-reference marking, with non-inflecting subordinate verbs indicating the role taken by a common argument in both the subordinate and the controlling clause. In this latter property, the non-inflecting type are similar to relative clauses, and there is some formal overlap.

This chapter describes the formal morphological properties of all subordinate verbs: person-marking forms are described in §9.3, and the person and switch-reference marking paradigm is described in §9.4. Non-inflecting subordinators are described in §9.5. The functional properties of all subordinate verbs are described in detail in Chapter 12.

9.1.1 Definition of subordinate verb

Below I define subordinate verbs by contrasting them with finite verbs and relativised verbs.

9.1.1.1 Subordinate verb distinct from finite verb

A subordinate verb requires a controlling verb, and can never head an independent clause. It is characterised by obligatory person marking for subject, using markers that are different from those used with finite verbs, and only subordinate verbs take different subject, conditional and concessive suffixes – that is, suffixes marking switch-reference and interpositional relations. Subordinate verbs do not take verbal tense and mood/modality marking, and they share tense and sometimes mood/modality with their controlling verb. Subordinate verbs may be marked with the same mood/modality markers that NP and adverbial constituents take. Further discussion of mood and modality as clausal categories is in §11.5.

Table 9.1 summarises the categories marked on dependent and independent verbs.

	FINITE	SUBORDINATE
MOOD/MODALITY	✓	–
TENSE	✓	–
ASPECT	✓	Some
PERSON	✓ ^a	✓ ^a
SS/DS	–	✓
COND/CONCESS	–	✓

^a Different sets of person suffixes are used with dependent and independent verbs

Table 9.1: Comparison of categories marked on dependent and independent verb forms

9.1.1.2 Subordinate verb distinct from relativised verb

The criterial definition of a relativised verb is the ability to modify an NP, a property not shared by any other verbal form. The ability to modify an NP confers a morphological distinction, in that only relativised verbs can take accusative, pertensive and vocative marking.¹⁰¹ Subordinate verbs are obligatorily marked for person while relativisations are not, but examples do exist of relativised verbs taking person suffixes, from both the subordinate and finite sets.

Subordinate verbs may take clause-level modality suffixes that typically appear on NP constituents (speculative *-tsu*, uncertainty *-fa* and polar interrogative *-ka*), but this does not necessarily reflect a greater nominality of the subordinate forms; rather, the suffixes may simply have a low selectivity. Three suffixes (different subject, conditional and concessive) that appear only on subordinate verbs are historically extensions of nominal suffixes (locative, focus and additive respectively).

Table 9.2 summarises the differences between subordinate verbs and relativised verbs.

	CAN MODIFY NP	PERSON MARKING
SUBORDINATE VERB	no	obligatory
RELATIVISED VERB	yes	occasionally

Table 9.2: Comparison of dependent and nominalised verb forms

¹⁰¹ But note that nominalised and relativised verbs may be limited in their nominal morphology they can take – see §10.2.2.

9.1.1.3 Syntactic status of subordinate verbs

All of the subordinate verbs in the following examples head clauses. I use the term **subordinate** in anticipation of a discussion and justification presented in §12.2.1. There is some overlap between subordinate clauses and full verbs in auxiliary constructions, as auxiliation has historically developed from subordination; the difference is that auxiliary constructions are syntactically monoclausal, as was shown in §6.4.

9.2 Morphological positions

Level II consists of four positions in subordinate verbs, as shown in figure 9.1. Note that slots B and C are applicable only to inflecting subordinate verbs. Non-inflecting forms take a subordinating suffix in slot A, and may take suffixes from slot D.

ROOT + level I affixes

- A: Subordinating suffix
- B: Person
- C: Different subject $-(n)\tilde{i}$
- D: (i) Conditional $-ka$, concessive $-fa(kama)$
(ii) Mood/modality suffixes

Figure 9.1: Level two suffix ordering in subordinate verbs

- A. The perfective and imperfective stems are zero-marked when heading subordinate clauses, and directly receive person/DS suffixes.
- B. The subject in subordinate verbs is marked with a different set of suffixes from those used with finite verbs, as described in §9.4.
- C. Different subject marking is fused with subordinator and person marking for most first and third person forms. In second person forms, a separate DS marker $-(n)\tilde{i}$ can be identified. I suggest below that the different subject suffix is a grammaticalised extension of the locative suffix $-(n)\tilde{i}$.
- D. All the suffixes of slot D appear on NPs and adverbial constituents in addition to subordinate clauses.
 - i. Conditional and concessive suffixes express interpropositional logical relations, and are marked by suffixes that are historically extensions of the nominal focus and additive suffixes respectively

- ii. The speculative and uncertainty suffixes appear on subordinate verbs where the controlling verb has speculative modality or interrogative mood, respectively.

9.2.1 Subclasses of subordinate verb

Inflecting subordinate verbs naturally fall into two major groups, based on whether they appear only in same-subject clauses (four types); in both same-subject and different-subject clauses (three types) or only in different-subject clauses (one type). This three-way division is mostly reflected morphologically: SS subordinate verbs take transparent marking, but DS verb morphology is transparent only in second person. The first and third person markers are partly fusional, and may be etymologically unrelated to the second person forms (§9.4.2).

A further morphological difference is that concessive and conditional markers never appear on the four SS-only verb types, although they can appear on SS verbs (§9.6).

A minor distinction is the presence or absence of a subordinating suffix; the perfective and imperfective stems can head subordinate clauses with no overt subordinating suffix, taking person and/or DS marking directly.

Table 9.3 summarises the morphological possibilities of subordinate verbs that separate them into three groups. The DS forms for non-temporal and sequential verbs (rows 1 and 3) are not clearly etymologically related to the SS forms, although they are functionally part of the paradigm (§9.4.2).

CLASS	TYPE	STEM	SUFFIX	SS	DS	CONCESS	COND
1	terminative	unmarked	<i>-kama</i>	✓	–	–	–
	intentional	perfective	<i>-tasa / -tatus</i>	✓	–	–	–
	frustrative	perfective	<i>-takama</i>	✓	–	–	–
	repetitive	imperfective	<i>-kawa</i>	✓	–	–	–
2	non-temporal	unmarked	<i>-sa(SS) / -taī (DS)</i>	✓	✓	✓	✓
	simultaneous	imperfective	<i>-ku</i>	✓	✓	✓	✓
	sequential	perfective	<i>-∅</i>	✓	✓	✓	✓
3	imperfective DS	imperfective	<i>-∅</i>	–	✓	✓	no data

Table 9.3: Suffixal possibilities of subordinate verb forms

9.3 Subordinating suffixes

Six suffixes form inflecting subordinate verbs, as listed in table 9.3 along with the verb stem they select. Below I give details of the morphological properties of each of the suffixes.

9.3.1 Intentional *-tasa* / *-tatus*

The intentional suffix has two allomorphs: *-tatus* is used for third person subjects (example 1) and *-tasa* followed by the person suffix for all other persons (example 2).

- (1) [utʃi akai-kĩ] [yumiŋmat hĩuʒa-**tatus**] [wi-tatamana]
 [youth go.down-TRF+3:SS] [well arrive:PFV-INTENT+3:SS] [go-A/S>O/E]

ikam_yawaã tipī-hu-ka-u-ai]
 jaguar lie.down-APPLIC-INTS-REL-COP:3:DECL]

‘the youth, having gone down the hill, going with the intention of arriving at the well, the jaguar pounced on him’ (6:4:54)

- (2) [nuni-ka] [akahũ hu-ki] [wi-a-ku]
 [do.that-INTS:SEQ+1PL:SS] [shotgun take-TRF:SEQ+1PL:SS] [go-IMPFV-SIM:1PL:SS]

[kuntu waina-ka-**tasa**] [waha-sa]
 [animal see-INTS-INTENT:1PL:SS] [stand-SBD+1PL:SS]

‘then, having taken our shotguns and gone looking for animals...’ (Text 3:7)

The sense imparted is intention on the part of the subject of the verb.

The suffix is clearly a grammaticalised form of the desiderative suffix *-tata* ~ *-tatu* followed by the general subordinator *-sa*. The non-third form has undergone a haplological reduction from **-tatu-sa* (-DESID-SBD) to *-tasa*. The third-person form never appears with a final vowel in my data, but we can assume that the underlying form is *-tatu-sã* (-DESID-SBD+3:SS).

An intentional clause may function as a complement clause if the controlling verb is one of intention or desire:

- (3) yuwátasan wakĩuʒahai
 [yu-a-**tasa**-nu] wakĩuʒa-a-ha-i
 [eat-HIAF-INTENT-1SG] want-IMPFV-1SG-DECL

‘I want to eat’

Complementation is described in detail in §12.6.

9.3.2 Repetitive *-kawa / -kua*

The repetitive suffix *-kawa / -kua* expresses a repeated or prolonged action.

- (4) *wikái wikáikawa yapáŋki minámunum hintá káỹũk bataín pihíkiuʃ antútayamĩ*

[*wikai wikaiũa-a-kawa*] [*yapahu-ki*]
 [REDUP walk-IMPV-REPET+1PL:SS] [get.hungry-TRF:SEQ+1PL:SS]

[*mina-mau-numa hinta [káỹuka bataĩ-na pihiki-u-ʃa]*]
 [arrive-NON.A/S:REL-LOC path+LOC [agouti *chambira*.fruit-ACC gnaw-REL-ADD]]

antu-taiami]
 hear-NORM]

‘walking and walking and getting hungry, we hear an agouti gnawing on *chambira* fruit in the place we arrive at’ (Text 1:13)

- (5) *búu búutkáwã wíu*

[*buu buuta-kawã*] *wi-u*
 [REDUP cry+IMPV-REPET+3:SS] go:PFV-REL

‘crying and crying he went’ (7:3:34)

It shows the diphthong simplification phenomenon, that is, it appears as [kua] when the first /a/ is in a position to be syncopeated (see §2.5.3) – as in example (6), referring to young men devoting themselves to preparations for warfare.

- (6) *hintá tipá tipákũã*

[*hinta*] *tipa tipa-kawã*
 [path+LOC] REDUP lie.down+IMPV-REPET+3:SS

‘throwing (themselves) into the path (of preparation)¹⁰² ...’

The diphthong reduction suggests that this suffix is historically morphologically complex, being etymologically (and perhaps underlyingly?) composed of two suffixes **-kau + *-a*.¹⁰³

¹⁰² This idiom, literally ‘laying oneself out in the path’, is commonly used to refer to young men setting out on their vision quests.

¹⁰³ Corbera (1994: 297-298) suggests that this suffix contains the simultaneous morpheme *-ku* plus some other morpheme *-ã* (the nasality is actually third-person marking; Corbera analyses it as part of the phonemic form of the suffix). This analysis only works if one assumes, as Corbera does, that the underlying form is

The repetitive suffix *-kawa* is always accompanied by partial reduplication of the verb root, glossed REDUP in the examples. The phonological details of reduplication are discussed in §2.8.1.

9.3.3 Terminative *-kama*

The terminative suffix is used to indicate an ongoing action that comes to a punctual conclusion with the action of the controlling verb. The following example is from a story in which a man gets lost and his relatives are looking for him, following his tracks. After walking for some time, they come across the lost man:

- (7) wíkaiṭáin̄ húu wiháma, hukíuṭaháma tus wíkaikamã wainkáuwai
 [wíkaiṭa-tá-ka hu wi-hama hu-ki-a-hama
 [walk-NON.A/S:NR-FOC PRX go:3-CNTR.EX PRX-RESTR-COP:3-CNTR.EX
 tu-sã] [wíkaiṭa-**kamã**] [waina-ka-u-ai]
 say-SBD+3:SS] [walk-**TERM+3:SS**] [see-INTS-REL-COP:3:DECL]

‘saying “the path goes here, it’s just here!” and walking on they saw (him)’(6:16:24)

In the following example, the word *dii-kamã* (see-TERM+3:SS) is consistently translated into Spanish as *al verlo* ‘upon seeing it...’.

- (8) anútuk diikmã núna kãyũkan piṭt ítsikĩ...
 [anu-tu-kã] [dii-**kamã**] [nu-na kãyuka-na piṭt
 [approach-APPLIC-INTS:SEQ+3:SS] [look-**TERM+3:SS**] [ANA-ACC agouti-ACC SYM
 i-tsikĩ-kĩ]
 CAUS-jump-TRF:SEQ+3:SS]

‘having approached, on seeing it, having made the agouti jump...’ (6:1:55)

9.3.4 Frustrative *-takama*

Frustrative *-takama* is used for an action that is simultaneous with that of the main verb and ultimately unsuccessful. Frustrative clauses indicate the outcome of the action described by the verb, and consequently, such clauses are logically compatible only with past-tense controlling verbs. With future-tense controlling verbs an intentional clause is

/kuã/ rather than /kawa/, an assumption for which there is no justification; it seems that Corbera’s data simply did not include any examples that surfaced as [kawa].

appropriate, as it does not specify the outcome. In a way, frustrative combines the meaning of intentional with the added sense of an unsuccessful action.

Example (9) is taken from a story in which the devil has had his arm pulled off, and he tries to pull a young woman's arm off to use in its place. The frustrative clause presages the verb *tuhintu* 'be unable' in the following clause.

- (9) nuúmpahun hápikĩ ahián itʃiŋtakamá ... tuhintúk p̄iimp̄iinakĩ
 [nuumpahu-na hapi-kĩ] [ahia-hã]
 [young.woman-ACC tug-TRF:SEQ+3:SS] [knock.down-PLU:SEQ+3:SS]
 [itʃĩ-ka-**takamá**] ... [tuhintu-kã] [p̄imp̄iina-kĩ]
 [pull.off-INTS-**FRUST+3:SS**] [be.unable-INTS:SEQ+3:SS] [turn.around-TRF:SEQ+3:SS]
 '(the devil) tugged at the young woman and knocked her down, trying to pull (her arm) off ... being unable, he turned to go' (6:2:40)

In the following example a hunter has chased a monkey for a long time through the forest and it has become so tired out that as it tries to jump from tree to tree it loses its grip and falls in the mud:

- (10) p̄h̄t tsíkĩ numínun atʃimkatakamá akupmámak pimpikú ášã kutʃánum puhút ÿyakú
 [p̄h̄t tsiki numi-numa atʃima-ka-takamá]
 [SYM jump:PFV:SEQ+3:SS wood-LOC grab-INTS-FRUST+3:SS]
 [akupamama-kã pimpi-ki-u asã kutʃa-numa]
 [let.go-INTS:SEQ+3:SS get.tired-TRF-REL COP:SBD/SEQ+3:SS mud-LOC]
 puhut ÿya-ka-u]
 SYM fall-INTS-REL]
 '(the monkey) trying in vain to jump into the tree "boing!", having let go because it was tired out, it fell "splash!" in the mud' (7:1:5)

It is not always the case that the failure must be made explicit however. In example (11) the failure is implicit in the verb *awiina* 'scare off', but the only *explicit* indication is the frustrative suffix.

- (11) dapín maátakaman awiimámhai
 [dapi-na ma-a-**takama**-nu] [awiima-ma-ha-i]
 [snake-ACC kill-HIAF-**FRUST-1SG:SS**] [scare.off:PFV-RECPAST-1SG-DECL]
 'trying to kill the snake, I scared it off'

The prototypical use of frustrative in Aguaruna is with telic verbs, where the expected endpoint is clearly defined. When used with the verb *tu* ‘say’, frustrative indicates an outcome that is counter to expectation, as in the following example where a devil has retrieved his arm from a cooking pot and is trying to stick it back on with a spell:

(12) “kusúi kusúi wíi wíithus wíithus” titakamá́ túsã áatus kuntúhĩn iwíwakmã húwaknuk páuh ahúũtaĩ...

[kusui kusui wii wiithus wiithus ti-takamá] [tu-sã
 [(magic formula) say+LOAF-FRUST+3:SS] [say-SBD+3:SS

aatusã kuntu-hĩ-na iwiwa-kama [huwakunu-kã
 thus+3 arm-PERT:1PL/3-ACC swing-TERM+3:SS [come.unstuck-INTS:SEQ+3:SS

pauh ahũũ-taĩ]
 SYM fall-SBD:1/3:DS]

‘saying (in vain) “kusui kusui wii wiithus wiithus!”, saying that as he swung his arm, when it came unstuck and fell “pauh!”...’ (6:2:35)

Counter-to-expectation is a common extension of frustrative markers in other languages (Overall, in preparation). Note however that the verb ‘say’ is often involved in idiosyncratic expressions cross-linguistically¹⁰⁴ and in Aguaruna itself, so this example should not be taken as typical of Aguaruna frustrative usage.

The frustrative suffix never undergoes vowel elision, suggesting that it is a recently grammaticalised form. For Shuar, Turner (1992: 82ff) gives the frustrative construction as a two-word form: *-taj tukamá-* (/tah tukama/); this form appears to have the following morphological composition:

(13) *-ta-h(a)* tu-kama-
 -INTENTIONAL.FUTURE-1SG say-TERMINATIVE-

That is, the verb root is suffixed with intentional future *-ta* and first person singular *-ha*, and that verb then acts as a speech report complement to the verb *tu* ‘say’, which carries the terminative suffix *-kama* followed by any person marking required. Terminative is a subordinating suffix, so the whole construction must be subordinate to a controlling verb. The frustrative sense is not apparent from the sum of the parts, which rather suggest

¹⁰⁴ cf. Matses incomplete construction (Fleck 2003: 362), Emerillon irrealis construction (Françoise Rose: pers. comm.).

an intentional meaning.¹⁰⁵ Turner gives only one example, in which the controlling verb is a negative form of *umi* ‘complete, fulfil’

(14) Shuar

[taka-s-**tah** **tukama-n**] [umi-k-tʃa-m-ha-i]
 [work-PFV-**DESID** ‘**despite**’-1SG] [complete-PFV-NEG-PAST-1SG-DECL]

‘Although I wanted to work, I did not complete it’¹⁰⁶ (Turner 1992: 83)

For Achuar-Shiwiar, Fast et al. (1996: 44) give the form of the suffix as *-kamá-*, although in their examples it appears as *-tat-kamá-*, looking very much like a phonologically reduced development of the Shuar periphrastic form (they do not give morphemic glosses).

(15) Achuar-Shiwiar

[ami wini-tat-**kama-m**] [tuhinta-mĩ]
 [2SG arrive-?-**FRUST**-2SG] [be.unable+IMPFV-2:DECL]

‘Although you try to come, you cannot’¹⁰⁷ (Fast et al. 1996: 44 - my glosses)

Fast et al. also note that:

“The frustrative mood appears in the first verb of a verbal expression composed of two verbs, the second of which denotes the difficulty or impossibility of the action.” (Fast et al. 1996: 44)¹⁰⁸

No grammatical information was available on Huambisa.

The evidence of Turner (1992) and of Fast et al. (1996) suggests a grammaticalisation path from a periphrastic intentional construction to a subordinating intentional suffix that was always accompanied by a controlling verb indicating an unsuccessful outcome. A subsequent shift of the ‘frustrative’ meaning from the controlling verb to the subordinate verb gives us the current system in Aguaruna. A final point to note is that the historical

¹⁰⁵ In fact, [*verb*-IFUT-1SG say-] is the same periphrastic construction that gave rise to the desiderative and intentional suffixes in Aguaruna – see §8.3.5.

¹⁰⁶ ‘A pesar de haber deseado trabajar, no cumplí’

¹⁰⁷ ‘Aunque tratas de venir, no puedes’

¹⁰⁸ “El modo frustrativo aparece en el primer verbo de una expresión verbal compuesta por dos verbos, el segundo de los cuales denota la dificultad o la imposibilidad de la acción.”

consonant cluster, evident in the Achuar-Shiwiar form, explains the non-application of vowel elision in the Aguaruna form (cf. §2.5.2.2).

9.3.5 Non-temporal *-sa*

The general adverbial suffix *-sa* is used to combine two or more actions into one sentence. Dependent verbs marked with *-sa* often appear as strings, as in example (16) from a story in which a man is trying to stay awake all night to see who (or what) keeps having sex with his wife.

(16) iwás tsaañkún buʃútus nahán itímas káhĩ maám ʃinták iwá tipáĩ...

[iwa-sã] [tsaañku-na buʃutu-sã] [naha-na
[be.awake-SBD+3:SS] [tobacco-ACC snort-SBD+3:SS] [nettle-ACC

itĩ-ma-sã] [kahĩ maa-ma]
beat-REFL-SBD+3:SS] [sleep:PERT:1PL/3 kill+HIAF-NON.A/S:>A/S]

[ʃinta-kũ] [iwa tipa-ĩ]
[wake+IMPFV-SIM+3:SS] [be.awake lie+IMPFV:1SG/3-DS]

‘(lying in bed) awake, snorting tobacco and beating himself with a nettle, when sleep overcame him he woke up and lay awake...’ (6:2:7)

In example (17), by contrast, the *-sa* marked verb appears in a string of perfective verbs, which express a sequence of events in purely temporal terms.

(17) hiinúm paták wĩŋka wĩŋkas piniknúm paták...

[hii-numa pata-kã] [wĩŋka wĩŋka-sã] [pinika-numa
[fire-LOC put-INTS:SEQ+3:SS] [REDUP singe-SBD+3:SS] [rack-LOC]

pata-kã]
put-INTS:SEQ+3:SS

‘having put (the monkey’s arm) in the fire, singeing it, having put it on the storage rack above the fire...’ (6:2:14)

The *-sa* marked verb in this example is subordinate to the preceding perfective clause, giving a structure [having put the arm in the fire [singeing it]] etc. The syntactic status of dependent clauses will be discussed in detail in §12.2.1.

A subclass of adverbs takes person marking similar to that of SS subordinate verbs, and there is evidence for grammaticalisation of the non-temporal subordinator *-sa* into an adverb marker (§3.7.1).

The suffix *-sa* only appears as such in SS clauses, but it has a counterpart in DS clauses in *-taĩ* (§9.4.2.1).

9.3.6 Simultaneous *-ku*

The simultaneous suffix *-ku* emphasises simultaneity of the action with that of the controlling verb.

(18) *dúwik múuntak túki minák awatĩ táya túwahamĩ*

<i>duwik_muunta-ka</i>	<i>tuki</i>	[<i>mina-kũ</i>]	[<i>awatĩ</i>]
ancestor-FOC	always	[arrive+IMPFV-SIM+3:SS]	[hit+LOAF+3:SS]
<i>ta-ia</i>	<i>tuwahamĩ</i>		
come-REMPAST:3	NARR		

‘our ancestors would always hit (a tree root) as they were arriving (as a signal to the people in the house)’ (6:2:21)

(19) *diiyák wúwai*

[<i>dii-a-kũ</i>]	<i>wi-u-ai</i>
[see-IMPFV-SIM+3:SS]	go:PFV-REL-COP:3:DECL

‘he went, looking’ (Text 1:7)

The suffix *-ku* is unique among the subordinators as it may appear following the future suffix *-tata* (see §8.3.5.7). It is not clear what the semantic effect is of suffixing *-ku* to the future suffix rather than the imperfective stem.

Verbs subordinated with *-ku* are common in auxiliary constructions, as discussed in detail in §6.4. It suffices to say here that an auxiliary construction arises when a verb is dependent on a semantically lighter controlling verb, and the whole is then reanalysed as monoclausal, as in the following examples:

(20) *diiyákum atá*

[<i>dii-a-ku-mi</i>]	[<i>a-ta</i>]
[look-IMPFV-SIM-2:SS]	[COP-IMP]

‘watch out!’ (6:1:22)

(21) *takáakun puháhai*

[<i>taka-a-ku-nu</i>]	[<i>puha-ha-i</i>]
[work-IMPFV-SIM-1SG:SS]	[live+IMPFV-1SG-DECL]

‘I’m working’

Simultaneous DS clauses have relatively transparent subject marking involving the DS suffix *-(n)i*, and the suffix *-ku* can be recognised throughout the paradigm (see §9.4.2.3).

9.3.7 Sequential -∅

Sequential subordinate verbs are zero-marked in SS clauses and DS clauses with second person subject: person marking suffixed directly to the perfective stem. In DS sequential clauses with first and third person subject, the perfective stem is followed by the suffix *-mataĩ* which is a portmanteau, combining first/third person and DS. Discussion and examples are in §9.4.2.2.

9.3.8 Simultaneous DS -∅

The imperfective stem may appear with person and DS marking suffixes directly attached. As this form only appears in DS clauses, it is described along with DS person marking in §9.4.2.5.

9.4 Person marking

Subjects of subordinate verbs are obligatorily indexed with suffixes. The suffixes used with subordinate verbs are different from those used with finite verbs in first and third persons, but not in second. The same person marking occasionally appears on relativised verbs and ablative-marked NPs.

Person marking is the same for all types of same-subject clauses, but differs slightly in the four types of DS clauses – so there are five paradigms in total for marking person/DS.

In the following sections I first describe SS person marking, followed by DS marking in the three types that make up class 2, and finally the single type of class 3.

9.4.1 Same-subject person marking

In same-subject clauses the following set of person markers is used:

PERSON	SINGULAR	PLURAL
1	<i>-nu</i>	suppression of apocope / <i>-i</i> ^a
2	<i>-mí</i>	
3	nasalisation of stem-final vowel	

^a First person plural is marked with the suffix *-i* only when followed by the conditional suffix *-ka*.

Table 9.4: Subject markers on subordinate verbs in SS clauses

As with finite verbs, plural is obligatorily marked in first person, but not third; but unlike finite and DS subordinate verb forms, second person is marked with the suffix *-mí* in both singular and plural. All persons may optionally be marked for plurality with the level I suffix *-ina* ‘plural imperfective’ in the two types that take the imperfective stem (repetitive and simultaneous). The other types do not mark plural in third person.

Below I discuss each of the persons in turn.

9.4.1.1 First person singular

First person singular is marked with the suffix *-nu* in SS clauses.

(22) *ikamyãwããñ haŋkínũ inuán atʃíkhai*

ikam_yawaã-na [*haŋki-numa inu-a-nũ*] *atʃi-ka-ha-i*
jaguar-ACC [*jaw-LOC put.hand.into-HIAF:SEQ-1SG:SS*] *grab-INTS-1SG-DECL*

‘having stuck my hand in its jaws, I have grabbed the jaguar’ (6:4:62)

(23) *wíi kaʃín wíuqaknũ takástʃattahai*

[*wi kaʃini wi-a-ku-nũ-ka*] [*taka-sa-tʃa-tata-ha-i*]
 [*1SG tomorrow go-IMPV-SIM-1SG:SS-COND*] [*work-ATT-NEG-FUT-1SG-DECL*]

‘if I go tomorrow, I won’t work’

This suffix is apparently etymologically unrelated to other markers of first person singular: *-ha* first person singular subject in finite clause; *-hu* / *-tu* first person object; *-hu* pertensive + first person singular possessor.

9.4.1.2 First person plural

First person plural subject is not marked with a suffix except in conditional clauses (see below), but apocope is suppressed in the surface form; this suggests that there may have been some segmental marking in the past that blocked the application of apocope, but

that has since been lost. In the following example three first person plural same-subject sequential clauses are subordinate to the final clause (also see example (2) above):

- (24) tsawáha yuhúmkauf yuwá káʃik hiinkí wítáyamĩ
 [tsawa-**ha**] [yuhumaka-utʃi yu-a]
 [dawn-PLU:SEQ:1PL:SS] [food-DIM eat-HIAF:SEQ:1PL:SS]
 [kaʃik hiina-**ki**] wi-taiamĩ
 [early.morning go.out-TRF:SEQ:1PL:SS] go-NORM
 ‘having woken up, eaten a bit of food and gone out early in the morning, we go (hunting)’
 (Text 3:6)

When the conditional suffix *-ka* is present, first person plural in SS clauses is marked with the suffix *-i*:

- (25) kaʃín wínakuik íik takástʃattahi
 [kaʃini wi-ina-ku-**i**-ka] [ii-ka taka-sa-tʃa-tata-hi-i]
 [tomorrow go-PL:IMPFV-SIM-1PL:SS-COND] [1PL-FOC work-ATT-NEG-FUT-1PL-DECL]
 ‘if we go tomorrow, we won’t work’

Assuming that the suppression of apocope mentioned above is triggered by the historical presence of a suffix, it follows that the suffix *-i* is most likely a reflex of the same suffix. No other persons show different marking in conditional clauses. In §9.4.2.4 below, comparative evidence is presented that suggests an earlier form of the first person plural suffix in both conditional and non-conditional subordinate clauses was **-hi*, the reflex of a PJ suffix **-ri*.

9.4.1.3 Second person

Second person on subordinate verbs is marked with the same suffix as singular finite verbs: *-mĩ*. Plural *-humĩ* is not used in subordinate clauses; *-mĩ* covers both singular and plural, as in the following examples.

- (26) ámi maátakamam awiimámumi
 [ami ma-a-takama-**mĩ**] [awiima-ma-umi-i]
 [2SG kill-HIAF-FRUST-2:SS] [scare.off:PFV-RECPAST-2:PAST-DECL]
 ‘trying in vain to kill (the snake), you scared it off’

(27) atʃiakum iyáitahum

[atʃi-a-ku-mi] iya-i-ta-humi
[grab-IMPV-SIM-2:SS] fall-LOAF-IMP-2PL

‘grab (the darts) and fall down’ (4:4:267)

(28) yuhúmak áusam yúwakum dakahumatáhum

[yuhumaka au-sa-**mi**] [yu-a-ku-**mi**]
[food put.in.pot-ATT:SEQ-2:SS] [eat-IMPV-SIM-2:SS]

[daka-hu-ma-ta-hu-mi]
[wait.for-1SG.OBJ-DUR-IMP-PL-2]

‘having put the food in the pot (to cook), while eating, wait for me’ (6:4:26)

Second person appears as *-mía* when the controlling clause has content interrogative mood, as in the following example:

(29) yátsuhu wahúk wímía tukúmumi

yatsu-hu wahuka [wi-mía] tuku-ma-umi
brother:PERT-1SG+VOC how [go:PFV:SEQ-2:SS:INT] shoot:PFV-RECPAST-2:PAST

‘my brother, how (=where) did you go and shoot (so many monkeys)?’ (6:17:20)

9.4.1.4 Third person

Third person is not marked with a suffix, but the final vowel of the stem is nasalised, suggesting the historical presence of a suffix with a nasal component.

(30) wíuqa wíuqakūã hĩũǎwãĩ mantʃumutʃ puhámunum

[wíuqa wi-a-**kawã**] [hĩũqa-u-ai [mantʃumutʃi
[REDUP go-IMPV-REPET+3:SS] [arrive:PFV-REL-COP:3:DECL [*Manchumuch*

puha-mau-numa]]
live+IMPV-NON.A/S:REL-LOC]]

‘going and going she arrived at the place where *Manchumuch* lives’ (6:1:2)

In many examples, such as the following, the final vowel is lost to apocope.

(31) tsampáunumin wihák utʃín batsakíu túwahanĩ

[tsampaunumi-na wi-hu-a-**kũ**] [utʃi-na batsa-ki-u
[manioc.leaf-ACC go-APPLIC-IMPV-SIM:3:SS] [child-ACC leave-TRF-REL

túwahanĩ]
NARR]

‘going to get manioc leaves, they left the children behind, so the story goes’ (6:1:17)

9.4.2 Different-subject person marking

Four subordinate verb types can appear in DS clauses (table 9.3). Person and DS marking are obligatory, and each of the four types shows a different marking pattern. Some distinctions are neutralised in DS clauses:

- In non-temporal DS verbs, person marking is neutralised, and the non-temporal marker of SS verbs *-sa* is replaced by the suffix *-taĩ*. This form is apparently incompatible with second person subjects.
- DS sequential and simultaneous verbs neutralise the distinction between first and third persons, while second person is marked with the usual second person suffixes *-mĩ* (singular) and *-humĩ* (plural) followed by the DS marker *-(n)ĩ*
- First and third person + DS in sequential clauses are marked with the suffix *-mataĩ*
- First and third person + DS in simultaneous clauses are marked with the suffix *-ĩ*
- First singular and third person singular and plural + DS in imperfective DS clauses are marked with the suffix *-ĩ*
- First person plural in imperfective DS clauses is marked with the suffix *-hi* followed by the DS marker *-(n)ĩ*

The following table lays out the four person marking paradigms used in DS clauses.

VERB TYPE	VERB STEM	SUFFIX	PERSON			
			2SG	2PL	1SG/3	1PL
non-temporal	unmarked	<i>-sa</i> ^a	-		<i>-taĩ</i> ^a	
sequential	perfective	<i>-∅</i>	<i>-mĩnĩ</i> ^b	<i>-humĩnĩ</i> ^b	<i>-mataĩ</i>	
simultaneous	imperfective	<i>-ku</i>			<i>-ĩ</i>	
imperfective DS	imperfective	<i>-∅</i>			<i>-ĩ</i>	<i>-hi-nĩ</i>

^a The suffix *-sa* only appears with SS verbs, and is replaced by *-taĩ* on DS verbs.

^b The DS suffix *-(n)ĩ* triggers the combining forms of the second person suffixes, so the combination surfaces as *-minĩ* (sg) and *-huminiĩ* (pl).

Table 9.5: Subject markers on subordinate verbs in SS and DS clauses

There is a surprising asymmetry in neutralisation of categories between first/third person and second person. For the most part, first and third persons neutralise both person

and number distinctions in DS clauses (the only exception is imperfective DS clauses, which distinguish first plural from the rest). Second person, however, maintains the number distinction found in finite verbs, although this distinction is lost in SS subordinate verbs (§9.4.1.3). So while first and third-person DS subordinate clauses are characterised by a paucity of categories distinguished relative to SS subordinate verbs and finite verbs, second person DS subordinate verbs show an increase in the categories distinguished relative to their SS counterparts.

Switch-reference is the phenomenon whereby a clause contains morphological indication of grammatical relations that hold in another clause. Aguaruna subordinate verbs are obligatorily marked to show whether the subject is the same as or different from that of the controlling clause. In Haiman & Munro's (1983) words:

“Canonical switch-reference is an inflectional category of the verb, which indicates whether or not its subject is identical with the subject of some other verb.” (Haiman & Munro 1983:ix)

Different subject is marked with the suffix *-(n)ĩ* (the long form appears when it is preceded by /i/ or /i/, the short form elsewhere). Although not always morphologically decomposable, all DS markers end with /ĩ/, suggesting that the DS suffix is at least historically involved in their composition.

Different subject marking is triggered by a subject in the subordinate clause that is not included in that of the controlling clause.

A first plural controlling clause triggers DS marking in a first singular subordinate clause (example 35), but a first singular controlling clause triggers SS marking in a first plural subordinate clause (example 36); because the subject of the controlling clause (1SG) is included in that of the subordinate clause (1PL).

- (35) wíi ikiŋmáŋmatãĩ takasmí
 [wi ikiŋma-ha-matãĩ] taka-sa-mi
 [1SG wash.hands-PLU:SEQ-1/3:DS] work-ATT-HORT
 ‘after I’ve washed my hands, let’s work’

- (36) yuhúmak yuwá kánin áyahai
 [yuhumaka yu-a] kanu-inu a-ia-ha-i
 [manioc eat-HIAF:SEQ:1PL:SS] sleep-NR COP-REMPAST-1SG-DECL
 ‘(we) having eaten manioc, I would sleep’ (2:2:62)

The following table shows the combinations of first singular and first plural subjects and whether they trigger SS or DS marking in the subordinate clause.

	CONTROLLING	
SUBORDINATE		
	1SG	1PL
1SG	SS	DS
1PL	SS	SS

Table 9.6: SS/DS marking with combinations of first person singular and plural

There are also two non-canonical switch-reference markers, *-ma* and *-tatamana*. There is no possible reflex of DS *-(n)ĩ* involved in these forms, and while the canonical switch-reference markers indicate only that the subject of the marked clause is not the subject of the controlling clause, *-ma* and *-tatamana* encode grammatical relations in **both** clauses: *-ma* indicates that the object of the marked clause is subject of the matrix clause, while *-tatamana* indicates that the subject of the marked clause is an object of the matrix clause. This is summarised in the table:

MARKER	ROLE IN MARKED CLAUSE	ROLE IN CONTROLLING CLAUSE
<i>-(n)ĩ/-taĩ/-mataĩ</i>	subject	not subject
<i>-tatamana</i>	S/A	O
<i>-ma</i>	non-S/A	S/A

Table 9.7: Canonical and non-canonical switch-reference

The crucial difference is that ‘different subject’ gives no information on the role of the erstwhile subject in the controlling clause. Non-canonical marking requires a common argument that is a participant in both clauses. Such a requirement is outside the range of canonical switch-reference as defined by Haiman & Munro (1983), and is apparently very rare: the only reliably attested examples come from the Panoan family (Loos 1999: 237). In fact, the two Aguaruna forms also occasionally function as relativisers and historically this was probably their primary function. This then explains the unusual switch-reference properties, as it is a requirement of relative clauses that they index a common argument in two clauses.

9.4.2.1 Non-temporal clauses

Non-temporal DS verbs are marked with the suffix *-taĩ* in first and third persons.

(37) “hĩũãhũĩ wĩũqahai” tútaĩ “ĩtsã akĩawai hũwĩ kanáham kaĩín wĩtá” túhutkũĩ...

[hĩũq̃a-hu-ĩ wĩ-a-ha-i tu-taĩ]
 [house-PERT:1SG-LOC go-IMPV-1SG-DECL say-SBD:1/3:DS]

[ĩtsã aki-a-wa-i hu-ĩ kana-ha-mi kaĩini wĩ-ta
 [sun set-IMPV-3-DECL PRX-LOC sleep-PLU:SEQ-2:SS tomorrow go:PFV-IMP

tu-hu-ta-ku-ĩ]
 say-APPLIC-1SG.OBJ+IMPV-SIM-1/3:DS]

‘when I said “I’m going home” she said to me “the sun is setting, sleep here and go tomorrow”’ (Text 2:20-21)

(38) utĩín tsiũq̃ahmitkatãĩ tupikáu

[utĩi-na tsiũq̃ahu-mitika-taĩ] tupika-a-u
 [child-ACC cry:PL-CAUS-SBD:1/3:DS] run-IMPV-REL

‘when (the devil) made the children cry, (their father) came running’ (6:2:43)

It is apparently incompatible with second person.

Although this suffix is paradigmatically associated with the non-temporal subordinator *-sa*, it does not appear to be cognate. The final /ĩ/ may be a reflex of the DS marker *-(n)ĩ*. In §9.4.2.6 below I suggest that *-taĩ* may have originated as a nominaliser.

9.4.2.2 Sequential clauses

There is no explicit verbal marker of SS sequential clauses; the perfective stem is sufficient. In DS clauses, the second person forms show person marking followed by the DS suffix. First person and third person are identically marked with the suffix *-mataĩ*. The following table shows a paradigm with the verb *antu* ‘hear’.

PERSON	SINGULAR	PLURAL
1	[antúkматаĩ] antu-ka-mataĩ hear-INTS:SEQ-1/3:DS	[antúkaṅmataĩ] antu-ka-aha-mataĩ hear-INTS:SEQ-PL-1/3:DS
2	[antúkamin] antu-ka-mi-nĩ hear-INTS:SEQ-2-DS	[antúkaṅmin] antu-ka-humi-nĩ hear-INTS:SEQ-2PL-DS
3	[antúkматаĩ] antu-ka-mataĩ hear-INTS:SEQ-1/3:DS	[antúkaṅmataĩ] antu-ka-aha-mataĩ hear-INTS:SEQ-PL-1/3:DS

Table 9.8: Different-subject sequential clause paradigm with *antu* ‘hear’

First person DS may be distinguished from third person using an auxiliary construction, e.g. *antu-ka a-hi-n* (listen-INTS COP-1PL-DS).

The suffix *-mataĩ* is clearly in a paradigmatic relationship with the SS forms exemplified in table 9.4 above, marking both first/third person and DS. Given the formal similarity between *-mataĩ* and *-taĩ* it is tempting to seek a relationship, but there is no evidence to support such a relationship; the historical origins of both suffixes are obscure. As with *-taĩ*, however, it is reasonable to consider the final /ĩ/ to be a reflex of the different subject marker *-(n)ĩ*. Although it is possible that the suffix *-mataĩ* contains some element that indexes the meaning ‘sequential’, the fact that sequential verbs are zero-marked in SS verbs and second person DS verbs strongly suggests that this is not the case.

9.4.2.3 Simultaneous clauses

In second-person forms, the different subject suffix is simply added to the same subject form. First and third persons are marked identically, as in sequential clauses, but in simultaneous clauses they are marked only with the DS suffix *-ĩ*.

PERSON	SINGULAR	PLURAL
1	[ántakũĩ] anta-ku-ĩ hear+IMPFV-SIM-1/3:DS	[ántuinakũĩ] antu-ina-ku-ĩ hear-PL:IMPFV-SIM-1/3:DS
2	[ántakmĩn] anta-ku-mĩ-ĩ hear+IMPFV-SIM-2-DS	[ántakhumin] anta-ku-humi-ĩ hear+IMPFV-SIM-2PL-DS
3	[ántakũĩ] anta-ku-ĩ hear+IMPFV-SIM-1/3:DS	[ántuinakũĩ] antu-ina-ku-ĩ hear-PL:IMPFV-SIM-1/3:DS

Table 9.9: Different-subject simultaneous clause paradigm with *antu* ‘hear’¹⁰⁹

¹⁰⁹ Tables (9.9) and (10) use the same forms as those given for Shuar in Adelaar (2004: 446 – citing data from Juank 1982: 76).

9.4.2.4 Imperfective DS clauses

The imperfective stem only appears in different subject subordinate clauses. Some subject clauses use one of the subordinating suffixes discussed in §9.3. In fact, the use of the unmarked imperfective stem is effectively in competition with *-ku* forms. The following table gives the full paradigm for imperfective DS verb marking.

PERSON	SINGULAR	PLURAL
1	[puháĩ] puha-ĩ live+IMPFV-1SG/3:DS	[puháhin] puha-hi-nĩ live+IMPFV-1PL-DS
2	[puhámin] puha-mi-nĩ live+IMPFV-2-DS	[puháŋmin] puha-humi-nĩ live+IMPFV-2PL-DS
3	[puháĩ] puha-ĩ live+IMPFV-1SG/3:DS	[puhúinaĩ] puhu-ina-ĩ live-PL:IMPFV-DS

Table 9.10: Different-subject forms with imperfective stem

Typically imperfective DS verbs are ambiguous between a locative and a temporal reading, as in the following example:

(39) umís tipáĩ utʃihín takáak hĩũámtãĩ

[umi-sã tĩpa-ĩ] [utʃi-hĩ-na taka-a-kũ
[prepare-SBD+3:SS lie+IMPFV:1SG/3-DS] [child-PERT:1PL/3-ACC carry-IMPFV-SIM+3:SS

hĩũã-mataĩ]
arrive:PFV:SEQ-1/3:DS]

‘when she arrived, carrying her child, at the place where he was throwing himself into preparations...’ (6:6:57)

OR

‘as he was throwing himself into preparations, she arrived carrying her child’

The following example is from the story of the hero Kagkáp, and here he is preparing to fight with a jaguar. He pulls down some vines which he uses to tie his kilt up, so that it won’t obstruct his movements, then he waits for the jaguar which suddenly arrives (*ts#k#n* is the sound-symbolic form used to indicate sudden arrival). Again, the verb with the different

subject suffix could be translated as locative or temporal. It is this inherent ambiguity that may have originally enabled locative to be used to mark different subject (§9.4.2.6).

(40) núnik kaṅkápfakam daika atsuḥũá kamisán apihík itiphũá wahãĩ íkamyawãã tsíkin wahakú

[nuni-kã kaṅkapi-fakama [daika atsuḥu-ã]
 [do.that-INTS:SEQ+3:SS Kagkap-ADD [vine+ACC pull.down-HIAF:SEQ+3:SS]

[kamisa-na apihi-kã] [itipa-hu-ã]
 [clothing-ACC fold-INTS:SEQ+3:SS] [put.on.kilt-APPLIC-HIAF:SEQ+3:SS]

waha-a-ĩ] [ikam_yawãã tsíkin waha-ka-u]
 stand-IMPV:1SG/3-DS] [jaguar SYM stop-INTS-REL]

‘having done that, Kagkáp pulled down some vines, folded up his kilt and put it on, and was standing there when the jaguar suddenly arrived’ (6:4:81)

The locative reading is clearer in the following, in which a locative-marked proximal demonstrative explicitly refers to the location of the action:

(41) húũĩ puhãĩ taáta

[hu-ĩ puha-ĩ] ta-a-ta
 [PRX-LOC live+IMPV:1SG/3-DS] come-HIAF-IMP

‘come here, where I am’

And in (42) the verb is relativised with an encliticised demonstrative, which itself takes the locative suffix:

(42) áu puhanũĩ wíuqahai

[au puha = nu-ĩ] wí-a-ha-i
 [3SG live+IMPV:3=ANARel-LOC] go-IMPV-1SG-DECL

‘I’m going to where he is’

It would be stretching the point to translate this example as a switch-reference construction, but it is clearly parallel to (41) above.

Rather surprisingly, first person plural in imperfective DS clauses takes the suffix *-hi*, the same suffix as is used with finite verbs:

(43) hutí áidauti wíuqahiniñ amí wákí bísimañ huwáktatmí

[hutí a-ina-u-ti wí-a-**hi**-nĩ-ka] [amí wákí_bísimañ
 [1PL COP-PL:IMPFV-SAP go-IMPFV-**1PL**-DS-COND] [2SG sad

huwa-ka-tata-mí-i]
 stay-INTS-FUT-2-DECL]

‘if we go, you will stay here (being) sad’

There is comparative evidence, however, that this suffix comes from a different source as the finite verb first person plural marker *-hi*. Turner (1992: 78ff) for Shuar and Fast et al. (1996: 55ff) for Achuar-Shiwiar give the first plural suffix in subordinate clauses as *-r(i)*, which suggests that the PJ first plural suffix on subordinate verbs was **-ri*. The expected cognate form in Aguaruna is *-hi*, but this has apparently been lost except on imperfective stems and preceding the conditional suffix (where it is reduced to *-i* in forms other than imperfective DS). The only other remnant of the PJ suffix is in the suppression of apocope on SS verbs (§9.4.1.2).

First person plural in finite verbs is marked in Shuar and Achuar-Shiwiar with a suffix *-hi*, as in Aguaruna, suggesting a distinct PJ suffix **-hi*. The distinction between finite **-hi* and subordinate **-ri* would have been neutralised in Aguaruna with the merger of PJ **/r/* and **/h/*, but it is clear from the evidence just presented that in example (43) the suffix marking first person plural is not the same suffix as that which marks first person plural in finite verbs, at least etymologically.

9.4.2.5 Different subject *-(n)ĩ*

The different subject suffix *-(n)ĩ* (*-nĩ* following /i/ or /i/, *-ĩ* elsewhere) indicates that the subject of the subordinate verb is different from that of its controlling verb.

(44) núna múun áuñmatuinakũĩ “wáinkas táwa” túyahai

[[nu-na] muunta auhumatu-ina-ku-**ĩ**] [wainakasã ta-wa
 [[ANA-ACC] elder tell-PL:IMPFV-SIM:1/3-**DS**] [in.vain+3 say+IMPFV-3:EXCL

tu-ia-ha-i]
 say-REMPAST-1SG-DECL]

‘as the elders told that (story), I would say “they’re talking rubbish!”’ (6:2:88)

(45) ámi wámin wíi huwákmahai

[ami wi-mi-nĩ] [wi huwa-ka-ma-ha-i]
 [2SG go:PFV-2-DS] [1SG stay-INTS-RECPAST-1SG-DECL]

‘when you left, I stayed behind’

The DS suffix triggers the combining form of the second person suffixes, changing the final vowel from /i/ to /i/ (§2.6.2.6).

As in other parts of the grammar, four combinations of person and number are distinguished for the purposes of switch-reference: first singular, first plural, second and third. First person and third person are marked identically in different subject subordinate clauses (with the exception of first plural on imperfective stems), in contrast to the SAP versus non-SAP distinction that is commonly encountered in the grammar.

The different-subject suffix appears with the simultaneous suffix *-ku* and perfective and imperfective stems.

9.4.2.6 Historical considerations

The formal similarity suggests that the different subject suffix has arisen from an earlier use of the *-(n)ĩ* locative. Historically, it is not unlikely that switch-reference forms with DS *-(n)ĩ* could have arisen from causal relations marked with locative *-(n)ĩ*; cf. Heine & Kuteva (2002):

“This appears to be an extremely widespread process whereby locative markers are grammaticalized to markers of cause.” (Heine & Kuteva 2002: 200)

Aguaruna typically does not distinguish temporal from causal relations in clause-combining constructions (§12.2). The crucial intermediate stage is illustrated by the imperfective DS type clause, which typically imply a locational sense (§9.4.2.4). Table 9.11 summarises the relationships that may be marked by *-(n)ĩ* when suffixed to different stems.

	NOUN	IMPFV	SUBORD.
LOCATION	✓	✓	–
DIFFERENT SUBJECT	–	✓	✓

Table 9.11: Relations marked by *-(n)ĩ*

Table (9.11) also illustrates the proposed grammaticalisation path of *-(n)ĩ* from LOCATIVE on nouns to DIFFERENT SUBJECT on verbs, via the imperfective DS marker with its combined locational and DS reading.

I noted above that the non-temporal DS subordinator *-taĩ* does not appear to be cognate with its SS counterpart *-sa*. One could hypothesise, then, that this form originated as a locative-marked nominaliser (compare the action nominaliser *-ta*, §10.4.1) that has worked its way into the verbal paradigm. If *-sa* was previously part of the SS-only set of subordinators then a gap would have been available for it to fill. A similar case might be made for the first and third person DS marker in sequential clauses, *-mataĩ*.

Much more work is required before this hypothesis can be considered anything other than tentative. Verbal morphology, particularly subordinate clause marking, is complicated and historical changes appear to have wreaked havoc with paradigms. However, future comparative work will certainly allow much more secure statements to be made, as was shown with the single example of the first person plural marker(s) *-hi* in §9.4.2.4 above.

9.5 Non-inflecting subordinators

The two non-inflecting subordinators are distinct from those discussed above, as they do not take part in the paradigms of person and DS marking. Like nominalised and relativised clauses, then, they are essentially non-finite. Unlike nominalised and relativised clauses, however, and in common with other subordinate verbs, these forms do indicate switch-reference relations between the marked clause and its matrix clause, as illustrated in table 9.12. The switch-reference is not the canonical SS/DS type, as the grammatical role of a common argument in both the marked clause and the controlling clause is indicated.

MARKER	STEM	SWITCH-REFERENCE	
		ROLE IN MARKED CLAUSE → ROLE IN CONTROLLING CLAUSE	
<i>-tatamana</i>	unmarked	A/S	O/E
<i>-ma</i>	aspectualised	non-A/S	A/S

Table 9.12: Switch-reference in non-inflecting subordinators

Both *-tatamana* and *-ma* appear to have developed through reanalysis from relativisers, and some examples are better analysed as relative clauses (§9.5.3).

9.5.1 ‘Subject to object’ subordinator *-tatamana*

The subordinator *-tatamana* appears suffixed to the unmarked stem, and no attested example contains any derivational morphology in the stem. The action of the clause marked with *-tatamana* is simultaneous with that of the controlling verb, and the subject of the marked clause becomes an object of the controlling clause, as in the following example from a story in which the devil detaches his penis and holding it in his hand, reaches through a gap in the wall and has sex with a sleeping woman.

(46) *katín núwĩ íkinák nuwán nihíttaman atjiká hápikĩ...*

[*katĩ-na* *nu-ĩ* *ikĩna-a-kũ* [*nuwa-na*
 [penis:PERT:1PL/3-ACC ANA-LOC hold-IMPV-SIM+3:SS [woman-ACC

nihĩ-tatamana]] *atji-kã* *hapi-kĩ*
 fuck-A/S>O/E]] grab-INTS:SEQ+3:SS tug-TRF:SEQ+3:SS

‘as (the devil) was holding his penis there (in his hand) and fucking the woman, (the man) grabbed him and tugged him (towards the wall)...’ (6:2:10)

Use of *-tatamana* links the action of its verb with the controlling verb through the common argument, and thus contrasts with the use of subordinate verbs marked with the ‘different subject’ suffix, which instead highlight the juxtaposition of two distinct actions performed by different subjects.

(47) *útʃi akáikĩ yúmiŋmat hũũãtatus wítatman íkamỹãwãã tipĩŋkáuwai*

[*utʃi* [*akai-kĩ*] [*yumiŋmata* *hũũã-tatus*] *wi-tatamana*]
 [child [go.down-TRF:SEQ+3:SS] [well arrive-INTENT+3:SS] go-A/S>O/E]

ikam_yawaã *tipi-hu-ka-u-ai*
 jaguar lie.down-APPLIC-INTS-REL-COP:3:DECL

‘as the youth, having gone down the hill, was going to the well, the jaguar pounced on him’ (6:4:54-55)

9.5.2 ‘Non-subject to subject’ subordinator *-ma*

The subordinating suffix *-ma* may appear with the perfective or imperfective stem. No preceding morphology other than Aktionsart suffixes is attested in my corpus.

with relativisers. This similarity shows up in a few examples in which the subordinators in fact function as relativisers, and the morphology and syntax are such that they cannot be parsed as subordinate clauses.

Consider (51); the subordinate clause marked with *-tatamana* is center-embedded in the controlling clause, preceded by the indirect object NP.

- (51) *núna nuwín nuní wíkáitatman dútikā suwímkan susáya túwahamĩ*
 [nu-na nuwĩ-na] [nuni wíkaĩuqa-tatamana]
 [ANA-ACC woman:PERT:1PL/3-ACC]_E [thus walk-A/S>O/E]
 [dutikā] [suwimaka-na] su-sa-ia tuwahamĩ
 [do.that:PFV:SEQ+3:SS] [punishment-ACC]_O give-ATT-REMPAST:3 NARR
 ‘so he punished that wife of his when she wandered so’ (6:5:79)

Because the preceding object NP is the subject of the *-tatamana* clause, (51) could be parsed as containing a relative clause marked with *-tatamana* (compare example (10.35), with a *-u* relative clause). The noun *nuwa* ‘woman’ would then head an object NP, and the presence of the anaphoric determiner *nu* means that the whole NP shows case agreement. The final /na/ of *-tatamana* must be analysed as the accusative case-marker *-na*. The structure of the indirect object NP would then be:

- (52) [nu-na nuwĩ-na [nuni wíkaĩuqa-**tatamana**]]
 [ANA-ACC woman:PERT:1PL/3-ACC [thus walk-A/S>O/E]]_{NP,E}
 ‘that wife of his who wandered so’ (6:5:79)

Compare the following example illustrating the canonical subordinating function of *-tatamana*:

- (53) *núu utfĩ itfĩnkú miníttaman tapít atfĩk*
 [[nu [utfĩ itfĩ-ka-u] mini-**tatamana**] tapit
 [[ANA [child+ACC pull.apart-INTS-REL] arrive-A/S>O/E] SYM
 atfĩ-kā
 grab-INTS+3:SS

‘as that one who had pulled the child apart was arriving, (the man) grabbed him...’ (6:2:65)

Here the subject of the *-tatamana*-marked verb consists of the anaphoric pronoun *nu* and a headless relative: ‘that (one) who pulled a child apart’. But neither the *-u* relative clause nor the anaphoric determiner is marked with the accusative suffix, so both must form

structure that would be reanalysed as a subordinate clause of the type in (54). The non-subject relativiser *-mau* synchronically may function as a subordinator, with internal argument structure, following this same process (§10.3). A historical origin in relativisation would explain the non-canonical switch-reference properties and the lack of person marking on these two subordinators.

There could be some relationship between subordinating *-ma* and the reflexive suffix *-ma(ma)*; the change of non-subject to subject is very passive-like, and it is not uncommon for reflexive and passive to be marked similarly. Doris Payne (2001) notes that a single multi-purpose valency reducing morpheme is a common pattern in Amazonian languages.

9.6 Conditional and concessive

The conditional suffix *-ka* and concessive suffix *-fa(kama)* mark logical relations between clauses, as the following examples illustrate:

(57) kúntin kaútu wainkáik piníha áuʃkam dakáka kúntin minítkuin mantúmtayamĩ

[kuntu koutu-u waina-ka-i-**ka**] [pini-ha]
 [animal come.to.eat-REL see-INTS-1PL-COND] [build.hide-PLU:SEQ:1PL:SS]
 [au-ʃakama daka-ka] [kuntu mini-tu-ku-ĩ-**ka**]
 [DST-ADD wait.for-INTS:SEQ:1PL:SS] [animal arrive-APPLIC-SIM:1/3-DS-COND]

mantu-ma-tayamĩ
 kill+APPLIC-REFL-NORM:DECL

‘if we see animals gathering to eat, having built a hide and waited for them too, if an animal arrives, we kill it’ (Text 3:17)

(58) átum wíuqakhuminiŋ wí wáki bísimaŋ huwáktathai

[atumi wi-a-ku-humi-nĩ-**ka**] [wi waki_bisimaŋ]
 [2PL go-IMPV-SIM-2PL-DS-COND] [1SG sad]

huwa-ka-tata-ha-i]
 stay-INTS-FUT-1SG-DECL]

‘if you(pl) go, I will be sad’

(59) “wáamak huhuktáhum” waháu núnitãĩ[kam antúktʃahau áinawai

[waamakɨ hu-hu-ki-ta-humɨ waha-a-u]
 [quickly take-1SG.OBJ-TRF-IMP-2PL call-IMPV-REL]

[nuni-tãĩ-**ʃakama**] antu-ka-tʃa-aha-u a-ina-wa-i
 [do.that-SBD:1/3:DS-CONCESS]_{BRIDGE} listen-INTS-NEG-PL-REL COP-PL:IMPV-3-DECL

‘he was calling out “quickly take me away!”, but although he did that, they didn’t listen’
 (6:4:78)

(60) ímau áĩʃ wíʃʉak ukukúwai

[imau a-ĩ-**ʃa**]
 [INTENS.LOC COP-1/3:DS-CONCESS]

[wí-a-kũ uku-ki-u-ai]
 [go-IMPV-SIM+3:SS leave-TRF-REL-COP:3:DECL]

‘although (the jaguar) was just there, he went (outside) and left’(6:4:33)

Conditional and concessive suffixes are compatible with the four subordinate verb types that can appear in DS clauses: non-temporal, sequential, simultaneous and imperfective DS (table 9.3). Although incompatible with SS-only suffixes, they may mark SS clauses, as in example (57) above. Both appear as nominal suffixes too, marking focus and additive respectively

9.7 Mood/modality

Subordinate clauses can take the suffixes *-tsu* ‘speculative’ and *-ʃa* ‘uncertainty’ appropriate to the mood/modality of their controlling clause. These suffixes also appear on NP constituents.

(61) numín tsúpiakus puhátai

[numi-na] tsupi-a-ku-**tsu** puha-tai
 [wood-ACC] cut-IMPV-SIM+3:SS-**SPEC1** live+IMPV:3-SPEC2

‘perhaps he is cutting wood’

(62) pasún miníthamakũĩŋ wahúk uwimáinatmi

[pasuni mini-tu-hama-a-ku-ĩ-**ŋa**] [wahuku
[evil.spirit arrive-APPLIC-1PL.OBJ-IMPV-IMPV-SIM-1/3.DS-UNCERT] [how

uwí-mai-inu-aita-mi]
save.oneself-POT-NR-COP-2]

‘should an evil spirit come across us, how can you save yourself?’ (6:11:8)

(63) ŋiĩŋ aníahai wítasanuŋ táwak

ŋiĩha ani-a-ha-i wi-tasa-nu-**ŋa** ta-wa-ka
very desire-IMPV-1SG-DECL go:PFV-INTENT-1SG:SS-UNCERT say+IMPV-3-POLINT

‘is she saying “I really want to go”?’ (Obs)

(64) amĩŋ líma wítasamiŋ wakĩuqasmik

[amí-**ŋa**] [líma wi-tasa-mi-**ŋa**] wakĩuqa-a-tsu-mi-ka
[2SG-UNCERT] [Lima go:PFV-INTENT-2SG:SS-UNCERT] want-IMPV-NEG-2-POLINT

‘do you want to go to Lima?’ (2:2:64)

So we see that two nominal suffixes may appear on dependent verbs. Also, three originally nominal suffixes may have historically spread into verbal morphology: locative → different subject; focus → conditional; additive → concessive. These three suffixes have in common the expression of interclausal relations.

Chapter 10: Verb V: Non-finite verb forms

10.1 Introduction

The subject of this chapter is non-finite verb forms. These forms are characterised by lack of obligatory person marking and entirely nominal morphology, as they have undergone the greatest decategorisation of all verb forms. Non-finite verbs are of two types: relativisations and nominalisations.

Relativisation enables a clause to modify an NP. Clauses relativised with *-u* have most of the distributional properties of adjectives, but they do not show the same differentiation from nouns in such areas as gradability. They also show some verbal properties. Relativised clauses are widely used in Aguaruna discourse, and are crucial in clause-chaining and participant tracking. Relativisations also frequently function as predicates, syntactically heading copular or verbless clauses.

“Modification appears to be largely an accessory function to reference and predication” (Croft 1991: 52)

Modification within the NP is rather uncommon, and when it does occur, there is often cause to treat it as apposition of two NP heads rather than one head-modifier NP. Property concepts tend instead to be encoded in the same way as nominal predicates, in equative clauses. Relative clauses are also more commonly used as predicate heads than as NP modifiers, but here the distinction is different. Relative clauses are actually quite common in modifying position, but they are also commonly used as finite predicates, especially in narratives. It seems that there has been a historical change:

RELATIVISED VERB → EQUATIVE CLAUSE → MAIN VERB IN → FINITE PREDICATE
COMPLEMENT AUXILIATION

This raises the tricky question of reanalysis. A few examples show morphological evidence that suggests reanalysis of relativised clauses as a narrative “tense”. It may be useful to divide the suffix *-u* into two homophonous forms: SUBJECT RELATIVISER and NARRATIVE TENSE.

Headless relatives are common, particularly with non-subject relativisations. Headless NPs arise from zero anaphora, when the head is definite. Note the following example where the referent is first-person, and therefore definite.

- (1) mína sáiqnakiʃ uhátsuk “mína apáhuk atsáwai” tusán wíqabiahai
 [[mi-na sai-hu-na-kI-ʃa] uha-a-tsu-u-ka]
 [[1SG-ACC brother.in.law-1SG-ACC-RESTR-ADD] tell-IMPV-NEG-REL-FOC]
- [mi-na apa-hu-ka atsa-wa-i tu-sa-nu]
 [1SG-ACC father-1SG-FOC exist.NEG+IMPV-3-DECL say-SBD-1SG:SS]
- wi-amaia-ha-i
 go:PFV-DISTPAST-1SG-DECL
- ‘(my father was away and) without even telling my brother-in-law I said “I have no father”
 and went’ (2:2:73)

In the case of non-subject relativisations, the common argument is typically an already-introduced participant in the narrative, the notable exception being when the common argument takes locative case in the matrix clause.

Relativised clauses are distinct both from nouns and from adjectives. Although nominalisations do not share all the properties of nouns, they are clearly nominal in their distribution. Table 10.1 summarises the distinct properties of nouns (both natural and derived) and adjectives, as described in §3.4, and also compares relativised clauses.

PROPERTY	NOUN	ADJECTIVE	RELATIVE CLAUSE
Can be intensified	–	✓	–
<i>imá</i> = ‘more’	–	✓	–
Can be possessor	✓	–	–
Can be possessed	✓	some	some
Can head NP	✓	–	–

Table 10.1: Properties of nouns, adjectives and relativisations

The conclusion is that relative clauses, like adjectives, do not actually head NPs: headless relatives are modifiers of headless NPs.

There are three nominalising suffixes: the action nominaliser *-ta* forms an abstract noun that refers to the action of the verb, and is basically an infinitive; *-inu* refers to the subject participant and *-taĩ* to a non-subject participant. The three suffixes are listed in table 10.2 along with their referents.

SUFFIX	REFERENT
<i>-ta</i>	action
<i>-inu</i>	subject
<i>-taĩ</i>	non-subject

Table 10.2: Nominalising verbal suffixes

Nominalisation is at the level of the clause, so verbal arguments, adverbs and subordinate clauses may all be included. In the case of non-subject nominalisations, any overt non-subject arguments are not marked with accusative case, as they would be in a finite clause.

The three groups of non-finite suffixes can be considered along with other verbal forms to form part of a cline of decategorisation. Table 10.3 illustrates the cline: finite, independent verbs are in the leftmost column, and decategorisation progresses rightwards across the table. The dotted line indicates the line between ‘(partially) finite’ and ‘non-finite’ verb forms, as I use the terms; the distinction corresponds to ‘person-marking’ vs ‘non-person-marking’ forms. The non-finite forms are described in the present chapter. Note that “NON-INFL (DS)” covers the non inflecting subordinators *-ma* and *-tatamana* (§9.5); “REL” covers the relativiser *-u*; and “NOM” covers the nominalisers *-ta*, *-inu* and *-taĩ*.

	FINITE	SUBORDINATE (SS)	SUBORDINATE (DS)	NON-INFL (DS)	REL	NOM
Marks TAM	✓	–	–	–	–	–
1 and 3 subject distinct	✓	✓	–	–	–	–
2 subject distinct	✓	✓	✓	–	–	–
Marks switch ref	✓	✓	✓	✓	–	–
Can head NP	–	–	–	–	–	✓

Table 10.3: Loss of verbal properties in decategorisation

The table shows that the first category to be lost is TAM marking, followed by person marking in two stages: the first vs third person distinction is neutralised in different-subject subordinate clauses, while non-finite clauses do not show any person marking. Relativisations and nominalisations also lack any marking that shows whether their subject is the same as or different from that of the matrix verb. And finally, we see that

nominalisations can head NPs – decategorisation has progressed to the point of changing the word class from verb to noun.

10.2 Morphology of relativiser and nominalisers

Because NP heads and modifiers are so similar in Aguaruna, it is useful to first consider relativised and nominalised clauses as a single group, to highlight the similarities and differences. I describe their properties individually in §§ 10.3 and 10.4 below.

10.2.1 Verbal stems

All three nominalisers typically appear suffixed to the unmarked verbal stem; derivational morphology including valency-changers, reflexive, reciprocal, object markers (slots A–E in §7.2) may be included, but no Aktionsart or tense markers. Relativisers, on the other hand, are suffixed to aspectualised stems. The contrast is illustrated in table 10.5:

STEM SUFFIX		UNMARKED	PERFECTIVE	IMPERFECTIVE
		NR	<i>-ta</i>	✓
<i>-inu</i>	✓		–	–
<i>-taĩ</i>	✓		–	–
REL	<i>-u</i>	–	✓	✓

Table 10.4: Combinations of nominalisers and relativisers with verbal stems

In addition to the unmarked stem, the subject nominaliser *-inu* may be suffixed to a future stem formed with the perfective stem plus the future suffix *-ta* to form a ‘future subject’ nominaliser, and to the potential stem with *-mai* to form a ‘potential subject’ nominaliser. The other two nominalisers and the relativiser may include the negative suffix *-tʃa* (slot G). Derived stems combine as follows:

	POTENTIAL <i>-mai</i>	NEGATIVE <i>-tʃa</i>	FUTURE <i>-ta</i>
<i>-ta</i>	–	✓	–
<i>-inu</i>	✓	–	✓
<i>-taĩ</i>	–	✓	–
<i>-u</i>	–	✓	–

Table 10.5: Combinations of nominalisers and relativisers with derived verbal stems

The following example comes from a story about how a rat first taught people how to give birth. The nominalised auxiliary construction *yuha a-tinu* (multiply COP-FUT+NR) ‘those who will multiply’ refers to humans. Note also that the speech verb *ta-wa-i* (say+IMPFV-3-DECL) ‘he/she says’ is marking narrative modality in this example.

(2) *huni yuhá átinun áatus dúʃakam iwáinkau táwai*

huni [*yuha* *a-tinu-na*] *aatusã* *nu-ʃakama*
 thus [multiply COP-FUT+NR-ACC] thus+3 ANA-ADD

iwaina-ka-u *ta-wa-i*
 CAUS+see-INTS-REL say+IMPFV-3-DECL

‘thus that one (the rat) also showed those who would multiply in the future (people) (how to multiply)’ (6:6:76)

(3) *wainmáinaithai*

waina-mai-inu-aita-ha-i
 see-POT-NR-COP-1SG-DECL

‘I can see’

The relativiser also combines with a suffix **-ma* (perhaps the same suffix as discussed in §9.5.2?) to produce a non-A/S relativiser. Combinations with *-u* produce the morphologically complex suffixes in table 10.6:

SUFFIX	REFERENT	INTERNAL MORPHOLOGY
<i>-ma-u</i>	non-subject	<i>*-ma + -u</i>
<i>-tʃa-u</i>	subject	negative + <i>-u</i>

Table 10.6: Morphologically complex relativising suffixes

The NEGATIVE + RELATIVE form is also used to negate nouns and adjectives (§0), and the accusative suffix *-na* combines with *-u* to form a nominal suffix *-nau* that marks possessor (§4.5.2).

The distinction between unmarked and aspectualised stems reflects the actualised status of the verb in relative clauses, in contrast to nominalisations – that is, the action of a relative clause is located in time as an actual event, whereas that of a nominalised verb is a habitual or potential action that becomes a property of the referent. Compare the following relativised and nominalised examples:

- (4) a. *úmau*
uma-u
 drink+IMPFV-REL
 ‘the one who is drinking’
- b. *úmin*
umu-inu
 drink-NR
 ‘a drinker’
- c. *yuwámu*
yu-a-mau
 eat-HIAF-NON.A/S:REL
 ‘what was eaten’
- d. *yútãĩ*
yu-tãĩ
 eat-NON.A/S:NR
 ‘food’

The negative relativiser *-tʃau* is the only relativiser that may appear with either aspectualised or unmarked stems; one could argue that this is possible because it does not refer to an actualised event or action:

- (5) a. *yuwátʃu*
yu-a-tʃau
 eat-HIAF-NEG:REL
 ‘one who has not eaten’
- b. *yútʃau*
yu-tʃau
 eat-NEG:REL
 ‘one who does not eat’

This accords with the basic semantic distinction between noun and modifier: nouns describe natural classes, and ‘eaters’ is a natural class, because all ‘eaters’ have a property in common, that of eating. By contrast, ‘non-eaters’ is not a natural class, because they have no positive property in common, only lack of a property.

10.2.2 Nominal morphology

Nominalisations and relativisations vary in the nominal suffixes they can take. The variation is summarised in table 10.7 below.

	NOM	ACC	VOC	PERT	INSTR	COMIT	ABL	COPULA
<i>-inu</i>	✓	✓	✓	–	–	✓	–	✓
<i>-taĩ</i>	✓	✓	–	✓	✓	✓	✓	✓
<i>-ta</i>	✓	✓	–	✓	–	–	–	✓
<i>-u</i>	✓	✓	✓	–	no data	✓	no data	✓
<i>-tʃau</i>	✓	✓	✓	–	no data	no data	no data	✓
<i>-mau</i>	✓	✓	–	✓	✓	✓	no data	✓

Table 10.7: Attested morphological possibilities of nominalisers and relativisers

The data in table 10.7 have been collected from both natural texts and elicitation, so those combinations that are not attested are either impossible or rare.

The differences can be ascribed to the semantics of the derived words. For example, vocative and pertensive are in complementary distribution – and this is because subject nominalisations and relativisations typically have human referents, and can therefore take vocative marking, and non-subject forms typically have non-human referents, and can be possessed.

10.2.2.1 Possession

As table 10.7 shows, all of the non-subject nominalisations and relativisations may be possessed. With *-ta* action nominalisations the pertensive morphology is inconsistent; sometimes declined as vowel-changing, sometimes as suffixing, sometimes possessed without pertensive marking (see §4.4 for details of nominal pertensive marking).

(6) umiḱáthami takathúmin

umi-hu-ka-ta-hami-i [taka-**ta**-hu-mi-na]
 complete-APPLIC-INTS-IFUT-1SG>2SG.OBJ-DECL [work-**ACTNR**-PERT-2-ACC]

‘I’ll do your work (for you)’

(7) húwai mína puhúthuk

hu-ai [mi-na puhu-**ta**-hu-ka]
 PRX-COP:3:DECL [1SG-ACC live-**ACTNR**-PERT:1SG-FOC]

‘this is my life’(2:2:300)

(8) apahúi takatí idáyas...

[apahui taka-**tí**] idaya-sã
 [God+GEN work-**ACTNR**+**PERT:1PL/3**+ACC] leave-SBD+3:SS

‘(as they were) abandoning God’s work...’ (8:1:113)

(9) mídau takát atsáwai

[mi-nau taka-**ta**] atsa-wa-i
 [1SG-POSS work-**ACTNR**] exist:NEG+IMPFV-3-DECL

‘I have no work (lit. *my work does not exist*)’

Note in the last example that the possessive marked form of the pronoun is used, thereby avoiding the need for any pertensive morphology altogether.

Non-subject nominalisations are declined as suffixing:

- (10) mína puhutáin
 mi-na puhu-**taĩ**-hu
 1SG-ACC live-NON.A/S:NR-PERT:1SG
 ‘where I live’, ‘my home’

- (11) ĩnutáĩhĩ
 ĩnu-**taĩ**-hĩ
 sing-NON.A/S:NR-PERT:1PL/3
 ‘its song (i.e. of a bird)’ (6:7:57)

Non-subject relativisations functioning as nominals can be alienably possessed, but pertensive morphology is preferred with more concrete referents. Compare the examples in (12):

- (12) a. nĩ puhámuhin wíi wainkámhai
 [nĩ puha-**mau**-hĩ-na] wi
 [3SG live+IMPFV-NON.A/S:REL-PERT:1PL/3-ACC] 1SG
 waina-ka-ma-ha-i
 see-INTS-RECPAST-1SG-DECL
 ‘I saw where he lives’
- b. páblo puhámunmaya mináwai
 [páblo puha-**mau**-numa-ia] mina-wa-i
 [Pablo live+IMPFV-NON.A/S:REL-LOC-ABL] arrive+IMPFV-3-DECL
 ‘(someone) from where Pablo lives is coming’

In both examples the verb *puhu* ‘live’ is marked with the non-subject relativiser *-mau*. However, in example (a) the implied head of the relative clause is a concrete dwelling-place – perhaps even the house itself. In (b), the more concrete reading is not possible; this refers to someone from the same village as Pablo, not from his house, and the pertensive suffix is dispreferred.

10.2.3 Verbal morphology

Non-finite verbs retain many verbal properties. Those with subject referents can function as predicate heads, and show signs of reanalysis as subordinate or main-clause verbs, with appropriate person marking. Reanalysis can also affect constituent ordering and NP marking within relative clauses (cf. examples with *-mau* in §).

-inu occasionally shows signs of reanalysis as a verb, with appropriate person marking. In (13) a nominalisation with *-inu* is followed by the main-clause first-person subject suffix *-ha*, and in (14) it is followed by the same-subject subordinate-clause first-person subject marker *-nu* and the concessive suffix *-fa(kama)*:

(13) “dakítnuhai” tímahai

dakitu-inu-ha-i ti-ma-ha-i
refuse-NR-1SG-DECL say+LOAF-RECPAST-1SG-DECL

‘I said I didn’t want (it)’

(14) wáŋka wíi húnintʃinuʃ utʃín imátikan puháha

wáŋka [wi huni-inu-utʃi-**nu**-ʃa] [utʃi-na
 why [1SG do.this-NR-DIM-**1SG:SS-CONCESS**] [child-ACC

imatika-nu puha-ha]
 do.so.much:PFV:SEQ-1SG:SS live+IMPFV-1SG]

‘why do I have so many children, even though I am so insignificant?’ (6:6:35)

The negative relativiser *-tʃau* typically takes a copula suffix when it is functioning predicatively, but may take main-clause person marking without the copula suffix, as in the following example:

(15) bukintín yútʃauhai

[bukinti-na] yu-tʃau-**ha**-i
 [palm.grub-ACC] eat-NEG:REL-**1SG-DECL**

‘I don’t eat palm grubs’

The above is apparently stylistically preferred to the equally grammatical:

(16) bukintín yútʃauwaithai

[bukinti-na] yu-tʃau-**aita-ha**-i
 [palm.grub-ACC] eat-NEG.REL-**COP-1SG-DECL**

‘I don’t eat palm grubs’

And the subject relativiser *-u* can take subordinate-clause person marking:

(17) “belén wíún wákithai” táwai

[belen wi-u-nu] [wakita-ha-i] ta-wa-i
 [Belén go:PFV-REL-1SG:SS] [return+IMPFV-1SG-DECL] say+IMPFV-3-DECL

‘he says: “I’m returning from Belén (village)”’

I have no examples of relativising *-u* followed directly by main-clause person marking without an intervening copula suffix. It is worth noting, however, that the combination of *-u* plus the third-person declarative copula suffix *-ai* is homophonous with third-person *-wa* plus declarative *-i*, a similarity that could play a role in future reanalysis.

(18) wíuwai

wi-u-ai
 go:PFV-REL-COP:3:DECL

OR

?wi-u-wa-i
 go:PFV-REL-3-DECL

‘he went’

If this does come to be analysed as directly suffixed person marking, it is likely that the other persons will follow suit; at present, however, directly person-marked relativised verbs are the exception rather than the rule.

10.3 Relativiser *-u*

The relativiser *-u* and its derivatives *-mau* ‘non-subject relativiser’ and *-tfau* ‘negative subject relativiser’ form relative clauses.

10.3.1 Common argument

All arguments of a relativised verb may be overt except the common argument that is shared with the matrix clause. Note in the following example that the speech report complement is included in a relativised clause headed by the verb *tu* ‘say’:

(19) “iḡkúnikmi” tímaunum

[iḡku-nai-ka-mi ti-**mau**-numa]
 [meet-RECIP-INTS-HORT say+LOAF-NON.A/S:REL-LOC]

‘in the place where they had agreed to meet’ (6:7:35)

The following example shows a locative-marked participant included in the relativised clause:

- (20) núwa áidau ahánúm aʃinkáu
 [nuwa a-ina-u [aha-numa aʃina-ka-u]]
 [woman COP-PL:IMPFV-REL [garden-LOC go:PL-INTS-REL]]
 ‘women who had gone to the garden’ (6:9:15)

Adverbs and subordinate clauses may also be included in relativised clauses.

Common arguments of relativised verbs are syntactically external to the relative clause, however some examples of non-subject relativisations with *-mau* show internal heads (examples (23) and (24) below). We saw above that *-tatamana* and *-ma*, when functioning as relatives, show external common arguments, but the same arguments are internal when they function as clause-linkers, in keeping with their ambiguous status.

That common arguments are typically external is most apparent from *-mau* clauses in which the common argument is an underlying object of the verb. As such, it would be expected to show accusative marking if it were internal to the clause. This can be seen in the examples below, where the common arguments of the *-mau* clauses are not marked with the accusative suffix, although they are underlyingly verbal objects:

- (21) dúʃakam múun áuŋmatbau áatus hiináawai
 [nu-ʃakama [muunta auhumatu-**mau**]] aatusã hiina-a-wa-i
 [ANA-ADD [elder tell-NON.A/S:REL]] thus.3 come.out-IMPFV-3-DECL
 ‘that (story) too, as told by the elders, goes like that’ (6:8:52)

- (22) íwãntʃ yáuntʃuk húkimu núwa
 [[íwantʃi yauntʃuki hu-ki-**mau**] nuwa]
 [[devil previously take-TRF-NON.A/S:REL] woman]
 ‘women the devil had previously taken’ (6:2:60)

A *-mau* relativisation may be used without a matrix clause, in which case constituent order tends to be AOV(*-mau*), as in finite clauses.

- (23) páŋki aínsu yuwámu
 [paŋki aínsu yu-a-**mau**]
 [boa person eat-HIAF-NON.A/S:REL]
 ‘(the story of) a person who got eaten by a boa’ (title given for Text 1)

(24) íkamỹãwãã aíns hintá wikáíuqu hitíkbaú

[ikam_yawaã [aínsu hinta wikáíuqa-a-u] hiti-ka-**mau**]
[jaguar [person path+LOC walk-IMPFV-REL] attack-INTS-NON.A/S:REL]

‘(the story of) a man attacked by a jaguar as he was walking the path (of preparation)’
(8:2:27)

As with the examples above, the underlying objects are not marked with the accusative suffix, so could be considered external to the relative clause – but the subject of the relativised verb **precedes** the object, so that the syntactically external argument is “physically” internal to a discontinuous relative clause. Both of these examples are titles given to me for stories, and the explanation probably lies in the fact that the relativisation is in fact functioning as an action nominalisation, and as a result, the clause takes the usual main-clause AOV ordering.

In the following example, both objects of a relativised trivalent verb are overt; neither is marked with the accusative suffix, and the whole construction is ambiguous as to which is the common argument:

(25) mína núwa tşínkim tsupínkamun wainkátawai

[[mi-na nuwa] [tşínkimi] tsupi-hu-ka-**mau**-na]
[[1SG-ACC wife] [firewood] cut-APPLIC-INTS-NON.A/S:REL-ACC]

waina-ka-tata-wa-i
see-INTS-FUT-3-DECL

‘he will see my wife, for whom firewood was cut’

OR

‘he will see the firewood that was cut for my wife’

Neither object takes accusative marking, so both must be external “co-potential-common-arguments” of the relative clause. With relative clauses formed from underived ditransitive verbs the common argument is similarly ambiguous. In (26) the headless relative *su-sa-mau* (give-ATT-NON.A/S:REL) refers to ‘the things that were given’, while in (27), the same form refers to ‘the one who was given things’.

(26) susámu áidaun ofisínanum ukúkĩ
 [su-sa-**mau** a-ina-u-na] ofisina-uma
 [give-ATT-NON.A/S:REL COP-PL:IMPFV-REL-ACC] office-LOC
 uku-ki-mĩ
 leave-TRF-RECPAST:3:DECL
 ‘he left the donations in the office’

(27) susámuhãĩ tʃitʃastáhai
 [su-sa-**mau**-haĩ] tʃitʃa-sa-ta-ha-i
 [give-ATT-NON.A/S:REL-COMIT] speak-ATT-IFUT-1SG-DECL
 ‘I’ll talk with (the person) who received things’

To complicate matters, and in contrast to the examples just presented, object arguments may be syntactically internal to the relativised clause, and thereby receive accusative marking as in the following example:

(28) wĩ ukuntʃín áĩũ ukúkbaun yãũũ yúwawai
 [wi ukuntʃi-na au-ĩ uku-ka-**mau**-na] yawaã
 [1SG bone-ACC DST-LOC leave-INTS-NON.A/S:REL-ACC] dog
 yu-a-wa-i
 eat-IMPFV-3-DECL

‘I left a bone there, and the dog is eating it’ Lit: *the dog is eating an I-left-a-bone-there (thing)*

Note that this elicited example, like the story titles given above, shows main clause constituent ordering. It is likely that the accusative marking and main-clause-like constituent ordering reflect the fact that the relativisation is being used to combine clauses rather than to embed one clause into a matrix clause. To put it another way, what appears morphosyntactically to be an object NP consisting of a headless relative clause is in fact being parsed by speakers as a subordinate clause. So the two strategies (**external** vs. **internal** common argument) correspond to two distinct functions of the *-mau* relativiser:

1. Relativisation; object as common argument; externally-headed relative clause; common argument in initial position in relative clause (OAV)
2. As clause-combiner; main-clause (AOV) ordering; main-clause object-marking (rare)

A third strategy, represented by the story titles in (23) and (24), is essentially a combination of the above two:

3. Stand-alone nominalised clause; main-clause (AOV) ordering; no object-marking

Note that *-mau* refers to any non-subject participant, whether core or oblique – typically, but not necessarily, the O argument of a transitive verb, or the location of an intransitive verb. In some examples, such as the following, it appears to refer to the action, rather than to a participant.

(29) *ihaphúkbau hĩũǎǎtinĩ*

[*ihapahu-ka-mau*] *hiũǎ-hu-tu-ini-ĩ*
 [give.birth-INTS-NON.A/S:REL] arrive-APPLIC-1SG.OBJ-LOAF-3:PFV

‘the day of my giving birth has arrived’ (6:6:28)

(30) *kuwáʃat yúwamu piŋkiŋʃau*

[*kuwaʃata yu-a-mau*] *piŋkiha-tʃau*
 [much eat-IMPV-NON.A/S:REL] good-NEG:REL

‘eating too much is bad’

When an intransitive verb is relativised with *-mau* the common argument is typically the location:

(31) *wákítu dukuhĩ wímaunum wíũǎu*

[*wakitũ*] [*duku-hĩ* *wi-mau-numa*] *wi-a-u*
 [return:PFV:SEQ+3:SS] [mother-PERT:1PL/3 go:PFV-NON.A/S:REL-LOC] go-IMPV-REL

‘(the dog) having returned, he went to (the place) where his mother had gone’ (6:5:27)

(32) *hĩũǎũwĩ mántʃumũ puhámunum*

hiũǎ-u-ai [*mantʃumutʃi puha-mau-numa*]
 arrive:PFV-REL-COP:3:DECL [*Manchumuch* live+IMPV-NON.A/S:REL-LOC]

‘she arrived at the place where Manchumuch (a mythical cannibal) lives’ (6:1:4)

(33) *áak atsámunum tipisa...*

[*aaka atsa-mau-numa*] *tipi-sa*
 [hut exist:NEG+IMPV-NON.A/S:REL-LOC] lie.down-ATT+1PL:SS

‘(we) having lain down (in the place) where there was no hut...’ (8:1:78)

I have no examples in which a location common argument is overt, and, unlike other headless relative clauses, the common argument has typically not been previously introduced into the discourse. Perhaps it is the case that the locative suffix *-numa* itself is derived historically from a noun meaning something like ‘place’. Certainly a recent

(35) h́una saiptj́hin iyaunakíŋ yuwáwainka

[hu-na saip̥i-utʃi-hĩ-na iya-**u**-na-kI-ʃa]
 [PRX-ACC peel-DIM-PERT:1PL/3-ACC fall:PFV-**REL**-ACC-RESTR-ADD]

yu-aw-aĩ-ka
 eat-HIAF-APPR+3-3:PROHIB

‘and make sure (the child) doesn’t eat these (manioc) peelings that have fallen (on the floor)’
 (6:1:21)

There are no examples that suggest the internal common argument analysis. Clearly more data are needed before any firm conclusions can be drawn.

Although *-u* relative clauses typically have an immediate sense, there are examples with more of a habitual sense:

(36) ẃika utʃinmauwaithai, h́unak ẃi d́ikahai

[wi-ka utʃi-hĩ-ma-**u**-aita-ha-i] [hu-na-ka wi
 [1SG-FOC child-PERT:1PL/3-VR-**REL**-COP-1SG-DECL] [PRX-ACC-FOC 1SG

d́ika-a-ha-i]
 know-IMPV-1SG-DECL]

‘I am a child-bearer – I know this (i.e. *I know how to bear children*)’ (6:6:38)

More typically, such a habitual sense is conveyed with the subject nominaliser *-inu* (§10.4.2).

The combination of NEGATIVE + RELATIVISER *-tʃa-u* may be suffixed to either the aspectualised or unmarked stem, depending on whether it is to be construed as having specific or generic reference. As with non-negated subject relativisations, those with *-tʃa-u* may function as finite verbs (see §10.2.3).

10.3.2 Functions and distribution

Relative clauses modify NPs, and headless relatives are not uncommon. They also may be reanalysed as subordinate verbs and take subordinate person suffixes. They function as independent verbs, although in this situation they could be analysed as syntactically verbless clause complements. An important factor in the reanalysis process is that a form ending in /Vu/ will take an allomorph of the third-person declarative copula suffix of the form /wai/, which is phonologically identical to the third person suffix *-wa* plus declarative *-i*.

10.3.3 Relativisation without *-u*

A second relativisation construction that does not involve the suffix *-u* is the use of postposed demonstratives. This type can refer to any participant in the relative clause, and is described in §5.4.

10.4 Nominalisers

10.4.1 Action nominaliser *-ta*

The action nominaliser forms an abstract noun referring to the action of the verb. All arguments may be overt, and objects are not marked with accusative case.

(37) wíka iháphut

[wi-ka ihapahu-**ta**]
[1SG-FOC give.birth-**ACTNR**]

‘my giving birth’ (6:6:28)

(38) máma suhután dakítawai

[[mama] su-hu-**ta**-na] dakita-wa-i
[[manioc] give-1SG.OBJ-**ACTNR-ACC**] refuse+IMPFV-3-DECL

‘he doesn’t want to give me manioc’

The following example comes from a story about a man who was swallowed by a giant boa, and tried to kill it by cutting up its heart.

(39) naṅkámawwai anintáĩ tsupíṅtan

naṅkama-a-u-ai [[anintaĩ] tsupi-hu-**ta**-na]
begin-HIAF-REL-COP:3:DECL [[heart] cut-**APPLIC-ACTNR-ACC**]

‘he began to cut (the boa’s) heart’ (3:1:107)

An exception to this lack of accusative marking arises when there is a first person object, as in (40):

(40) mína suhután dakítawai

[mi-na su-hu-**ta**-na] dakita-wa-i
[1SG-ACC give-1SG.OBJ-**ACTNR-ACC**] refuse+IMPFV-3-DECL

‘he doesn’t want to give (it) to me’

Other material may be overt, including adverbs (41) and non-core participants (42). Example (41) is a formula used to set the scene in “just-so story” type myths about the origins of things.

- (41) yamá nahánitnumak
 [yama nahani-**ta**-numa-ka]
 [newly create-**ACTNR**-LOC-FOC]
 ‘in the beginning’ (2:5:1)

- (42) dakítau apahíhãî wítán
 dakita-u [apa-hĩ-haĩ wi-**ta**-na]
 refuse+IMPFV-REL [father-PERT:1PL/3-COMIT go-**ACTNR**-ACC]
 ‘he refused to go with his father’ (6:5:13)

-ta nominalisations are typically given as the citation form of verbs, and this has led to previous analysts labelling this the ‘infinitive’.

Action nominalisations are used in complementation, particularly complements of *dakitu* ‘refuse’, as in example (42) above. Verbs of wanting and desire, however, take intentional clauses or speech reports as complements (see §12.6). Initiation of an action is commonly indicated with the verb *naŋkama* ‘begin’ and a *-ta* nominalised complement clause, as in examples (39) and (79) above.

Action nominalisations can function as A; the following example is a complement clause:

- (43) háta naŋkámahuabi
 [ha-**ta**] naŋkama-hu-a-amayi
 [be.sick-**ACTNR**] begin-1SG.OBJ-HIAF-DISTPAST:3:DECL
 ‘I began to get sick’ (lit. *to be sick began me*) (Text 2:27)

Action nominalisations also appear as NP arguments expressing abstract concepts, such as *taka-ta* (work-**ACTNR**) ‘work’; *puhu-ta* (live-**ACTNR**) ‘life’; *ha-ta* (be.sick-**ACTNR**) ‘sickness’ – for the last example, compare:

- (44) núwĩ háta múun atŋkábî
 nu-ĩ [ha-**ta** muunta] atŋi-hu-ka-mayi
 ANA-LOC [be.sick-**ACTNR** big] grab-1SG.OBJ-INTS-INTPAST:3:DECL
 ‘then I got really sick’ (lit. *a great sickness took hold of me*) (2:2:200)

This contrasts with the complement clause in (43) above, as the noun is modified, and the verb is ‘grab’, which takes nominal arguments rather than complement clauses.

(45) takát áwai

[taka-**ta**] a-wa-i
[work-**ACTNR**] exist-3-DECL

‘there is work’ (Text 2:16)

(46) inímtanaʃ inimáintʃau dikapíyahai

[inima-**ta**-na-ʃa] inima-mai-inu-tʃau dikapi-ia-ha-i
[ask-**ACTNR-ACC-ADD**] ask-POT-NR-NEG:REL feel-REMPAST-1SG-DECL

‘I couldn’t even ask a question’ (Text 2:13)

(47) ipáamatai

ipaama-**ta**-i
thunder-**ACTNR-COP**:3-DECL

‘it’s thunder (that you hear)’ (Obs)

A locative-marked *-ta* nominalisation is used with the verb *puhu* ‘live’ to express the sense of ‘about to do’ something, as in the following examples.

(48) wíka yabáik hatánum puháhai

wi-ka yamai-ka [ha-**ta**-numa] puha-ha-i
1SG-FOC now-FOC [die-**ACTNR-LOC**] live+IMPFV-1SG-DECL

‘now I’m about to die’ (6:6:31)

(49) árias witánum puháwai

arias [wi-**ta**-numa] puha-wa-i
Arias [go-**ACTNR-LOC**] live+IMPFV-3-DECL

‘Arias is about to go’

10.4.2 Subject nominaliser *-inu*

The subject nominaliser *-inu* ascribes a propensity or habitual action to the referent, as subject of the nominalised verb. The following examples demonstrate the use:

(50) mántin

mantu-**inu**
kill+**APPLIC-NR**

‘killer’ (typically applied to hunting dogs)

(51) hintínkaṭin
 hintina-kahatu-**inu**
 teach-1PL.OBJ-NR
 ‘teacher’

(52) iwíṣin
 iwíṣi-**inu**
 bewitch-NR
 ‘shaman’

Object arguments may be overt, and are marked with accusative case as in finite clauses:

(53) wíi utṣín tṣitṣáhin atáhai
 [wi] [utṣi-**na** tṣitṣa-hu-inu] a-ta-ha-i
 [1SG] [child-ACC speak-APPLIC-NR] COP-IFUT-1SG-DECL
 ‘I will be the children’s advisor’ (6:2:72)

(54) nunú kaṅkaṭín nuwín intsámhin áidauṣkam
 nunu [kaṅkaṭi-na nuwĩ-**na**] intsamahu-inu
 ANA [Kagkap-ACC woman:PERT:1PL/3-ACC] have.sex-NR
 a-ina-u-ṣakama
 COP-PL:IMPFV-REL-ADD
 ‘those who were having sex with Kagkap’s wife too’ (6:4:34)

(55) núna múun áuṣmatin ahabianúna wíṣa táhai
 [[nu-**na** muunta auhumatu-inu] aha-maia = nu-na] wi-ṣa
 [[ANA-ACC elder tell-NR] COP:PAST-INTPAST:3=ANARel-ACC] 1SG-ADD
 ta-ha-i
 say+IMPFV-1SG-DECL
 ‘what the elders told, I also tell’ (6:2:95)

This shows that the object arguments are internal to the nominalised clause. In addition to objects, nominalised clauses may include adverbs:

(56) hápak síntṣi tupikáinai
 [hapa-ka] [síntṣi tupikau-**inu**-ai]
 [deer-FOC] [strongly run-NR-COP:3:DECL]
 ‘the deer is a strong runner’(6:15:4)

And subordinate clauses, as in the following example. The whole process described in (57) is habitual, as the narrator is describing his life when he worked for a *mestizo* family for a year:

- (57) káʃik hiinkí taká takákua ítsā jíiŋ akáũĩĩ kiihitutu waháĩ taá mái yuhúmak yuwá kánin áyahai
 [[kaʃiki hiina-ki] [taka taka-a-kawa] [ítsā jíiha
 [[early go.out-TRF:SEQ+1PL:SS] [REDUP work-IMPV-REPET+1PL:SS] [sun well
 akai-a-ĩ] [kiihitutu waha-a-ĩ] [ta-a]
 set-IMPV:1SG/3-DS] [SYM stand-IMPV:1SG/3-DS] [come-HIAF:SEQ+1PL:SS]
 [mai] [yuhumaka yu-a] kanu-**inu**]
 [bathe+LOAF:SEQ+1PL:SS] [manioc eat-HIAF:SEQ+1PL:SS] sleep-NR]
 a-ia-ha-i
 COP-REMPAST-1SG-DECL

‘(we) having gone out early, working, when the sun was well set, as it was getting dark, (we) having come back, having bathed, having eaten a meal, I was one who slept’ (2:2:60)

10.4.2.1 Future subject nominaliser -*tinu*

As mentioned above, the subject nominaliser *-inu* combines with a future stem formed from the perfective stem and the future suffix *-ta* to give a ‘future subject nominaliser’ *-tinu*.

- (58) wi-**tinu**
 go:PFV-FUT+NR
 ‘one who will go’

- (59) wi-aha-**tinu**
 go:PFV-PL-FUT+NR
 ‘those who will go’

- (60) au taka-a-kũ puha-wa-i [aha-na] [mi-nau
 3SG work-IMPV-SIM+3:SS live+IMPV-3-DECL [garden-ACC] [1SG-POSS
 a-**tinu**-na]
 be-FUT+NR-ACC]
 ‘he is working on the garden that will be mine’

- (61) [hu-na-ka] [utʃihuma-ka-**tinu**-na-ka]
 [PRX-ACC-FOC] [give.birth-INTS-**FUT**+NR-ACC-FOC]

umi-hu-ka-hami-i
 prepare-APPLIC-INTS-1SG>2SG.OBJ-DECL

‘I have prepared this for you, who are about to give birth’ (6:6:46)

Although clearly based on future *-ta* + subject nominaliser *-inu*, the form *-tinu* is a separate affix synchronically. The crucial difference is in the referent: the future nominaliser may be interpreted as referring to the object of the verb, as in (62) below.

- (62) uwa-ha-**tinu**-ʃakama a-wa-i
 drink:PFV-PLU-**FUT**+NR-ADD exist-3-DECL

‘there’s also drink (i.e. *that which will be drunk*)’

It seems reasonable, therefore, to assume that the form *-tinu* has been reanalysed from FUTURE STEM + SUBJECT NOMINALISER > PERFECTIVE STEM + FUTURE NOMINALISER. As the meaning of the suffix has shifted to futurity, the sense of subjecthood has been lost, allowing the referent in individual examples to be interpreted as context allows.¹¹¹

10.4.2.2 Historical development

The nominaliser *-inu* has probably come from the anaphoric pronoun *nu*, which synchronically finds a use in forming relative clauses, and in that function may form a single phonological word with the preceding predicate (§5.4.3). However the morphophonological effects and functional difference (the nominaliser *-inu* is rarely used in relativisation) clearly show that these are different morphemes synchronically.

A suffix *-tinu* appears on pertensive-marked nouns to form an attributive, i.e. ‘one who has NOUN’. This is most likely traceable historically to the verb root *tu* ‘say’ and the habitual nominaliser *-inu*; so the meaning would be something like ‘one who says “my NOUN”’ (see further discussion in §4.5.1).

¹¹¹ A possible source of analogy is the commonly encountered combination of the potential stem formed with the potential suffix *-mai* + subject nominaliser *-nu*; the potential stem is always S=O ambitransitive (§7.3.3).

10.4.3 Non-subject nominaliser *-taĩ*

The non-subject nominaliser *-taĩ* forms a noun whose referent is a non-subject participant; typically an object of a transitive verb or location of an intransitive verb, as with *-mau* relativisation. Typical examples are commonly-encountered nouns referring to everyday cultural artefacts or activities:

(63) *ikima-taĩ*

sit-NON.A/S:NR

‘seat’ (intransitive; referent = location¹¹²)

(64) *yu-taĩ*

eat-NON.A/S:NR

‘food’ (transitive; referent = O)

(65) *umpuu-taĩ*

blow-NON.A/S:NR

‘flute’ (transitive; referent = O)

(66) *ʃiki-taĩ*

urinate.on-NON.A/S:NR

‘urinal, place where people go to urinate’ (6:2:67) (transitive; referent = location? O?)

(67) *atuʃat waina-taĩ*

far see-NON.A/S:NR

‘binoculars’ (transitive; referent = instrument)

-taĩ contrasts with the non-subject relativiser *-ma-u* in that it refers to a non-specific, typical object. So while *yu-taĩ* (eat-NON.A/S:NR) is best translated with the more general term ‘food’ (i.e. ‘what gets eaten’), *yu-a-mau* (eat-HIAF-NON.A/S:REL) is ‘that which was eaten’ – with reference to a specific event. For example, the story of ‘the man who was eaten by a boa’ is given as *paŋki a#ntsu yu-a-mau* (boa person eat.HIAF-NON.A/S:REL).

Although many examples are well lexicalised (and appear in dictionaries), the productivity of the suffix is apparent from such forms as *auʃa-taĩ* (write-NON.A/S:NR),

¹¹² cf. *#i#ma-sa-ta tʃimpui-numa* (sit-ATT-IMP stool-LOC) ‘sit on the stool!’, with an overt locative-marked participant.

which can mean ‘pen’ (instrument), ‘notebook’ (location) or ‘writing desk’ (location), depending on the context.

-taĩ nominalisations tend to be used without their arguments. Object arguments may, however, be included, and are unmarked:

- (68) [buukia paka-**taĩ**-numa] ihĩuqa-u
 [skull peel-NON.A/S:NR-LOC] CAUS+arrive-REL
 ‘he brought them to the place where skulls were skinned (to make shrunken heads)’ (6:3:32)

- (69) [aiʃi daka-**taĩ**-numa] wa-ka-u-ai
 [husband:PERT:1PL/3 wait.for-NON.A/S:NR-LOC] go.up-INTS-REL-COP:3:DECL
 ‘she went up to the place where she always waited for her husband’ (6:17:57)

In both of the examples above, the referent of the nominalisation is the location, not the overt object. Also cf. example (67) above, which includes the adverb *atufat* ‘far’.

- (70) [iwa wampatʃi aintsu iŋkipa-**taĩ**-utʃi-hĩ]
 [Iwa backpack person put-NON.A/S:NR-DIM-PERT:1PL/3]
 ‘his_i backpack that Iwa_i puts people in’ (2:3:47)¹¹³

In example (70) the referent is again the location (*wampatʃi* ‘backpack’ – this would be an oblique NP in a finite clause), and not the object (*aĩntsu* ‘person’).

When an intransitive verb is nominalised with *-taĩ* the referent is almost always the location cf. *kanu-taĩ* (sleep-NON.A/S:NR) ‘dormitory for guests’.

- (71) āhantu-ia-ha-i [[yatʃa auhu-**taĩ**-na] auhu-u
 be.shy-REMPAST-1SG-DECL [[wise study-NON.A/S:NR-ACC] study-REL
 asa-nu]
 COP:SBD/SEQ-1SG:SS]
 ‘I was shy, because I was studying what wise people study’ (2:2:163)

Here the internal subject of the nominalised clause is a habitual subject, as shown by the fact that it is different from the subject of the matrix clause.

¹¹³ Iwa is one of a mythological race of cannibals, who would trap and kill Aguaruna people, then carry them home in a big backpack to eat.

- (72) [kiiwi-ʃa] [yu-**taĩ**-ka-aita] ii-ʃa]
 [centipede-UNCERT] [eat-NON.A/S:NR-POLINT-COP:3:INT 1PL-UNCERT]
 ‘do we (i.e. people) eat centipedes?’ (6:1:21)

Finally, *-taĩ* may also refer to the action rather than a participant:

- (73) wi-a uha-ka-ta-hami-i [mi-na
 1SG-FIRST tell-INTS-IFUT-1SG>2SG.OBJ-DECL [1SG-ACC
 uwi-ma-**taĩ**-hu-na]
 defend-REFL-NON.A/S:NR-PERT:1SG-ACC]
 ‘first I’ll tell you about my method of self-defence’ (6:11:14)

10.4.3.1 Historical speculation

The non-subject nominaliser may involve the abstract nominaliser *-ta*. Corbera (1994: 149) suggests that it is composed of the action nominaliser *-ta* and the instrumental *-i* (note that he transcribes the suffix without a nasal vowel). But this could not be a synchronically analysable combination, as a nominalisation with *-taĩ* is nominative, and can take the instrumental suffix. Similarly, one could speculate that the source is the action nominaliser plus the locative *-(n)ĩ*, which would explain the nasal quality of *-taĩ*, but this would again have to be considered synchronically opaque. Ultimately it seems that *-taĩ* is not synchronically decomposable, and there is not sufficient evidence to suggest any historical composition.

10.5 Summary of non-finite verb forms

The evidence shows that all relativisation and nominalisation is at the level of the clause. Typically referents are external, but in a number of examples the marker functions as a clause-chainer, and then arguments are internal and constituent order and marking of grammatical relations is as for subordinate clauses. This raises the issue of the psychological reality of relativised and nominalised clauses, or rather, of the NPs they head or modify. Where a large number of such clauses are nested or combined, the function is basically that of clause-chaining (see discussion in Chapter 12). Do native speakers of Aguaruna really consider such constructions to constitute NPs? This is an important area for future research, along with the mechanics of clause-chaining and participant tracking in general.

Chapter 11: Structure of the Clause

11.1 Introduction

The clause consists minimally of a predicate. Clauses can be classified by two broad criteria: transitivity and mood.

Aguaruna has a strictly nominative-accusative profile. Grammatical relations centre on subject (A and S) and object (O). Nominalisation and relativisation, however, contrast subject with non-subject (O or oblique). Verbs have inherent transitivity values, and valency can be increased with derivational morphology. Subjects and SAP objects are indexed with verbal suffixes and NP arguments are case-marked to show their role in the clause – core arguments take nominative or accusative case. The effects of a person hierarchy can be seen throughout the object marking system.

Outside of transitivity distinctions are equative/attributive clauses and copular clauses headed by copula verbs. All require two arguments, a subject and a complement.

The predicate may consist of just one verb, a predicate nominal, or a non-finite main verb and finite auxiliary. The main verb in an auxiliary construction may take one of several forms, and it is difficult to draw a sharp distinction between auxiliiation and clause-combining constructions.

Major mood types are declarative, interrogative, exclamatory and imperative; declarative and interrogative moods subsume various formally and functionally distinct subtypes.

There is a strong verb-final tendency in all clause types. Subordinate clauses are always verb-final, while finite clauses show considerable variation for pragmatic purposes. Constituent ordering is discussed in more detail in §13.5.

11.2 Syntactic constituents

The syntactic constituents that combine to form a clause in Aguaruna are noun phrase and predicate. Minor syntactic constituents are adjective phrase and adverb phrase: each consists of an optional modifier slot in pre-head position in addition to the head. There is no motivation to recognise a verb phrase, consisting of the predicate and its object(s), as a relevant syntactic constituent.

11.2.1 Noun Phrase

The noun phrase is defined in detail in Chapter 5. It consists minimally of a head noun. The NP may include preposed or postposed modifiers. The accusative, comitative, locative and instrumental case suffixes are attached only to the final element of the NP, except where one of the following three determiners precedes the head: *hu* proximal demonstrative, *au* distal demonstrative, *nu* anaphoric pronoun. In that case all elements of the NP show case agreement. Possession is head-marked with a pertensive suffix on the possessum, and the possessor, if it appears, takes the genitive form.

NPs may be conjoined asyndetically, and this is relevant to the analysis of apparent “multiple object” constructions below.

Discontinuous NPs are possible, and the modifier of a discontinuous NP may functionally simulate a separate argument, as in examples (30) and (46).

11.2.2 Adjective phrase and adverb phrase

Both the adjective phrase and the adverb phrase consist simply of the head plus an optional pre-head modifier:

(1) (Mod) Head

The modifier may be one of: *fiha* ‘well, very’ or *ima* ‘intensifier’. Since the modifier *fiha* is an adverb, it can take a modifier itself, giving hierarchically nested phrase structure:

(2) *ʃiŋ ʃiŋ múun*
[[*ʃiha ʃiha*] *muunta*]
[[*very very*] *big*]
‘very very big’

11.2.3 Clause

A **clause** consists of a single predicate and its associated arguments. In Aguaruna this is minimally a verb or a predicate nominal (i.e. one functioning as a verbless clause complement). Overt expression of NP arguments is not obligatory.

True auxiliary constructions are monoclausal, the two verbs form a complex predicate, and transitivity is determined by the main verb. Pseudo-auxiliary constructions are similarly monoclausal, but the transitivity value is not shared between the two verbs. Both types of auxiliary constructions have grammaticalised from multiclausal

constructions, and some synchronically multiclausal constructions are very similar on the surface. See §6.4 for a full description.

11.2.4 Sentence

A sentence consists minimally of one finite clause, which in turn consists minimally of a finite verb or predicate nominal as defined above. Multiclausal sentences may be created through clause-chaining, relativisation (functioning as clause-chaining) and coordination. By these criteria, then, a sentence is defined as consisting of one finite clause and its associated subordinate clauses. Multiclausal sentences consisting of more than one finite clause (i.e. clause coordination) are very rare in Aguaruna – hypotactic constructions are the norm. However coordination of clauses is possible, and creates a second type of complex sentence. Bridging constructions are often used to link finite clauses, and it can be difficult to judge solely on syntactic evidence whether such constructions form sentences. Typically every clause in a narrative is linked syntactically to the following clause, and there is no clear line to be drawn between syntactic and pragmatic levels of linking. Some examples are clearly linked to form a single sentence, judging by semantic criteria: for example, a concessive clause and its controlling clause may be linked with a bridging construction.

The difficulty in setting limits on what constructions should be considered to form more than one sentence does not detract from the syntactic and semantic reality of the sentence.

Issues related to multiclausal constructions are all discussed in Chapter 12. The discussion that follows is limited to single clauses.

11.3 Grammatical Relations

Aguaruna has a robust nominative-accusative profile in both NP (dependent) marking and verbal (head) marking. Only one SAP object may be marked on a verb, with the choice of which to mark obeying a hierarchy. The same hierarchy underlies a constraint on which persons may fill grammatical roles in a clause, and various strategies, involving suspension of regular object marking, are employed to avoid violations.

There is a strong preference for divalent, transitive verbs. The mapping of participants to grammatical roles is remarkably similar to English, including such patterns as experiencer = A, stimulus = O.

Grammatical relations involve NP participants in the action of the verb. Core arguments are subject and object; “The core arguments must be stated – or else be understood – for the clause to be acceptable and to have sense.” (Dixon & Aikhenvald 2000: 2). There are no verbs that require an oblique NP as an argument.

The subject – object opposition is manifested in case marking on NPs and in subject and object marking on the verb. Two types of objects can be distinguished: O is the object projected by all transitive verbs, and E is the third ‘recipient’ type argument projected by ditransitive verbs, and the ‘beneficiary’ type argument added by the applicative suffix. For most grammatical processes the two are treated identically, but some object-marking strategies can be shown to be manifestations of a preference for E to be higher on a person hierarchy than O (discussed in §11.3.2.2).

A second, less pervasive, grammatical opposition is that of subject versus non-subject; this is exploited in forming relativisations using the non-subject relativiser *-mau* and nominalisations with the non-subject nominaliser *-taĩ*. The resulting forms can refer to any non-subject participant of the clause, whether O, E or oblique (i.e. non-core). Figure 11.1 sets out the grammatical roles and the groupings that are apparent in the grammar.¹¹⁴

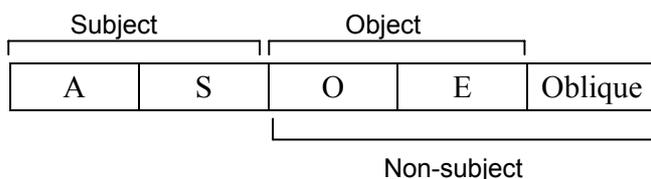


Figure 11.1: Grammatical roles and their groupings

There are just two areas where the opposition is not between subject and object: inherently plural verbs are selected for plural S or O (see §3.2.3),¹¹⁵ and two Aktionsart

¹¹⁴ Number marking occasionally seems to depart from a simple subject/object distinction: plural marking normally indicates a plural subject but some verbs with plural object and singular subject still receive plural marking. This phenomenon is described in §7.8.1.1.

¹¹⁵ Durie (1986) and Dixon (1994: 55) point out that this pattern is universal in verb roots with inherent number specification.

suffixes *-a* ‘high affectedness’ and *-i(ni)* ‘low affectedness’ are selected based on the affectedness of S or O (see §7.3.1.1). These are the only two phenomena I have found that treat A and S differently.

The following person hierarchy interacts with marking of grammatical relations in a number of ways:

$$1\text{SG} > 2\text{SG} > 1\text{PL}/2\text{PL} > 3$$

First and second person plural have equal rank. The main tendency is for E to be higher ranked than O. As the effects of the hierarchy are seen in object marking, they are described in section §11.3.2 below.

11.3.1 Subject

Subject is the grammatical instantiation of A and S. No morphological distinction is made between the subject of an intransitive verb (S) and subject of a transitive verb (A); the same pronominal form *wi* and the same suffix *-ha* encode first person singular subject in both examples below:

- (3) a. [wi] wi-a-ha-i
 [1SG]_S go-IMPFV-1SG-DECL
 ‘I am going’
- b. [wi] [atafu-na] yu-a-ta-ha-i
 [1SG]_A [chicken-ACC]_O eat-HIAF-IFUT-1SG-DECL
 ‘I’m going to eat chicken’

Similarly, the subject of an equative/attributive or copula clause (CS) is treated identically to A and S:

- (4) [wi] [awahuni-ita-ha-i]
 [1SG]_{CS} [aguaruna-COP-1SG-DECL]_{CC}
 ‘I am (an) Aguaruna’

The same identity of A, S and CS holds for all persons. The following morphosyntactic properties are criterial for subjecthood:

- a. Verbal suffixes cross-reference the subject.
- b. Subject NPs appear in the zero-marked nominative case. That is, subject NPs cannot take any of the case suffixes, although they may take discourse-level suffixes.

- c. The switch-reference marking that pervades clause-linking constructions makes reference to the subject. Marking on dependent clauses indicates whether the subject is the same as or different to that of the controlling verb. Other participants may be shared, but do not affect the verbal marking.
- d. The subject nominaliser *-inu* and subject relativiser *-u* refer to the subject of the verb.

Semantically, the subject is prototypically an agent, and always encodes the **most** agentive participant or the source of the action. For verbs of emotion and perception the experiencer is the subject, and the stimulus, if present, the object.

11.3.2 Object

The term object covers all **non-subject core participants**, that is, O and E. Semantically, this includes patients and themes as well as recipients and beneficiaries/maleficiaries. Object NPs are distinguished from subjects by the following morphosyntactic criteria:

- a. Accusative case marking (with regular exceptions)
- b. SAP objects marked on verb
- c. Controller of A/S>O subordinator *-tatamana*
- d. Potential targets for non-subject relativisation and nominalisation

The first three properties also distinguish objects from other non-subject arguments, that is, oblique NPs. Object and oblique are grouped together for a few processes, however, as discussed below.

11.3.2.1 Object NP marking

Object NPs are marked with the accusative suffix *-na*, **except** where a second person or first plural subject acts on an object other than first person singular. Only the final element of the NP receives accusative case except that NPs with demonstrative determiner or overt possessor show accusative case agreement on all elements. Pronominal possessors always take accusative marking, and it seems that the genitive form of the noun has arisen historically from accusative case – see further discussion in §4.6.2.

An interesting property of Aguaruna is that there is not a complete overlap between syntactic objects and morphological accusative marking. When the subject is first person singular or third person, all object NPs take accusative case, but when the subject is first person plural or second person, only first person singular object is accusative marked, with others appearing unmarked. This is represented schematically in table 11.1 below: a tick represents combinations of subject and object that require accusative marking; the dash represents those that take unmarked objects. The two greyed-out cells do not take part in this system, as such combinations must involve coreferentiality of A and O, and therefore take reflexive marking on the verb and are incompatible with overt object NPs.

		Object			
		1SG	2SG	1PL/2PL	3
Subject	1SG		✓	✓	✓
	2SG	✓		–	–
	1PL/2PL	✓	✓	–	–
	3	✓	✓	✓	✓

Table 11.1: Accusative marking and the person hierarchy

There is an interesting symmetry in the way that accusative marking maps to the person hierarchy: subjects at the extremes of the hierarchy (1SG and 3) mark all objects with accusative case, while the middle values (2SG and 1PL/2PL) only mark higher-ranked objects.

NP object marking does not match verbal object marking, as the latter is always present for SAP objects, even when the coreferential NP is unmarked (see §11.3.2.2).

- (5) a. [nĩ] ĩma-ta
 [3SG] carry+PFV-IMP
 ‘you (sg) carry him!’
- b. [kutfi] maa-ma-uhumi
 [pig] kill+HIAF-PAST-2PL
 ‘you (pl) killed a pig’
- c. [atafu] yu-a-tata-hi
 [chicken] eat-HIAF-FUT-1PL
 ‘we will eat chicken’

Compare the above examples, with no accusative marking, with those below:

- (6) a. [tsabau-na] yu-a-ti
 [banana-ACC] eat-HIAF-JUSS
 ‘let him eat a banana!’
- b. [kutʃi-na] maa-aha-mĩ
 [pig-ACC] kill.HIAF-PL-RECPAST:3:DECL
 ‘they killed a pig’
- c. [ataʃu-na] yu-a-tata-ha-i
 [chicken-ACC] eat-HIAF-FUT-1SG-DECL
 ‘I will eat chicken’

Combinations of second person and first plural show a mixture of features: overt pronouns are not marked with accusative case, but verbal object marking does appear:

- (7) [hutii ainau-ti] ama-sa-tata-himi-i [tsamau] [atumi ainau]
 [1PL PL-SAP]_A give-ATT-FUT-1>2:PL-DECL [banana]_O [2PL PL]_E
 ‘we gave you (pl) bananas’
- (8) [hutii ainau-ti] [atumi] wai-hatu-ina-humi-i
 [1PL PL-SAP]_O [2PL]_A see-1PL.OBJ-PL:IMPV-2PL-DECL
 ‘you (pl) see us’

Second person singular is marked accusative with first person plural subject:

- (9) [hutii a-ina-u-ti] daka-sa-tata-hami-i [ami-na]
 [1PL COP-PL:IMPV-REL-SAP]_A wait.for-ATT-FUT-1SG>2SG.OBJ-DECL [2SG-ACC]_O
 ‘we will wait for you’

First-person singular objects are marked on the verb and with accusative case on the pronoun:

- (10) a. [mi-na] hu-hu-ki-ta
 [1SG-ACC]_O carry-1SG.OBJ-TRF-IMP
 ‘carry me!’
- b. [mi-na] su-hu-sa-ta
 [1SG-ACC]_E give-1SG.OBJ-ATT-IMP
 ‘give (it) to me!’

Evidence that the unmarked NPs are true objects comes from three sources.

1. Verbal indexing of participants: SAP objects are marked identically on the verb whatever the person of the subject and regardless of the absence of accusative marking on the NP.
2. Analogy: structurally identical clauses with first singular or third-person subject always show accusative marking on the object NP – compare the examples in (5) with those in (6).
3. Valency: intransitive verbs cannot take a similarly unmarked NP without valency-increasing derivation.

Since these objects behave in all other respects identically to other objects, there is no need to recognise them as anything other than O or E arguments.

There is an optional phonological process whereby word-final nasal consonants are elided. This occurs with some object NPs, as in the following examples, where the expected surface forms of the objects are *[yumín] and *[wawákɪn] respectively.

- (11) [yumí áimak wítatman]
 [yumi-na] aima-a-kũ wi-tatamana
 [water-ACC] fill-IMPV-SIM+3:SS go-A/S>O/E
 ‘while going to fill a container with water...’ (1:7:16)

- (12) [wawákɪ tapít átʃihuk]
 [wawaki-na] tapit atʃi-hu-kã
 [pincer-ACC] SYM grab-APPLIC-INTS:SEQ+3:SS
 ‘having grabbed (the crab’s) pincer “yoink!”...’ (2.3.27)

This originally phonological process has contributed to the development of a genitive form, used to mark the possessor in a possessive NP (§4.6.2). There appears to be no semantic or grammatical motivation for genitive marking of objects, rather, the process is entirely phonological, and these forms are synchronically underlyingly accusative-marked.

11.3.2.2 Verbal object marking

SAP objects are indexed with verbal suffixes, but third-person objects never are.¹¹⁶

- (13) a. isa-tu-ka-tata-wa-i
 bite-1SG.OBJ-INTS-FUT-3-DECL
 ‘it will bite me’

¹¹⁶ See §7.5.6 for details of the object marking suffixes.

b. isa-hapa-ka-tata-wa-i
bite-2.OBJ-INTS-FUT-3-DECL

‘it will bite you’

c. isa-ka-tata-wa-i
bite-INTS-FUT-3-DECL

‘it will bite (him)’

Where a verb takes more than one object, only one of them is indexed on the verb. In the following example there are two objects: third person O and first singular E, and first singular is marked.

(14) [mi-na] su-hu-sa-ta
[1SG-ACC] give-1SG.OBJ-ATT-IMP

‘give it to me’

The next example has three objects: third person O (the book) and E (your father), and first singular E_{APPLIC}, an object added by the applicative suffix. Again the first person object is marked on the verb.

(15) [huhu papi] [apa] su-hu-tu-sa-ta
[PRX book] [father:PERT:2] give-APPLIC-1SG.OBJ-ATT-IMP

‘give this book to your father for me’

The choice of which object to mark obeys the person hierarchy: 1SG > 1PL/2 > 3 so that first and second-person arguments will be given preference. This is expressed with rule (A):

(A) Highest ranked object is marked on the verb

There is a differentiation within objects, and a preference for E to be higher on the person hierarchy than O. This can be formulated as constraint (B), to be read as “O may not outrank E”:

(B) **O > E

A number of strategies are used to avoid violations of this constraint, and will be illustrated below. Constraint (B) is absolute when O and E are both SAP participants, but in other situations is a matter of preference; so we could reformulate it as two constraints:

(B1) **O = 1SG, E = 2

(B2) Avoid O = SAP, E = 3

This asymmetry can also be referred back to the person hierarchy, as the constraint is at its strongest when dealing with objects that are higher on the hierarchy, and weaker at the lower end of the hierarchy.

A third constraint prohibits adding an object with the applicative suffix (E_{APPLIC}) if there is already a SAP object in the clause; as a result, the only possible cooccurrence of two SAP objects is with underived ditransitive verbs.

(C) $**E_{\text{APPLIC}}$ if O = SAP

Constraint (C) *cannot* be reformulated as simply “ E_{APPLIC} must be the highest ranked object”, as one might expect. If that were the case, then a clause with a second person O or E and a first singular E_{APPLIC} would be possible, but such a configuration is avoided – see example (23).

Constraint (C) is not absolute. It is violated in example (17), in which a first singular O is repositioned as E_{APPLIC} to avoid a violation of constraint (B), suggesting that constraints (B) and (C) are ranked (in that order). A second exception is represented by example (22); this is also an exception to (B), and suggests that both (B) and (C) are motivated by avoidance of ambiguity, and can be violated provided the context is sufficient to avoid ambiguity.

Below I shall present some examples of the constraints in action, and identify four strategies that are used to avoid violations of constraints (B) and (C). These are:

1. $O \rightarrow E_{\text{APPLIC}}$. This strategy resolves a violation of constraint (B) by recasting the notional O argument as the E added by the applicative suffix (example 17).

Strategy (1) may co-occur with one of the following strategies:

2. $E \rightarrow \text{Obl (locative)}$. This strategy resolves a violation of constraint (B) by recasting the notional E argument as an oblique NP with locative case marking (example 17).
3. Notional E placed in subordinate clause. This strategy places a ‘beneficiary’ type participant into a different clause, so that it is no longer within the valency of the same verb as the higher-ranked O (example 19).
4. Notional E_{APPLIC} placed in oblique NP (translating as “in X’s name”). This strategy places a ‘beneficiary type’ object in an oblique locative-marked NP (example 25).

And now, on to the examples. We saw above examples with SAP O, and with SAP E and third person O, and in both types it was the SAP object that was marked on the verb. In the following example there are two SAP objects: O = 2 and E = 1SG. As predicted by rule (A), the first singular object is the one marked on the verb.¹¹⁷

- (16) [apa] [ami-na] mi-haĩ nuwina-ti tu-sã
 [father:PERT:2] [2SG-ACC] 1SG-COMIT marry:PFV-JUSS say-SBD+3:SS

su-hu-sa-tinu-ĩ
 give-1SG.OBJ-ATT-FUT+NR-NONVIS.COP:3

‘your father will give you to me to marry’ Lit. *saying ‘let her marry him’*.¹¹⁸

So far so good; in the following example, however, the underlying predicate structure has first person singular O and second person E, in violation of constraint (B); to resolve this, the underlying E is marked as an oblique NP, with locative case (strategy 2). At the same time, the first singular O – which must be marked on the verb, as the highest ranked participant – is recast as an E_{APPLIC} argument by adding the applicative suffix (strategy 1):

- (17) [mi-na apa-hu] [ami-nĩ] su-hu-tu-ka-tata-wa-i
 [1SG-ACC father-PERT:1SG] [2SG-LOC] give-APPLIC-1SG.OBJ-INTS-FUT-3-DECL

nuwina-ti tu-sã
marry:PFV-JUSS say-SBD+3:SS

‘my father will give me to you to marry’

In the following similar example, the context is that a girl’s father tells her he is planning to give her away in marriage, and she expresses her desire to marry José:

- (18) hose-ĩ su-hu-tu-ka-ti tu-sa-nu waki-a-ha-i
José-LOC give-APPLIC-1SG.OBJ-INTS-JUSS say-SBD-1SG:SS want-IMPV-1SG-DECL

‘I want you to give me to José’ Lit. *I want, saying ‘let him give me to José’*.

The following example illustrates strategy (3) for avoiding a violation of (B). The notional E, the jaguar, is not overtly included in the same clause as the first singular O.

¹¹⁷ Note that there are no natural examples in my corpus of two SAP objects co-occurring in one clause, and the bulk of the data for this discussion were gathered from elicitation.

¹¹⁸ The current speaker is referred to with a first person pronoun in the speech report – see §12.5.1.1 for a description of deictic-centre shift in speech reports.

Instead, it appears in an embedded DS purpose clause couched as a speech report (described in §12.5).

- (19) waŋka [ikam_yawaã yu-a-ti tu-sa-mi-ʃa]
 why [jaguar eat-HIAF-JUSS say-SBD-2-UNCERT]
 su-hu-tu-ka-tata-mi
 give-APPLIC-1SG.OBJ-INTS-FUT-2
 ‘why are you going to feed me to the jaguar?’

As with example (17) above, strategy (1) also applies: the first person object appears as E_{APPLIC} to avoid a situation where O outranks E. A more literal translation of the clause is given in (20):

- (20) ‘why are you going to give, to my detriment, saying “let the jaguar eat?”’

Regular marking of O and E, both verbal and nominal, is completely absent. The following example is also acceptable, showing that constraint (B) is not absolute.¹¹⁹

- (21) waŋka [ikam_yawaã yu-a-ti tu-sa-mi-ʃa] su-hu-tata-mi
 why [jaguar eat-HIAF-JUSS say-SBD-2-UNCERT] give-1SG.OBJ:PFV-FUT-2
 ‘why are you going to feed me to the jaguar?’

Another violation of (B) and (C) is the following example, in which a third person E_{APPLIC} is added to a clause with second person O:

- (22) [wi] [ami-na] suwima-hu-a-tata-hami-i
 [1SG]_A [2SG-ACC]_O beat-APPLIC-HIAF-FUT-1SG>2SG.OBJ-DECL
 ‘I will beat you for him’ (E3:53)

In subsequent discussion it was noted that out of context, the preferred reading for example (22) is ‘I will beat someone for you’, interpreting the second person object as E_{APPLIC} and the third person as O. This shows that although rule (A) is always followed, constraints (B) and (C) are preferences, providing a default mapping of morphosyntactic structures to grammatical relations only where context does not make this clear.

¹¹⁹ A further interesting correlate of hierarchy inversions is in the choice of Aktionsart suffix – attenuative *-sa* is the usual Aktionsart used with *su* ‘give’, but in examples where the underlying argument structure violates the person hierarchy, intensive *-ka* or no Aktionsart at all is used.

The following example illustrates a second person O and first singular beneficiary. In this case there is no violation of constraint (B), because the beneficiary (notional E_{APPLIC}) outranks the O. But addition of E_{APPLIC} would violate constraint (C), and strategy (3) avoids this by placing the first singular argument in a subordinate purpose clause.

- (23) [ami-na] inahu-tama-ka-tata-wa-i [mi-na yu-a-ti tu-sã]
 [2SG-ACC] cook-2.OBJ-INTS-FUT-3-DECL [1SG-ACC eat-HIAF-JUSS say-SBD+3:SS]
 ‘he will cook you for me to eat’

Another example of strategy (3), in which a notional beneficiary (and potential E_{APPLIC}) appears in a subordinate clause, is the following; it could be translated into English as ‘he will tell you for his mother’:

- (24) [duku-hĩ uha-tu-hu-ka-ta ti-ma]
 [mother-PERT:1PL/3 tell-APPLIC-1SG.OBJ-INTS-IMP say+LOAF-NON.A/S>A/S]
 uha-pa-ka-tata-u-i
 tell-2.OBJ-INTS-FUT-3-DECL
 ‘his mother having said “tell him for me!”, he will tell you’

Strategy (4) is illustrated by the following example. Here a beneficiary (‘my wife’) is marked in an oblique NP, as the E_{APPLIC} slot is already filled by first singular. This use of first singular is common in requests:

- (25) [mi-na nuwa-hu-na naa-hĩ-nĩ] [huhu papi]
 [1SG-ACC woman-PERT:1SG-ACC name-PERT:1PL/3-LOC]_{Obi} [PRX book]_O
 [apa] su-hu-tu-sa-ta
 [father:PERT:2]_E give-APPLIC-1SG.OBJ-ATT-IMP
 ‘give this book to your father on my wife’s behalf’ Lit: *in my wife’s name*.

The following example provides further illustration of the addition of first person E_{APPLIC} to make a request more polite, by highlighting the speaker’s personal involvement in the action:

- (26) [huhu papi] [apa] su-hu-tu-sa-ta
 [PRX book]_O [father:PERT:2]_E give-APPLIC-1SG.OBJ-ATT-IMP
 ‘please give this book to your father (for me)’

Another example of strategy (4) is the following, where the second person beneficiary appears in an oblique NP:

- (27) [mi-na] suwima-hu-a-tata-wa-i [ami-na naa-hu-mi-nĩ]
 [1SG-ACC]_O beat-1SG.OBJ-HIAF-FUT-3-DECL [2SG-ACC name-PERT-2-LOC]_{OBI}
 ‘he will beat me for you’ Lit: *in your name*.

This construction using the noun *naa* ‘name’ as a locative marked argument (strategy 4) is very likely calqued from the structurally identical Spanish usage, for example *en su nombre* ‘in his/her name’.

The following example illustrates a further avoidance strategy that makes applicative unnecessary: because the O NP ‘chickens’ is marked as possessed, there is no need to add first plural as an applicative object. Note that the pertensive marking is ambiguous between first plural and third possessor; context must determine which reading is understood, but the fact that the third plural subject is explicitly mentioned suggests that it is being contrasted with the first plural possessor.

- (28) ataʃu-hĩ-na dita ñuqa-ka-aha-mĩ
 chicken-PERT:1PL/3 3PL look.for-INTS-PL-RECPAST:3:DECL
 ‘they looked for our chickens’

The following example illustrates a similar strategy: the beneficiary, notional E_{APPLIC}, is represented in the headless O NP, that is, “our (baby, dog etc.)”.

- (29) [atumi] [huti-nau] kuitama-ka-tata-humi-i
 [2PL]_A [1PL-POSS]_O care.for-INTS-FUT-2PL-DECL
 ‘you (pl) will look after our one (for us)’

The following example is similar, but O is a discontinuous NP:

- (30) [numi-na] tsupi-ka-ta-ha-i [mi-na nuwa-nau-na]
 [wood-ACC]_O cut-INTS-IFUT-1SG-DECL [1SG-ACC woman-POSS-ACC]_O
 ‘I’ll cut wood for my wife’ Lit. *I’ll cut my wife’s wood*.

In any language, it is unusual to have two SAP objects of a ditransitive verb: for verbs such as ‘give’ and ‘ask for’ the notional direct object is typically inanimate and the notional indirect object human. But it is easy to think of quite natural constructions involving two SAP objects if one is a beneficiary: ‘she gave me a book for you’; ‘he will beat you on my behalf’. These are precisely the examples that illustrate avoidance strategies in Aguaruna, showing that the preference for limiting a verb to one SAP object or one applicative object, and for ensuring that E is higher ranked than O, are genuine grammatical

constraints rather than tendencies arising from typical usage, and can only be overridden by strong contextual factors.

11.3.3 Covert core participants

Subject and object NPs are not obligatorily overt. Aguaruna is a largely head-marking language, with extensive clause-chaining, and its sophisticated participant tracking techniques combined with context are typically sufficient to avoid ambiguity. There is no syntactic context in which an NP argument of a finite verb is obligatorily covert. However, in relative clauses, the NP argument that is coreferential with the external referent is never overt, as in example (31) below.

- (31) [ĩwantʃi yauntʃuki hu-ki-mau] nuwa
[devil long.ago Ø_i take-TRF-NSJREL] woman_i
'women that the devil had taken long ago' (6:2:60)

In relativised clauses functioning as action nominalisations, however, all arguments may be overt.

In same-subject complement clauses the tendency is that the common argument will not surface, but this is probably not a strict rule.

11.3.4 Oblique participants

An oblique participant is one that is neither subject nor object by the definitions given above. There are four oblique nominal cases marked by suffixes: comitative, locative, instrumental and ablative (see §§4.6.3–4.6.6). An NP marked with any of these suffixes functions adverbially. Many locational nouns have a locative form that is marked only with accent shift. An ablative-marked noun may function as an oblique NP or as an NP modifier, in which case the ablative marked noun may be case-marked. Ablative-marked nouns also occasionally appear marked with subordinate verbal person suffixes.

Finally, there is a vocative form, normally marked by suppression of apocope and accent-shift to the final vowel (§4.6.7). A vocative-marked noun stands outside the grammatical relations of a clause, even when it is coreferential with a core participant, as in (32):

- (32) [yatsu-hu] [ami-ʃa] puha-mi-ka
 [brother-1SG+VOC] [2SG-UNCERT] live+IMPV-2-POLINT
 ‘my brother, are you alive?’ (typical greeting)

This is a one-place predicate, and the subject role is filled by the nominative case-marked pronoun. There is no core syntactic role available for the vocative-marked noun. Typically there is a pause between the vocative form and the following material.

NP arguments may be conjoined through simple juxtaposition (§5.8), and such examples must be distinguished from those verbs that can genuinely take more than two core arguments.

Comitative case may conjoin NP arguments:

- (33) [wi] [mi-na nuwa-haĩ] mini-tata-ha-i
 [1SG] [1SG-ACC woman-COMIT] arrive:PFV-FUT-1SG-DECL
 ‘I will arrive with my wife’

Comitative case is also used in comparison, marking the standard of comparison.

- (34) [utʃi kasa-a = au-ka] [tuntʃi-haĩ] bitika-ai
 [child thief-COP:3=DST-FOC] [witch.doctor-COMIT] equal-COP:3:DECL
 ‘a child who is a thief is the same (i.e. as bad) as a witch-doctor’ (1:45:51)

11.4 Transitivity

Discussion of transitivity in Aguaruna is dogged by two difficult questions:

1. Is there S=A ambitransitivity?
2. Is there a “double O” construction?

In the course of the following discussion, I shall show that the answer to both questions is “no”, instead proposing the following alternative analyses:

1. Apparent S=A ambitransitivity arises from ellipsis of object NPs
2. Apparent “double O” constructions are better analysed as asyndetic NP coordination

The majority of underived verbs (about two-thirds in text counts – §3.2.1) are two-place (transitive) predicates, and almost all the rest are one-place (intransitive) predicates. All one and two-place predicates project the same basic argument structures: S (subject), or A (subject) and O (object); and case-marking is always nominative for subject, and accusative for object (except where the subject is 1PL or 2, as described above).

There are three attested ditransitive predicates, which project two object arguments in addition to the subject. The two object arguments are for the most part grammatically identical but evidence presented above shows that O and E can be differentiated.

A further semantic property of transitive verbs is relevant to a discussion of valency: a number of verbs are quite flexible in the semantic role of the arguments selected. In particular, two verbs of ‘making’ and ‘building’ (what Fleck 2003 calls “artifact construction verbs”) may take either the thing made or the material as their object. This flexibility combined with the possibility of asyndetic NP coordination can produce constructions such as (42) below, which looks on the surface like a “double O” construction.

This semantic flexibility is also possible with subjects, for example *tsawau* can mean ‘break’, with ‘day’ as its subject, or with a human subject it means ‘stay awake until dawn’ or ‘wake up’. This is distinct from ambitransitivity, as the argument structure remains the same.

The following table summarises the possible transitivity values in the language:

ARGUMENTS	TYPE	NUMBER	EXAMPLES
S	Intransitive	about 33%	<i>wi</i> ‘go’, <i>pakihina</i> ‘fall in love’
A, O	Transitive	about 66%	<i>tsupi</i> ‘cut’, <i>kitama</i> ‘be thirsty for’
A, O, E	Ditransitive	3	<i>su</i> ‘give’, <i>siiya</i> ‘ask for’, <i>nanʒi</i> ‘throw’
CS, CC	Copula verbs	3	<i>a</i> ‘be’, <i>nahanʒi</i> ‘become’, <i>dʒapʒi</i> ‘feel’

Table 11.2: Transitivity values of underived verbs

Two other verbs appear with three core arguments: *hũyama* ‘build a house’, with one nominative marked subject and two accusative marked objects, and *anaiya* ‘name’ with one subject, one accusative marked object and one unmarked object. These unusual case frames are discussed with three-place predicates in §11.4.2, and shown to arise not from properties of the verb, but from NP structure.

11.4.1 Basic one and two place predicates

The distinction between one and two-place predicates can be difficult to ascertain, as third-person objects are unmarked on the verb and often not explicitly stated. For example, the verb *kitama* ‘be thirsty’ typically appears with no overt object NP, and an English-

speaking analyst might readily assume it to be intransitive. But an overt object NP is grammatical, showing that this is a transitive verb:

- (35) [nihamantʃi-na] kitama-a-ha-i
 [masato-ACC]_o thirst-IMPV-1SG-DECL
 ‘I’m thirsty for *masato* (manioc beer).’

From this it can be assumed that all instances of the verb *kitama* ‘be thirsty’ have an understood object, but in the majority of examples it is zero-marked and has no overt NP realisation. Clearly then the best test of transitivity is to check the possibility of including an overt object NP in the clause. A truly intransitive verb will be ungrammatical with an accusative marked NP. Another possible analysis is that transitivity is not inherent to the verb, but instead is a product of the construction. Inherent transitivity is demonstrated by the following factors:

1. Transitivity-changing derivational processes
2. ‘High/low affectedness’ Aktionsart markers refer to O or S
3. Some verbs subcategorise for plural O or S – never A

11.4.1.1 Intransitive clauses

An intransitive clause consists of one core participant, the subject (S), and the predicate. Intransitive predicates can take oblique arguments, as in (36a), but these are never obligatory (cf 36b).

- (36) a. [namaka] wi-a-ha-i
 [river+LOC] go-IMPV-1SG-DECL
 ‘I’m going to the river’
- b. wi-a-ha-i
 go-IMPV-1SG-DECL
 ‘I’m going’

Because these are one-place predicates, they never appear with an accusative-marked NP, nor do they mark any non-subject participant on the verb.

11.4.1.2 Transitive clauses

A transitive clause has two core participants: the subject (A) and the object (O). As shown above, transitivity is a lexical property of verbs. Thus a transitive clause can be

defined as one whose verb is transitive. As with the intransitive clause, the NP arguments are not obligatorily overt, thus the clause consists minimally of a transitive verb.

11.4.1.3 Other two-place predicates

Motion verbs can take unmarked locational arguments, that is, without requiring locative marking. This could be considered a property of the nouns themselves, rather than the verbs: that is, one could say that there is a class of inherently locational nouns that do not require locative marking. However we see the same behaviour with pronouns:

(37) *wikaiŋa-taĩ-ka hu wi-hama*
 walk-NON.A/S:NR-FOC PRX go:3-CNTR.EX

‘the path goes this way!’ (Text 1:19)

There is no other evidence for a privileged status for locative arguments of motion verbs.

11.4.2 Three-place predicates

Three-place predicates take one subject argument and two objects. There are just three underived three-place predicates (§11.4.2.1). Derived three-place predicates are common, typically formed with the applicative suffix *-hu / -tu* (§11.4.4). As discussed above, transitive clauses that already have a SAP object do not utilise valency increasing derivation to introduce a semantic beneficiary (§11.3.2).

11.4.2.1 Ditransitive verbs

A ditransitive verb takes two objects, without requiring any kind of valency increasing operation. Aguaruna has only three ditransitive roots: *su* ‘give’, *sĩŋa* ‘ask for’ and *naŋki* ‘throw’:

(38) a. [*hu-na*] [*ami-na duku-na*] *su-sa-ta-ha-i*
 [PRX-ACC] [2SG-ACC mother:PERT:2-ACC] give-ATT-IFUT-1SG-DECL

‘I’ll give this to your mother’

b. [*mi-na*] *su-hu-sa-ta*
 [1SG-ACC] give-1SG.OBJ-ATT-IMP

‘give it to me!’

- (39) utʃi-na awima-ta-ha-i [[pablo-na] siuqa-ti [kutʃi-na]]
 child-ACC send:PFV-IFUT-1SG-DECL [[Pablo-ACC]_E ask.for:PFV-JUSS [knife-ACC]_O]

‘I’ll send a child to ask Pablo for a knife’

- (40) [matʃiŋki-na] naŋki-a-ma-ha-i [kaya-na]
 [spider.monkey-ACC]_E throw-HIAF-RECPAST-1SG-DECL [stone-ACC]_O

‘I threw stones at a spider monkey’

In example (38a), the verb *su* ‘give’ takes two NP arguments: *hu* ‘this’ and *amina duku* ‘your mother’. The verb subcategorises for three arguments, semantically the giver (A), the gift (O) and the recipient (E). The subject appears in nominative case, while the object arguments both take accusative case, and are treated equally with respect to relativisation and participant tracking. The distinction between O and E only shows up clearly in the hierarchy effects discussed above. Some other small effects of the distinction are: the high-affectedness Aktionsart *-a* is used with *naŋkima* ‘throw O’ (simple transitive), referring to the O; the same Aktionsart applies to *naŋki* ‘throw O at E’, showing that the missile must be the O.

Another effect is constituent order: preferred (A) E O V, or (A) O V E to focus E. Neither (A) O E V nor (A) E V O is considered felicitous.

The verb *su* ‘give’ is the best attested underived ditransitive verb in Aguaruna. Most other cross-linguistically typical ditransitive verbs are derived: *awitu* ‘send O to E’ (lit. ‘cause O to go for the benefit of E’) < *a-wi-tu* (CAUS-go-APPLIC); *iwaina* ‘show’ < *i-waina* (CAUS-see).

- (41) wi a-wi-tu-i-ma-ha-i [mi-na nuwa-hu-na]
 1SG CAUS+go-APPLIC-LOAF-RECPAST-1SG-DECL [1SG-ACC woman-PERT:1SG-ACC]

[papi-na]
 [letter-ACC]

‘I sent a letter to my wife’

11.4.2.2 Double O construction?

I have encountered one apparent ‘double O’ verb (cf. Fleck 2003: 864ff): *hũyama* (< *hũya-ma* house-VR) ‘make O₁ (must be ‘house’) out of O₂’. Semantically the two object NPs do not fit the prototypical theme and recipient pattern.

- (42) *hĩuqama-ka-ha-i* [*hĩuqa-na*] [*numi-na*]
 build-INTS-1SG-DECL [house-ACC] [wood-ACC]
 ‘I built a house out of wood’

In example (42), both object NPs are semantically patients. Which one should be considered O and which E is not *a priori* apparent, and perhaps both are actually O arguments.

Compare the examples below:

- (43) a. *wi nahana-ma-ha-i* [*naŋki-na*]
 1SG make-RECPAST-1SG-DECL [spear-ACC]
 ‘I made a spear’
- b. [*ʃiŋki-na*] *nahana-ma-ha-i*
 [stilt.palm-ACC] make:PFV-RECPAST-1SG-DECL
 ‘I made (something) out of stilt palm (Sp: *topa*)’

The verb *nahana* ‘make’, like *hĩuqama* ‘build’, can take either the artifact made (‘make O’) or the material (‘make something out of O’) as its object. But it is a simple transitive verb, and only one object can appear in a clause. Now compare the following example:

- (44) *nĩ awi-ti-mĩ* [*utʃi-hĩ-na*]
 3SG CAUS+go-APPLIC+LOAF-RECPAST:3:DECL [child-PERT:1PL/3-ACC]
 [*paampa-na*] [*yuhumaka-na*]
 [plantain-ACC] [manioc-ACC]
 ‘he sent plantains and manioc to his son’

Here we have a derived ditransitive verb *awi#tu* ‘send O to E’ (< *a-wi-tu* ‘CAUS-go-APPLIC’), but there are three accusative-marked NPs in the clause. The first, *utʃihĩ* ‘his child’, is semantically the recipient, the added E argument. The other two are semantically theme arguments. In fact, this construction is best analysed as asyndetic NP coordination. So the structure is:

is a discontinuous apposed name NP. We have seen above that the two parts of a discontinuous NPs may function like separate arguments (cf. example 30).

The intuitive problem with this analysis is that it does not capture the semantics of the clause adequately. The concept of naming is much more like a ditransitive than a simple transitive:

(48) [I]_A gave [my son]_E [the name Pablo]_O

So a more appropriate analysis might be that this is a ditransitive verb that takes an unmarked O argument, which must be a proper name. By this analysis, the verb *anaiya* ‘name’ is unique in being the only one to take a non-canonically marked argument. It bears repeating here (cf. §3.3.4) that proper names, including those borrowed from Spanish, are not deficient in case morphology when heading NPs, so the lack of marking on *Pablo* as an O argument is not a property of the name itself, and must arise from the verb.

11.4.3 Ambitransitivity

As mentioned above, first and second-person objects are marked on the verb, but third-person objects are not. Thus a clause with a third-person object that is not manifested by an overt object NP does not exactly wear its transitivity on its sleeve: if there are two overt objects, the verb must be ditransitive; if there is one, it could be a simple transitive or ditransitive; and if there is none, it could be any of the three. There are, however, certain contexts in which the transitivity distinction is clearly apparent. The clearest is that of valency-changing derivation. Verbs can be transitivised or (less commonly) detransitivised with derivational suffixes, showing clearly that underived roots must have inherent transitivity values.

The only object-like properties of a non-subject participant of an intransitive clause relate to: (1) the non-subject nominaliser *-taiĩ*, which forms a noun referring to a participant associated with the action of the verb (typically instrument, location or O); (2) the non-subject relativiser *-mau*, which forms a relative clause whose common argument is the most salient non-subject participant, typically O or location; and (3) the subordinator *-ma*, which indicates that a non-subject argument of the subordinate clause (typically O) is coreferential with the subject of the controlling clause.

Because of the possibility of NP ellipsis and the fact that third-person objects are zero-marked on the verb, many instances of lexically transitive verbs could be considered intransitive, and the verbs would thus be S=A ambitransitives. There are two pieces of evidence that combine to show that this is not the case.

Firstly, generic human objects are marked with the first person plural object suffix, showing that an O slot is available. An example is the derived noun *hintina-kahatu-inu* (teach-1PL.OBJ-NR) ‘teacher’, literally, ‘one who teaches us’. And in the following example, the narrator’s father had killed a stranger, so the only way that the object of ‘kill’ could be construed as ‘one of us’ is in the generic sense of ‘a person’.

- (49) [mi-na apa-hu] mǎ-kahatu-a-u a-yi
 [1SG-ACC father-PERT:1SG] kill-1PL.OBJ-HIAF-REL COP-REMPAST:3:DECL
 ‘my father was a murderer’ (2:2:17)

Secondly, generic non-human object NPs often surface, showing that the O slot must be available. Example (50) appears to be an intransitive use of the verb *yu* ‘eat’, but compare (51), where the generic object is overtly mentioned.

- (50) yu-a-umi-ka
 eat-HIAF-2SG-POLINT
 ‘have you eaten?’
- (51) yuhumaka yu-a-mi
 cooked.manioc eat-HIAF-HORT
 ‘let’s eat’

So generic human objects are marked as first-person plural, while all third-person objects, whether generic or specific, are unmarked on the verb and potentially ellipped. The possibility of including a third person generic object NP shows that the O slot is still available.

11.4.3.1 S=O ambitransitivity

There is just one verb in my data for which S=O ambitransitivity can be demonstrated: *isa* translates as ‘bite’ (with attenuative Aktionsart *-sa*) or ‘devour’ (with intensive Aktionsart *-ka*) in its transitive use:

(52) mi-na isa-tu-ini-ĩ
 1SG-ACC bite-1SG.OBJ-LOAF-3:PFV
 ‘it bit me’

(53) ikam_yawaã kutʃi-na isa-ka-mĩ
 jaguar pig-ACC bite-INTS-RECPAST:3:DECL
 ‘the jaguar devoured the pig’

The same verb is used intransitively with the meanings ‘burn oneself’ (with attenuative) or ‘burn up’ (with intensive). While there is a clear metaphorical path between being bitten or devoured and being burned or consumed by flames, this is also a significant semantic change.

(54) isa-i-i-pa
 burn.self-LOAF-APPR-2:INT/PROHIB
 ‘Don’t burn yourself!’

(55) pila isa-ka-ĩ
 battery burn.up-INTS-3:DECL
 ‘The battery has gone flat’

The Aktionsart suffix *-ka* typically correlates with a high degree of effort on the part of the subject, and thus seems incongruent with an intransitive verb meaning ‘burn up’ – this suggests that the transitive sense ‘devour’, which takes the same Aktionsart, must be prior to the intransitive.

While there are other examples of related verb pairs differing in transitivity, all involve phonological adjustments to the root, most of which are synchronically unproductive (see §7.5). Given the lack of productivity of valency-reducing morphology, it is perhaps more useful to consider the transitive/intransitive alternation in *isa* to be an unproductive zero-marked detransitivisation combined with a metaphorical extension of ‘bite’/‘devour’ → ‘get burned’/‘be consumed by fire’. In any case, this verb is unique in having two distinct senses.¹²⁰

¹²⁰ Interestingly, Olawsky (2006:385) notes that Urarina has only one S=O ambitransitive verb, *mukua* which translates as ‘burn’.

11.4.3.2 Ambitransitivity in derived verb forms

An interesting point of transitivity is that two verb forms always make transitive verbs S=O ambitransitive. These are the potential stem (formed with *-mai*) and deverbal nouns formed with the future nominaliser *-tinu*, which may refer to either the A or the O.

- (56) a. *nĩ waina-mai-inu-ai*
3SG see-POT-NR-COP:3:DECL
'she can see'
- b. *piʃaka-ka ʃiiha paanta waina-mai-inu-ai*
bird-FOC very clearly see-POT-NR-COP:3:DECL
'the bird can be easily seen'
- c. *uwa-ha-tinu-na waina-ka-ma-ha-i*
drink-PLU-FUT+NR-ACC see-INTS-RECPAST-1SG-DECL
'I saw the beverage that was to be drunk' OR 'I saw the person who will drink'

These examples show another peculiarity of the potential stem, that it typically appears as a nominalised form. Other examples show that it is the stem itself, rather than the nominalised form, that triggers ambitransitivity:

- (57) a. *antu-mai-tsu-u-i [au kantama-mau-ka]*
hear-POT-NEG-3-DECL [DST sing-NON.A/S:REL-FOC]
'that song cannot be heard'
- b. *au-ka antu-mai-tsu-i*
DST-FOC hear-POT-NEG-3-DECL
'that person cannot hear'

Identity of *-mai-inu* (POT-NR) with the future nominaliser *-tinu* (<*-ta-inu* IFUT-NR) has probably contributed to the ambitransitivity of nominalisations formed with the future nominaliser. In addition, the fact that *-tinu* is not synchronically parseable into a future marker and a nominaliser must have helped the change, as the nominaliser *-inu* in other uses refers strictly to the subject.

11.4.3.3 Transitivity of *tu* 'say'

The verb *tu* 'say' is exceptional, in that it is truly multitransitive. It may appear as transitive, with the object being either the speech report, the addressee, or a referent:

- (58) tu-mami-u-ai [yu-a-tʃau]
 say-REFL+LOAF-REL-COP:3:DECL [eat-HIAF-NEG:REL]
 ‘he said he hadn’t eaten anything’ (6:17:31)

The same verb may be applicativised, with the addressee as E:

- (59) mi-na-ka tu-hu-tu-a-mi
 1SG-ACC-POLINT say-APPLIC-1SG.OBJ-IMPV-2
 ‘are you talking to me?’

And it may be ditransitive:

- (60) [mi-na apa-hu-na] [hu-na tʃitʃama-na]
 [1SG-ACC father-PERT:1SG-ACC]_E [PRX-ACC word-ACC]_O
 ti-ta-ha-i
 say+LOAF-IFUT-1SG-DECL
 ‘I’ll say this word to my father’

Given this variation, it must be concluded that the verb *tu* ‘say’ functions both as a simple transitive and as a ditransitive verb.

11.4.4 Valency changing derivation

Valency-increasing derivation is common. Ditransitive verbs have more than one non-subject core participant. Generally one object will be a patient or theme, and the other a recipient or beneficiary. The same argument structure can be created through valency-increasing derivation.

The applicative suffix *-hu / -tu* adds an object (E), most commonly a beneficiary but also sometimes maleficiary. There are two causatives: a prefixed vowel and the suffix *-miti(ka)*. Both have the same effect of increasing valency by adding an object.

Reflexive and reciprocal are part of the verbal object-marking paradigm, but unlike other object marking suffixes they are incompatible with overt object NPs; so the syntactic effect is one of valency reduction.

A few verb roots show unproductive phonological alternants with differing transitivity values. These are described in §7.5.

Causative increases the valency of a verb by adding an E object, the semantic actor.

The causer becomes the new syntactic subject (A).

- (64) [ataʃu-na] ayuhu-a-ta-ha-i
 [chicken-ACC]_E CAUS+eat-HIAF-IFUT-1SG-DECL
 ‘I’m going to feed the chickens’ (cf. *yu* ‘eat’)

- (65) [anu tawasa] atsi-miti-hu-ka-ta
 [MED feather.crown]_O wear-CAUS-1SG.OBJ-INTS-IMP
 ‘put that *tawas* on me’

That the added object is an E argument is shown by examples such as the following, in which the E argument takes clause-initial position (also cf. example (30) in §7.4.2). This is the preferred ordering when both objects of a trivalent predicate are overt (§13.5).

- (66) [hu-na utʃi-na] [tawasa-na] atsi-mitika-ka-ta-ha-i
 [PRX-ACC child-ACC]_E [feather.crown-ACC]_O wear-CAUS-INTS-IFUT-1SG-DECL
 [arias-nau-na]
 [Arias-POSS-ACC]_O
 ‘I’ll make this child put on Arias’ *tawas* (feather crown)’

Because the distinction between O and E is only apparent if both are present, it is impossible to tell whether the added object of a causativised intransitive verb is an O or and E. By analogy with the causativised transitive clause type, one might assume that it is an E; but this would mean admitting an ‘extended intransitive’ clause type, with only subject and indirect object arguments. Table 11.3 represents schematically the changes in grammatical roles projected by intransitive and transitive verbs when causativised.

INTRANSITIVE	TRANSITIVE
S → O/E	A → E
	O → O
new A	new A

Table 11.3: Changes in grammatical roles of causativised clauses

A speech report may be used as a causative marking strategy:

- (67) wi su-sa-ta ti-ta-ha-i
 1SG give-ATT-IMP say+LOAF-IFUT-1SG-DECL
 ‘I’ll make him give it away’ Lit. *I’ll say “give it away”*.

Perhaps this type of construction actually indicates a semantic difference, relating to control over the causee.

The following example combines causative and applicative:

- (68) ayuhu-tu-hu-a-ta [mi-na ataʃu-hu]
 CAUS+eat-APPLIC-1SG.OBJ-HIAF-IMP [1SG-ACC chicken-PERT:1SG]_o
 ‘feed my chickens for me!’

The combination does not appear to be possible with suffixed causative.

11.4.5 Copular clauses

Aguaruna has two full copula verbs: *nahani* ‘become’ and *dikapi* ‘feel’. Both take two nominative marked arguments, the copula subject (CS) and the copula complement (CC).

- (69) [nunu namaka a-ina = nu-ka] ... [mama] nahania-ka-u
 [ANA fish COP-PL:IMPFV=ANA-FOC]_{CS} ... [manioc]_{CC} become:PFV-INTS-REL
 a-ina-wa-i
 COP-PL:IMPFV-3-DECL

‘Those fish (when the young man took them out of the water) turned into manioc.’ (2:1:25)

- (70) [aʃi aintsu a-ina-u] [ikam yawaã-na-ka kakahus
 [all person COP-PL:IMPFV-REL]_{CS} [jaguar-ACC-FOC easily
 maani-mai-inu-tʃau] dikapi-ina-u
 fight-POT-NR-NEG:REL]_{CC} feel-PL:IMPFV-REL

‘all the people felt that they were unable to fight a jaguar’ (6:4:5)

Note that the CC in the preceding example is a headless relative clause; this is a complementation strategy.

Both *nahani* and *dikapi* are related to other verbs (*nahana* ‘make’ and *dika* ‘know’) through unproductive or marginally productive valency-changing derivation. The two nominative arguments of *nahani* ‘become’ are readily distinguishable semantically as ‘source’ and ‘outcome’, and the related verb *nahana* ‘make’ can take two types of O: the material and the artifact produced (but not both at once). *dikapi* can also be used transitively, and then means ‘sense’.

11.4.6 Equative and attributive clauses

Equative/attributive clauses take two arguments: a subject (CS) and a predicate noun or adjective complement (CC). The predicate nominal is marked with the copula suffix (71b), or the copula verb *a*, depending on tense, mood, and number of the subject. The copula suffix may optionally be omitted in declarative clauses, resulting in an appositive construction (71c).

(71) a. hu pɪŋkiha-ai
PRX good-COP:3:DECL
'this is good'

b. hu pɪŋkiha
PRX good
'this is good'

(72) [nu-ka] [ʃukuima akapi-na yu-a = nunu]
[ANA-FOC]_{CS} [boa.sp liver-ACC eat-IMPV:3=ANARel]_{CC}
'that was a *shukuim* boa, that eats livers' (Text 1:13)

The copula suffix appears in present tense indicative and interrogative mood clauses, and simultaneous subordinate clauses with singular CS. In any other type of clause, the copula verb *a* must be used:

(73) [nu-ka ospitala-ka] [dɔs de mayo] a-yi
[ANA-FOC hospital-FOC]_{CS} [dos de mayo]_{CC} COP-REMPAST:3:DECL
'that hospital was (named) *Dos de Mayo*' (2:2:142)

(74) [wi] [ani-a-u] asa-nu nu-na wi
[1SG]_{CS} [remember-IMPV-REL]_{CC} COP:SBD/SEQ-1SG:SS ANA-ACC 1SG
itsihũ-a-ha-i
tell-IMPV-1SG-DECL
'being one who remembers, I tell that (story)'

(75) [atumi-ka] yamai-ka [aiʃmanʃku] a-ina-humi-i
[2PL-FOC]_{CS} now-FOC [man]_{CC} COP-PL:IMPV-2PL-DECL
'you are men now'

The copula root *a* is homophonous with the existential verb *a* 'exist', and probably historically connected; but there are some major differences:

1. Plural *a-ina* (COP-PL:IMPFV) in copula use vs. *aya* ‘exist:PL’ suppletive existential form
2. TAM restrictions on copula but not existential
3. Negation marked with the suffix *-tʃau* on the nominal CC with copula verb, but marked with suppletive negative existential *atsu* ‘exist:NEG’
4. Interrogation with nominal suffixes in copula clause, but with verbal suffixes in existential clause

Note that the verb *waha* ‘stand’ also occasionally functions as a copula in equative/attributive clauses:

(76) [*iinia*] [*kaka-ka-tʃau*] *waha-sa-u-ai*
 [1PL]_{CS} [be.strong-INTS-NEG:REL]_{CC} stand-ATT-REL-COP:3:DECL
 ‘our people were not strong’ (6:8:21)

(77) [*nu aintsu*] [*puhu*] *waha-sã*
 [ANA person]_{CS} [white]_{CC} stand-SBD+3:SS
 ‘that person being white...’ (Text 1:35)

Like the existential *a*, *waha* ‘stand’ projects just one S argument when used with its lexical meaning and two arguments (CS and CC) in its copula use.

The conditioning for the three different morphosyntactic realisations of equative/attributive clauses are set out in tabular form below. The overlap between suffixed forms and appositive constructions is apparently free variation. In all types, the relation described may be one of identity, class membership or attribution of a property.

	APPOSITIVE	SUFFIX	VERB
Present tense; declarative; singular	✓	✓	–
Present tense; indicative; interrogative; simultaneous subordinate clauses; singular	–	✓	–
Non-present tense; imperative; plural	–	–	✓

Table 11.4: TAM conditioning on equational/attributive clause types

11.5 Mood

Every independent clause is obligatorily marked for mood. Thirteen formally distinct markers define between them four major clause types: declarative, interrogative, imperative and exclamative, which are used to form statements, questions, commands and exclamations, respectively. Subordinate clauses are characterised by a lack of mood, but may share that of their controlling clause.

The table below shows the clause types and their superordinate groups:

MOOD TYPE	CLAUSE TYPE
Indicative	Declarative
	Counter-expectation
	Narrative
	Speculative
Interrogative	Polar interrogative
	Content interrogative
	Tag question
Imperative	Imperative
	Jussive
	Hortative
	Apprehensive
	Prohibitive
Exclamative	Exclamative

Table 11.5: Mood and clause types

The formal marking is described fully in §8.7. Two important points relating to mood marking are:

- Most of the imperative paradigm is marked with the ‘intentional future’ suffix which falls in the same morphological slot as tense markers. All imperative forms are incompatible with tense marking, and all select the perfective or durative verb stem; the durative stem only appears in imperative clauses
- Exclamative is characterised by a complete lack of formal marking, either on the verb or elsewhere

Indicative and interrogative are not so clearly demarcated, as one can state something with low certainty or ask a rhetorical question without actually seeking information. For the most part, the following properties apply:

- Indicative clauses are characterised by obligatory marking only on the verb
- Interrogative clauses are characterised by marking throughout the clause

Two forms, tag questions and speculative, disrupt this patterning of form and function. Tag questions are formally a subtype of indicative clauses, as they are marked only with a verbal suffix; evidence suggests that they may contain the declarative suffix (see below).

Speculative, although expressing a statement, is marked both with a suffix *-tai* on the verb, and a suffix *-tsu/-tsa* that may appear on the verb or on some other constituent of the clause. This double marking places speculative formally with the interrogative types. The semantic basis of this similarity has to do with certainty: the indicative mood for the most part expresses certainty, and this applies to the whole clause. In expressing uncertainty, on the other hand, speakers are inclined to be more precise. That is, a single constituent of a clause may be singled out when marking uncertainty, and speculative modality has this in common with interrogative.

Formal marking in Aguaruna is based on the speaker's certainty, rather than expectation of a response. So although tag questions typically expect a response, they are a type of indicative because of the high level of speaker's certainty. Sadock & Zwicky (1985) note that different types of questions may bear little or no formal resemblance to one another. The dotted line in figure 11.2 illustrates the cutoff point; above the line indicative-type marking applies (marker only on the verb), below the line interrogative-type marking applies (marking on the verb and one or more constituents).

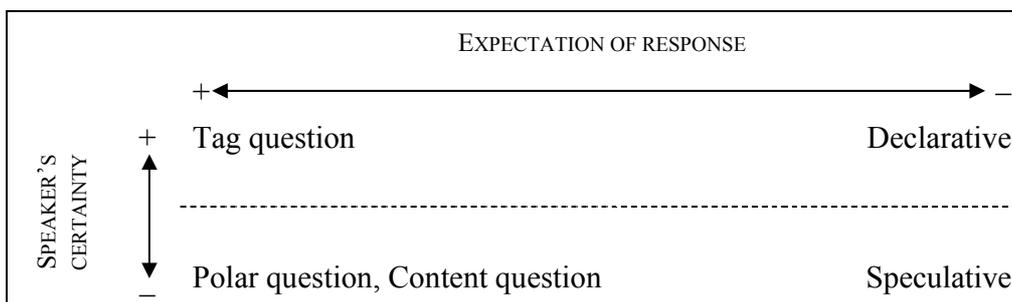


Figure 11.2: Parameters defining question and statement types

11.5.1 Indicative clauses

Indicative clauses express statements. They are subdivided into four types that differ in their portrayal of the speaker's attitude. Although there is not an evidential system, some indicative types imply first or second hand information.

MARKER	GLOSS	REMARKS
<i>-i</i>	Declarative	functionally unmarked
<i>-hama</i>	Counter-expectation	first hand information – mirative overtones
$-\emptyset$ + forms of <i>tu</i> 'say'	Narrative	not first-hand information
<i>(-tsa)-tai</i>	Speculative	lack of certainty

Table 11.6: Indicative clause types

Functionally, the least marked statement is declarative, marked with the verbal suffix *-i*. Declarative does not imply any particular source of knowledge, but in narratives relativised verbs are typically used to imply lack of first-hand knowledge, contrasting with declarative. Relativised verbs may take the copula suffix and declarative mood, but the remaining distinction between finite declarative and relativised declarative clauses can be considered an evidentiality strategy.

11.5.1.1 Counter-expectation

Counter-expectation, marked with the suffix *-hama*, conveys the speaker's assertion of the content of the clause where they consider that the addressee thinks otherwise. The following example was spoken upon realising the identity of a murderer who had been secretly killing members of a community:

(78) au-ka amu-pa-hama
 DST-FOC kill:PL-1PL.OBJ:3-CNTR.EX
 'he is killing us!' (6:3:22)

Although counter-expectation marking often implies a negative value-judgement, this is not always the case, as in the following example:

(79) ami hu hu-mai-inu-aita-mi-hama
 2SG PRX take-POT-NR-COP-2-CNTR.EX
 'you can have this' (6:7:25)

Similarly, many examples appear to have a mirative or surprised overtone, but this is not a required reading of counter-expectation marked clauses. Consider the following example, spoken by a shopkeeper on being asked whether he has any rice to sell. Clearly this is not a situation in which he has just learned of the fact – he was not looking for rice, because he knew there was none.

(80) atsa-hama
 exist:NEG+IMPFV:3-CNTR.EX
 'there isn't any!' (Obs)

Consultants feel that counter-expectation marking implies first-hand evidence of the situation described. To convey the attitudinal content of counter-expectation in the absence of first-hand evidence, a distancing strategy may be used, such as the speech report

traditional stories to finish off with a formula like ‘my father told me this story’. Crucially, the verb preceding the verb ‘say’ in all examples like this one is always relativised. So the form cannot be said to be marking modality in the same way as *tuwahamĩ* does.

- (84) [tuki maa-kũ ihapĩ hu-hu-haku
 [always kill+IMPFV-SIM+3:SS open.up:PFV:SEQ+3:SS take-APPLIC-NARRNR
 a-ina-wa-i yauntʃuku-ka] aatusã ta-wa-i
 COP-PL:IMPFV-3-DECL long.ago-FOC] thus+3 say+IMPFV-3-DECL

‘(because people didn’t know about giving birth) killing (the woman) they would open her up and take the baby out in the old days, so (he) says’ (6:6:7)

The use of the verb *tu* ‘say’ does not have any specific subject in the context of the story. It is another strategy for forming narrative clauses. But here we see that the content clause in square brackets is a finite declarative clause, and structurally this is like a speech report.

So narrative modality is fully grammaticalised in one form, but in others it is treated more like an actual speech verb, with the author of the speech report understood to be the speaker’s father or other source of the story. In the latter type of clause, the line between narrative and declarative clause types is rather blurred.

11.5.1.3 Speculative

Speculative expresses a high degree of speaker’s uncertainty, and this is reflected in the fact that its formal marking is more similar to the interrogative types than the declarative types, as discussed above (§11.5). Unlike interrogative, however, a speculative-marked clause does not seek information from the addressee.

Speculative is marked with two suffixes: *-tai* (SPEC2) always appears on the verb in final position, as with declarative type markers. The second element (SPEC1) may appear on the verb as *-tsa*:

- (85) tuhã nĩ waina-tʃau-ka waina-ina-tsu-u-a-tsa-tai
 but 3SG see-NEG:REL-FOC see-PL:IMPFV-NEG-REL-COP-SPEC1-SPEC2

‘but he who doesn’t know will probably never know’ (6:8:43)

Or it may appear on some other constituent of the clause as *-tsu*:

- (86) swisa-numa-ia-tsu ima piŋkiha-aita-tai
 Switzerland-LOC-ABL-SPEC1 INTENS good-COP:3:DECL-SPEC2
 ‘the (knife) from Switzerland is probably better’

In the following example, the speaker was wondering why the Aguaruna word for ‘harmonica’ is *kantaŋa*, the name of a type of fish.

- (87) kantaŋa-haĩ bitika asa-mataĩ-tsu ti-u
macana-COMIT equal COP:SBD/SEQ-1/3:DS-SPEC1 say+LOAF-REL
 a-ina-tai
 COP-PL:IMPFV-SPEC2

‘they must say that because (they think) it’s the same as a *macana* fish’ (Obs)

The semantic implications of the different marking strategies are unclear to me. It is not a distinction that can be easily translated into Spanish or described by consultants.¹²¹ The best hypothesis is that the SPEC1 suffix *-tsu/-tsa* is attached to the constituent that is the locus of the uncertainty. So in example (86) the fact that one of the knives is better is not what is at issue; the uncertainty attaches to the speaker’s speculation that it is the one from Switzerland that is better. In example (85), however, what is being speculated about is not *who* will know, but *whether* they will know at all, .

11.5.2 Interrogative clauses

Interrogative clauses are distinguished semantically from declarative clauses in their prototypical uses in that they seek information from the addressee. Aguaruna distinguishes three subtypes of interrogative clause: tag questions, polar questions and content questions.

11.5.2.1 Tag questions

Tag questions are marked with the suffix *-api*, forming a question that expects a positive answer.

¹²¹ One consultant characterised the difference as that between Spanish *quizás* (with *-tsa* on the verb) and *de repente* (with *-tsu* on a nominal). Both are translated by the Oxford Spanish Dictionary as ‘maybe, perhaps’, and are apparently synonymous in standard Peruvian Spanish, so this distinction does not really help the analysis.

(88) a. ami-ʃa wi-a-mi-api
 2SG-ADD go-IMPV-2-TAG

‘you’re going too, aren’t you?’

b. piŋkiha-api
 good-TAG

‘it’s good, isn’t it?’

Appropriate answers to the above examples would be *hiʃi* ‘yes’ or repetition of the predicate with appropriate person and TAM changes.

The following example shows a more rhetorical use of a tag question; the speech report attributed to the subject must represent thought rather than actual speech, as the context of the story tells us that the woman was returning alone from the garden:

(89) nĩ-ʃa [yu-a-ta-ha-api tu-sã] ta-a-u-ai
 3SG-ADD [eat-HIAF-IFUT-1SG-TAG say-SBD+3:SS] come-HIAF-REL-COP:3:DECL

‘she also arrived thinking “I’m going to eat”’ (6:5:62)

As noted above, tag questions are not prototypical interrogatives as the speaker already has a high degree of certainty regarding the content of the clause. Consulting native speakers as to whether these clauses are questions resulted in opinions ranging from: “yes, because it expects an answer” to: “no, it’s a strong way of asserting something”.

Although there are no negative tag questions in my corpus, there is no cause to assume that such forms would be ungrammatical, and future research should test the possibility (see also §8.7.4).

11.5.2.2 Polar questions

Polar questions are marked with the polar interrogative suffix *-ka*, either on the verb or on another constituent of the clause. Polar questions always expect a “yes” or “no” answer.

(90) nihamantʃi a-wa-ka
masato exist+IMPV-3-POLINT

‘is there any *masato* (manioc beer)?’

- (91) yu-a-ma-ka-umi
 eat-HIAF-RECPAST-POLINT-2
 ‘have you eaten?’

Polar questions are often couched in the negative, as in the following example, in which a woman has just realised that the meat she is being served is her own dog. A natural translation into English must use positive polarity.

- (92) [yawaã ii-nau] maa-tʃa-ma-ka-umi
 [dog 1PL-POSS] kill+HIAF-NEG-RECPAST-POLINT-2SG
 ‘have you killed our dog?’ lit. *have you not killed our dog?* (6:5:74)

The polar interrogative suffix may appear on constituents other than the verb; in the following example it is on the full (dependent-marked) verb in an auxiliary construction:

- (93) maa-ku-mi-ka puha-mi
 bathe+IMPFV-SIM-2:SS-POLINT live+IMPFV-2
 ‘are you bathing?’ (Obs)

As noted above, interrogative mood is marked only once in a clause, so in this case the finite verb takes no mood marking. And in the following example it appears on a subordinate clause:

- (94) [wi numi-na tsupi-ka-tʃau asa-mataĩ-ka] ta-mi
 [1SG wood-ACC cut-INTS-NEG:REL COP:SBD/SEQ-1/3:DS-POLINT] say+IMPFV-2
 ‘are you saying I didn’t cut wood?’

The polar interrogative suffix can also appear on nominals, and then precedes the copula suffix:

- (95) a. hu-ka
 PRX-POLINT
 ‘this one?’
- b. ami-ka-aita-mi
 2SG-POLINT-COP-2
 ‘is it you?’ (standard greeting when **not** in the context of a house visit)
- c. piŋkiha-ka-aita
 good-POLINT-COP
 ‘is it good?’

Such examples suggest that the polar interrogative suffix only appears on predicate nominals, that is, heads of clauses. However, a nominal argument may take the polar interrogative suffix, in which case the verb appears unmarked:

- (96) a. au-ka [tu wikaĩtuqa-tu-a-mi]
 DST-POLINT [say walk-APPLIC-IMPFV-2]
 ‘Is it him you’re going on about?’¹²²
- b. mi-na-ka tu-hu-tu-a-mi
 1SG-ACC-POLINT say-APPLIC-1SG.OBJ-IMPFV-2
 ‘are you talking to me?’
- c. tsamau-ka uwa-ha-tata-mi
 chapo-POLINT drink:PFV-PLU-FUT-2
 ‘will you drink *chapo* (fermented banana drink)?’
- d. [utʃi-ka] a-ia [waina-ka-mau-ʃa]
 [child-POLINT] COP-REMPAST [see-INTS-NON.A/S:REL-UNCERT]
 ‘was it a child (you) saw?’

When suffixed to a pronominal argument, the polar interrogative suffix does not undergo apocope, and takes the accent.

Appropriate responses to polar questions are one-word forms: *hi?* ‘yes’, *atsa* ‘no’, *atʃa* ‘I don’t know’. Also common is repetition of the same verb *mutatis mutandis*. This is particularly common to avoid ambiguity when the question is couched in the negative.

11.5.2.3 Content questions

Interrogative pro-forms are used to ask open-ended questions. The interrogatives are based on three roots: *ya* ‘who’, *wahu* ‘what’ and *tu* ‘where, which’

¹²² This is a weak auxiliary construction, as described in §6.4.

PRO FORM	WORD CLASS	GLOSS
ya	pronoun	who
tu	pronoun	which
tu	location word	where
wãã	adverb	why
wahĩ	pronoun	what
wahuti	time word	when
wahupa	adverb	how many
wahuka	adverb	how

Table 11.7: Question words

If there is an interrogative pro-form in the clause, the verb is marked by suppression of apocope:

- (97) a. [tuwĩ puhámĩ]
tu-ĩ puha-mĩ
where-LOC live+IMPFV-2
‘where do you live?’
- b. [yánauwaita]
ya-nau-aita
who-POSS-COP:3
‘whose is it?’

And second person subject is marked by the suffixes *-pa* (singular) and *-hupa* (plural) in content-interrogative clauses (§8.6.1).

Appropriate answers to content interrogatives are regular declarative clauses. There are no examples of elliptical answers consisting of a single NP in my corpus of natural data.

11.5.2.4 Rhetorical questions

Rhetorical questions use the formal trappings of questions to assert something that the speaker considers to be self-evident. In the following example a man is scolding his son for getting distracted by a group of young women while fetching water. The (unnecessary) answer to the rhetorical question is ‘no’; unmarried men were traditionally required to avoid all contact with women lest they breathe in their giggles and become weak and effeminate.

(98) wi nuwa-haĩ yumi aima-ka-ta ti-ma-ka-hami
 1SG woman-COMIT water fill-INTS-IMP say+LOAF-RECPAST-POLINT-1SG>2SG.OBJ
 ‘did I say to you “go with the women and fill (the gourds) with water?”’

There is also a special word used to mark rhetorical questions: *wããs* ‘I don’t know why’. The clause takes the formal trappings of a content interrogative clause, as in the following example, where interrogative markers are the uncertainty suffix *-fa* on both elements of the discontinuous NP (‘that man’) and lack of mood marking on the verb.

(99) wããs nu-*fa* nuni-ka-amaia muunta-*fa*
 I.don’t.know.why ANA-UNCERT do.that-INTS-DISTPAST:3 adult-UNCERT
 ‘I don’t know why that man did that’ (Text 1: 38)

11.5.3 Exclamatory clauses

Exclamatory clauses are formally unmarked. They are most similar to declarative types, although the lack of verbal marking is also reminiscent of some interrogatives; cf. Sadock & Zwicky’s (1985: 162) observation that exclamatory sentences may show similarity to both declarative and interrogative types.

Formally, declarative clauses are zero-marked on the verb, so they appear exactly as declarative clauses without the final suffix *-i*. Because the declarative suffix *-i* does not surface following the first person plural suffix *-hi* nor the second person suffixes *-mĩ* (sg), *-humĩ* (pl), there is no formal distinction in clauses with first plural or second person subjects.

Examples of exclamative clauses are rather scarce in my corpus, because of the nature of the materials. They are common in spontaneous speech when seeing something surprising or exciting. The following example was uttered by a child on seeing a dog on the roof of a building:

(100) yawaã yakĩ puha-wa
 dog above live+IMPFV-3:EXCL
 ‘there’s a dog up there!’ (Obs)

And the following when looking at a book of photos – note the special exclamative form of the copula suffix, described in §4.10:

(101) *lantʃa-ya*
boat-COP:3:EXCL
'it's a boat!' (Obs)

Exclamative may be combined with a speech report to emphasise the speaker's own words:

(102) *atʃi-ka-i-pa* *ta-ha*
grab-INTS-APPR-2 say+IMPFV-1SG:EXCL
'“don't touch it” I say!'

11.5.4 Imperative clauses

Imperative mood is prototypically used to command or suggest. The paradigm covers all persons; third person jussive expresses indirect commands and is also used to express wishes and in irrealis type clauses.

Imperative mood is marked by three formally distinct suffixes: imperative and jussive are marked with *-ta* and *-ti* respectively, cognate with the future tense suffixes; hortative is marked with *-mi*; and prohibitive is marked with the apprehensive suffix *-i*.

The apprehensive form is used in subordinate clauses or speech reports functioning as DS purpose clauses. Prohibitive is based on the apprehensive form with two morphological changes: second person is marked with *-mi* in apprehensive, but *-pa* in prohibitive; and third person apprehensive forms add *-ka* to give the prohibitive form.

All imperative forms are exemplified in §§8.3ff.

11.5.5 Mood in subordinate clauses

Subordinate clauses are not marked for mood, and are characterised by a lack of modality; they may share that of the controlling clause. If the controlling clause is one of the types that mark constituents (interrogative or speculative), a subordinate clause may be marked. Properties of subordinate clauses are described and exemplified in Chapter 12.

11.6 Negation

Clause-level negation is with verbal suffixes. There are three suffixes:

1. *-tsu* is used in present and future tenses (§7.7)
2. *-tʃa* is used elsewhere (§7.7)

3. *-i* marks prohibitive and apprehensive (§8.4)

Negated clauses typically mark a constituent with the focus suffix *-ka*:

- (103) *wi-ka dika-a-tsu-ha-i*
1SG-FOC know-IMPV-NEG-1SG-DECL
'I don't know'

Native speakers are unwilling to accept negative declarative clauses with an overt subject NP that does not carry the focus marker:

- (104) ? *wi dika-a-tsu-ha-i*
1SG know-IMPV-NEG-1SG-DECL
'I don't know'

The negative suffix *-tʃau* can be attached to verbs, forming a negative relative clause, and to nouns and to adjectives. Such forms may then appear as the complement of an equative/attributive clause, with or without the equative suffix:

- (105) *yawaã-tʃau-ai*
dog-NEG:REL-COP:3:DECL
'it is not a dog'

- (106) *hu-ka mi-nau-tʃau*
PRX-FOC 1SG-POSS-NEG:REL
'this is not mine'

This is the only way to form negative equative/attributive clauses.

Inherently negative lexemes are the negative existential *atsu* (§7.7.1) and the word *wããs* 'I don't know why' (example 99 above).

Chapter 12: Clause Combining

12.1 Introduction

Clause combining is central to Aguaruna grammar. Aguaruna is a clause-chaining language; narratives in particular are characterised by strings of nested subordinate clauses, obligatorily marked for switch-reference, and few finite verbs. Three general techniques are used to combine clauses: appositive coordination; subordination; and bridging constructions. In addition, nominalised and relativised verbs can be embedded in a matrix clause, heading or modifying NP constituents. The most commonly encountered technique is subordination, with coordination playing a relatively minor role. Bridging constructions are widely used to track participants between finite clauses.

Clauses can be positioned on a cline of syntactic integration, represented in figure 12.1. At the left extreme, there are two syntactically distinct finite clauses. At the right extreme, a nominalised or relativised clause is embedded in a matrix clause – the integration is total, and syntactically the two form a single clause.

INDEPENDENT CLAUSES > COORDINATION > SUBORDINATION > EMBEDDING

Figure 12.1: Hierarchy of syntactic integration in clause types (after T. Payne 1997: 307)

Related to this is the cline of decategorisation of verbs, apparent in the reduction of verbal categories that are marked. Chapters 7 to 10 provide a detailed discussion of verbal categories and their marking; the following table summarises the properties that define verbal decategorisation (cf. table 10.3).

	FULLY FINITE	SUBORDINATE (SS)	SUBORDINATE (DS)	NON-INFLECTING	REL/NOM
Marks TAM	✓	–	–	–	–
1 and 3 subject distinct	✓	✓	–	–	–
2 subject distinct	✓	✓	✓	–	–
Marks SS/DS	–	✓	✓	✓	–

Table 12.1: Loss of verbal properties in decategorisation

The reduction of marked categories, highlighted by the bold line on the table, can be expressed as a hierarchy of finiteness:

FINITE > SUBORDINATE (SS) > SUBORDINATE (DS) > NON-INFLECTING (DS) > REL/NOM

Figure 12.2: Hierarchy of finiteness in clause types

There is a general agreement between the two hierarchies, but nominalised and relativised clauses are extremely flexible: relativised clauses, in particular, head clauses at all points of the cline in figure 12.1, from independent to embedded. Coordination is little used, but the important bridging construction uses the formal properties of subordination to functionally simulate coordination (§12.4).

The following seven functional divisions of clause-linking constructions are distinguished in Aguaruna.¹²³

1. Complementation – a clause fills an argument slot in a matrix clause
2. Relativisation – a clause modifies an NP
3. Temporal
4. Consequence
5. Logical: conditional and concessive
6. Possible consequence
7. Contrast

The distinction between **temporal** (3) and **consequence** (4) relations is neutralised when the action of the subordinate clause is prior to that of the main clause.

The following sections first describe the syntactic and semantic properties of subordinate (§12.2) and coordinate (§12.3) clause linkages, followed by bridging constructions (§12.4), which mix properties of the previous two types. Speech report constructions, including their extended uses, are described in §12.5 and complementation in §12.6: the latter is a syntactically disparate category, utilising subordinate, coordinate and nominalised clauses.

¹²³ The description that follows is a slightly reorganised form of that in Dixon (forthcoming) – see Overall (forthcoming) for a description of Aguaruna couched entirely in those terms.

12.2 Subordination

Subordinate verbs fall into three types:

- A. Person-marking
- B. Non-inflecting
- C. Relativised

All are marked for some relative tense and aspectual categories; all are unmarked for mood/modality, and may share that of the controlling verb. Person and SS/DS are marked on type A; more specific interclausal relations on type B; type C may be person-marked if SS, or accusative-marked if A/S corresponds to an O argument of the controlling verb. Below I briefly summarise the properties of each type – full details of their morphological properties are in Chapters 9 (subordinate verbs) and 10 (relativised verbs).

A Person-marking subordinate clauses

In example (1), the subordinate verb *usupa-hã* ‘(she) having craved’, heads the bracketed subordinate clause.

- (1) [nuwa makitʃiki naŋkai-na usupa-hã] [hiina-ki-u]
 [woman one fruit-ACC crave-PLU:SEQ+3:SS] [go.out-TRF-REL]
 ‘a woman_i having craved fruit, (she_i) went out’ (6:1:1)

The subordinate clause is temporal - the woman craved fruit **and then** she went out. The relative timing is shown by the fact that the subordinate verb is marked as sequential. There is an iconicity to the ordering of temporal subordinate clauses; a subordinate verb always linearly precedes a verb representing a later action. In this way, in theory, any number of subordinate clauses may be strung together depending on one final clause. Example (2) shows five subordinate clauses dependent upon the one final clause.

- (2) [nihi-na tsupi-hã] [paina-kã]
 [meat-ACC cut.up-PLU:SEQ+3:SS] [put.in.pot-INTS:SEQ+3:SS]
 [ikina-kã] [idaiya-kã] [nu-na nihi-na]
 [put.on.fire-INTS:SEQ+3:SS] [boil-INTS:SEQ+3:SS] [ANA-ACC meat-ACC]
 akaŋki-na inahu-tu-kã] apu-sa-u-ai
 abdomen-ACC cook-APPLIC-INTS:SEQ+3:SS] put-ATT-REL-COP:3:DECL

‘Having cut up the meat, put it in the pot, put it on the fire and boiled it, having cooked the meat of the abdomen he set it down (for his wife)’ (6:5:57)

As in example (1), the ordering of the sequential subordinate verbs in (2) reflects the temporal ordering of the sequence of actions being described.

Three types of subordinate verbs can appear in both same-subject (SS) and different-subject (DS) subordinate clauses. The three forms are based on the unmarked, perfective and imperfective stems, and express non-temporal subordination, prior action and simultaneous action respectively. The two parameters of stem and SS versus DS form a six-way distinction, illustrated in table 12.2.

	NON-TEMPORAL	SEQUENTIAL	SIMULTANEOUS
SS	<i>-sa</i> + subject	<i>-∅</i> + subject	<i>-ku</i> + subject
DS	<i>-taĩ</i>	<i>-mataĩ</i>	<i>-kuĩ</i>

Table 12.2: Stem and SS vs DS distinctions in subordinate clauses with 1/3 subject

The imperfective stem can also appear in DS subordinate clauses without the simultaneous suffix *-ku*. Subject marking is as for *-ku* forms, except that first person plural is marked with the suffix *-hi*, as in independent clauses.

Four further subordinating suffixes appear **only** in SS clauses and express a range of aspectual distinctions. They are listed in the table below along with the stem selected:

FORM	GLOSS	STEM
<i>-tasa ~ -tatus</i>	intentional	perfective
<i>-kawa</i>	repetitive	imperfective
<i>-kama</i>	terminative	unmarked
<i>-takama</i>	frustrative	perfective

Table 12.3: SS subordinating suffixes

These suffixes are followed by the SS subordinate subject markers illustrated in §9.4.1, except that ‘intentional’ with third-person subject takes the form *-tatus*.

The general subordinate suffix carries no particular temporal or aspectual connotations, although it does indicate that the action of the verb is ongoing, and therefore overlapping with that of the main verb. The simultaneous suffix is the imperfective equivalent of the perfective subordinate verb forms, and emphasises the temporal overlap between the actions of the verbs. For the other suffixes, the aspectual distinctions are primary, although there are some temporal implications. Thus the action of an intentional verb cannot precede that of the main verb. Similarly, the action of a frustrative verb (or, more correctly, the attempted action) must precede that of the main verb – otherwise its

meaning would overlap with intentional. The repetitive suffix, like the non-temporal subordinate suffix, implies temporal overlap because its action is ongoing, but in this case it is the repeated nature of the action that is emphasised.

B Non-inflecting subordinate clauses

Two subordinators *-tatamana* and *-ma* index grammatical relations in both the subordinate and the matrix clause. They are morphologically unlike the person-marking subordinate clause markers in two respects:

1. They take neither person nor DS marking
2. Their switch-reference properties are more complex, indexing grammatical relations in both the dependent and the matrix clause

-tatamana selects the unmarked stem, while *-ma* may be suffixed to the imperfective or the perfective stem. The following table (repeated from table 9.9.12) summarises their properties.

MARKER	STEM	SWITCH-REFERENCE	
		ROLE IN MARKED CLAUSE → ROLE IN CONTROLLING CLAUSE	
<i>-tatamana</i>	unmarked	A/S	O/E
<i>-ma</i>	aspectualised	non-A/S	A/S

Table 12.4: Properties of non-inflecting subordinators

-tatamana indicates an action simultaneous with that of the main verb. The subject of the verb with *-tatamana* is an object of the following verb – see examples (30) and (43) below.

-ma typically encodes a temporal relation between clauses, but when suffixed to the perfective stem the temporal/consequence distinction is neutralised, as in all prior action subordinate clauses. A non-subject participant of the verb with *-ma* becomes the subject of the following clause.¹²⁴

¹²⁴ The common argument is typically O with transitive verbs and location with intransitive verbs.

- (3) [uha-ka-ma] [hii-na hu-kĩ] kukau
 [tell-INTS -NON.A/S>A/S] [fire-ACC take-TRF:SEQ+3:SS] dead.tree+ACC

aka-tu-a-u-ai
 set.alight-APPLIC-HIAF-REL-COP:3:DECL

‘(A man told his brother there was a boa living in a dead tree.) When he_i told him_j, he_j took a lighted stick and set fire to the dead tree’ (3:1:12)

The lack of verbal person marking and the fact that they index a common argument are properties shared with relativisers, and evidence from clause-internal argument marking and NP structure presented in §9.5 shows that both *-ma* and *-tatamana* occasionally function as relativisers.

C Relativised clauses

In §10.3 we saw that clauses relativised with the subject relativiser *-u* show a remarkable syntactic flexibility. In addition to their core function as relative clauses modifying an NP, they most commonly appear as independent clause heads, where the use of a relativised verb implies non-firsthand information source; one could argue that the suffix *-u* in these constructions has been reanalysed as a ‘non-firsthand’ marker (see §13.6). Relativised clauses also frequently take part in clause-chains, and their status is ambiguous. Consider the following example:

- (4) [paŋki ʃukuima nunu yu-a-kũ pinua-hã
 [boa boa.sp ANA eat-IMPFV-SIM+3:SS wrap.up-PLU+3:SS

aintsu-na puhu-hu-u-na] ihĩuqa-aŋa-u
 person-ACC live-APPLIC-REL-ACC]_o discover:PFV-PL-REL

‘they discovered that *shukuim* boa as it was was eating, having wrapped up the man’ (Text 1: 23)

This example can clearly be analysed as relativisation. But the NP marked with accusative case is very elaborate, including subordinate clauses of its own. The following example (repeated from 5.40) is even more complex:

- (5) [kãyuka-ka [anumaka puhu-sã] [tĩmaʃi-ma-a-kũ]
 [agouti-FOC [at.the.edge live-SBD+3:SS] [comb-REFL-IMPV-SIM+3:SS]

[tĩmaʃi-na hu-kĩ] [tĩmaʃi-ma puha-u-na]
 [comb-ACC take-TRF:SEQ+3:SS] [comb-REFL live+IMPV-REL-ACC]]

adu-tu-kã

approach-APPLIC-INTS:SEQ+3:SS

‘the agouti who was at the edge (of the garden) combing her hair, holding her comb and combing her hair, and (the woman) having approached it...’ (6:1:74)

Both of the above examples show accusative marking on the final element of the NP. When the subject of the relativised clause is also the subject of the matrix clause, there is no case-marking on the relativised verb. This verb is then ripe for reanalysis, leading to subordinate clause SS person marking on a relativised clause, as in the following example (repeated from 5.38):

- (6) [wi taka-a-ku-nu wi-u-nu] mina-ha-i
 [1SG work-IMPV-SIM-1SG:SS go:PFV-REL-1SG:SS] arrive+IMPV-1SG-DECL

‘I’m coming from work’

At this point an analysis as a relative clause is not possible, instead this must be considered a temporal subordinate clause.

Only subject relativisations with *-u* take part in clause chaining in this way. The advantage of using relativisations to track participants is they mark grammatical relations in two clauses at once: the common argument is the subject of the relativised clause, and case-marking morphology indicates the role of the common argument in the matrix clause.

Clauses marked with the non-subject relativiser *-mau* may function as action nominalisations (discussed in the context of complementation in §12.6.1.2 below). Such forms also appear followed by the locative suffix *-numa* in contexts where a locational reading is implausible:

- (7) a. nunĩ batsata-mau-numa
 thus live+IMPV-NON.A/S.REL-LOC

‘while they were living that way’

? ‘in the place where they were living that way’

- b. tu puha-mau-numa
 say live+IMPFV-NON.A/S.REL-LOC
 ‘as they were saying that’ (6:3:13-14)

? ‘in the place where they were saying that’

Compare example (8), in which an actual location is specified by the main clause verb ‘arrive’, which typically takes a locative argument.

- (8) hĩuqa-u-ai [mantʃumuʃi puha-mau-numa]
 arrive-REL-COP:3:DECL [*Manchumuch* live+IMPFV-NON.A/S.REL-LOC]
 ‘(she) arrived at (the place) where *Manchumuch* (the mythical cannibal) lived’ (6:1:4)

In the preceding examples, the relativised *-mau* clause functions as an adverbial subordinate clause. Crucially, the subject of the *-mau-numa* (NON.A/S:REL-LOC) clause always has a different subject from that of the matrix clause: this is exactly parallel to the historical development of the locative suffix *-ĩ* into a DS marker proposed in §9.4.2.6.

Such constructions are used to present the situations described in the two clauses as completely consequentially unrelated, while still linking them in terms of their relevance to the narrative. A suitable translation into English might use the word ‘meanwhile’.

12.2.1 Syntactic status of subordinate clauses

The use thus far of the term “subordinate” has begged the question regarding the syntactic status of dependent clauses. In the following section evidence is presented to demonstrate their subordinate status.

Canonical clause-chaining has been described as “cosubordination” (Foley & Van Valin 1984, Van Valin & LaPolla 1997), which is neither coordination nor subordination, but has properties of both. Cosubordinated (medial) clauses in a chain are dependent upon a single final clause. They are typically marked for switch-reference following one of two principles: (1) all clauses are marked relative to the immediately following clause; or (2) all clauses are marked relative to the final clause.

But there are significant problems with analysing Aguaruna dependent clauses as cosubordinate:

1. All dependent clauses are marked to show their relationship to their controlling clause, which is not necessarily the following clause

2. Considerable flexibility in positioning, including centre embedding, points to a closer syntactic relationship with the controlling clause
3. Operator scope, and mood/modality marking in particular, may extend to subordinate clauses
4. Many examples modify, a property generally considered to be absent from cosubordinate clauses

Let us now consider the properties of Aguaruna dependent clauses as they relate to the listed points.

12.2.1.1 Relations between subordinate clauses and controlling clause

Subordinate clauses can be nested, showing that they are truly subordinate. This is unlike medial or cosubordinate clauses which are ordered linearly. Consider the following example:

- (9) [nu-na hu-kĩ] [wĩuqa wi-a-kawã]
 [ANA-ACC take-TRF:SEQ+3:SS] [REDUP go-IMPV-REPET+3:SS]
- [hu wi-u-ĩ tu-taĩ]
 [PRX go:PFV-REL-NONVIS.COP:3 say-SBD:1/3:DS]
- [ima-kamã] [hĩuqa-tu-u-i aha-numa]
 [take-TERM+3:SS] [arrive-APPLIC:PFV-REL-COP:3:DECL garden-LOC]

‘having taken that (child), going and going, as the child said “she went here”, on taking (the child) she arrived in a garden.’ (6:1:46)

There are four subordinate clauses and the final clause is finite. Three of the subordinate clauses are marked SS, and the other DS. But the switch-reference marking does not depend on the immediately following clause; rather, it is marked to show its relation to the controlling clause. The DS marked clause is third in linear sequence, and the other three clauses all have the same subject as the controlling clause. The structure is diagrammatically represented below:

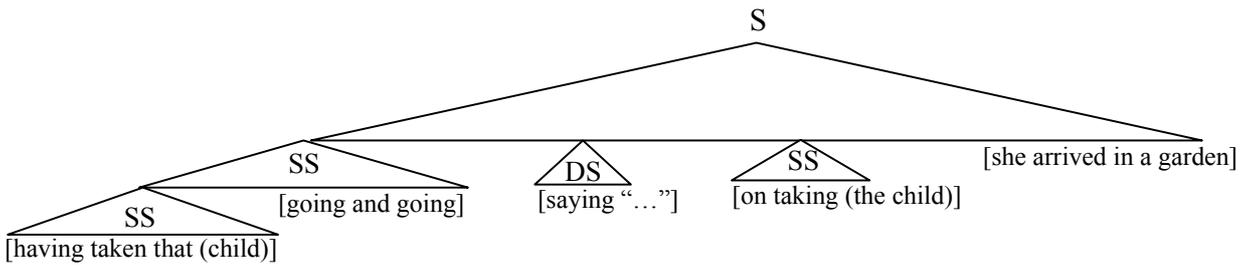


Figure 12.3: Tree diagram of example (9)

Semantically, the first clause “having taken that (child)” is subordinate not to the main clause, but to the second subordinate clause “going and going”. This cannot be proved by syntactic evidence, but other examples show that it is possible to nest subordinate clauses, as in the following:

- (10) [tuhintu-kã] [pĩmpĩina-a-kũ] [utʃi-na
 [be.unable-INTS:SEQ+3:SS] [turn.around-IMPV-SIM+3:SS] [child-ACC
 tsiɥaha-mitika-taĩ] [tupika-u]
 cry:PL-CAUS-SBD:1/3:DS] [run+IMPV-REL]

‘(the devil) was unable (to pull the child’s arm off), turning around, when he made the children cry, (their father) came running’ (6:2:42)

The first two clauses are subordinate to the third; this must be the case, as they are marked SS, and all of the first three clauses have the devil as their subject, while the final clause has the children’s father as its subject.

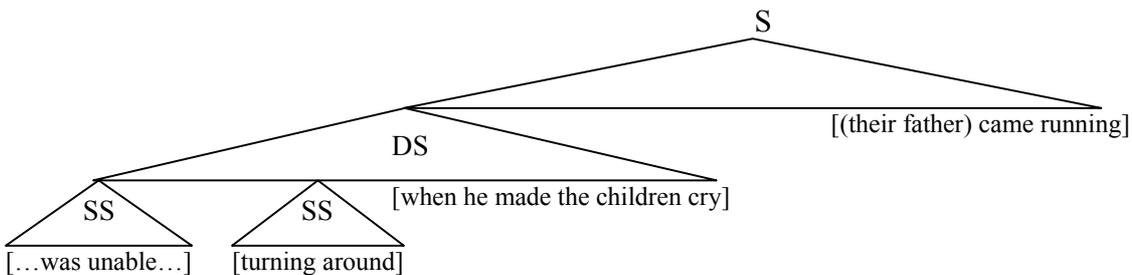


Figure 12.4: Tree diagram of example (10)

To summarise: the switch-reference marking shows that subordinate clauses are marked with respect to hierarchical relationships of controlling and dependent clauses, and not based simply on linear order, nor are all marked with respect to a single final verb. This is unlike cosubordinate clauses, which have a linear rather than a hierarchical structure.

12.2.1.2 Flexibility in positioning of subordinate clauses

Further evidence for the subordinate status of dependent clauses comes from constituent ordering. A subordinate clause may be **centre embedded** in its matrix clause, in the sense that it intervenes between constituents of that clause. Consider the following example; a man is planning to trick his stepfather into believing that he has killed all the birds, so he explains to the birds that he will fire darts towards them from his blowgun, and they must catch the darts and pretend to fall down dead. He tells them:

- (11) [*atumi* [*tsintsaka mina-kuĩ*] *atʃi-a-ku-mi* *iya-i-ta-humi*]
[2PL [dart arrive-SIM:1/3:DS] grab-IMPV-SIM-2:SS fall-LOAF-IMP-2PL]
‘you, when the darts arrive, grab them and fall down’ (4:4:267)

The first word *atumi* ‘you (pl)’ is the subject of the finite clause, ‘you grab them and fall down’. Centre-embedded in that clause is a different-subject subordinate clause, ‘the darts arrive’. Incidentally, this shows that the Aguaruna constructions do not involve conjunction at the verb phrase level, in the sense of Genetti (2005); rather, the entire subordinate clause is centre-embedded in the matrix clause.

Compare the following example:

- (12) [*ikam_yawaã-na* [*haŋki-numa inu-a-nu*] *atʃi-ka-ha-i*]
[jaguar-ACC [jaw-LOC put.hand.in-HIAF:SEQ-1SG:SS] grab-INTS-1SG-DECL]
‘I’ve stuck my hand in the jaguar’s jaw and grabbed it’ (6.4.62)

Here the accusative-marked *ikamyawaã-na* (jaguar-ACC) is the object of the final verb, and the subordinate sequential temporal clause intervenes.

There is a general preference for finite clauses to be final in multiclausal constructions, in keeping with Aguaruna’s predicate-final profile. Just as constituents such as NP arguments and adverbs may follow the verb in some circumstances, subordinate clauses may follow their controlling verb. That this should be the case is hardly surprising: complement clauses are core arguments and other subordinate clause types are adverbial constituents of a matrix clause, so it is to be expected that they should show the same positioning possibilities as their non-clausal counterparts. The difference lies in the fact that clauses express states or actions, and as such there is a motivation to order them iconically if those states or actions show any temporal ordering.

The most commonly postposed clauses are purpose clauses. Purpose clauses are focal (in the terminology of Dixon (forthcoming)). Complement clauses are also often postposed to the controlling verb; indeed, many complement clauses **are** purpose clauses.

The principle of iconicity would suggest that sequential temporal clauses should not be postposed to their controlling verb, and the vast majority of temporal and causal clauses are ordered iconically. But this phenomenon is apparently not a syntactic requirement. Consider the following example, in which a sequential clause appears with the conditional suffix:

- (13) [migel ma-a-mi] [aĩntsu ha-ka-mataĩ-ka]
 [*Miguel* kill-HIAF-HORT] [person die-INTS:SEQ-1/3:DS-COND]
 ‘Let’s kill Miguel if the person (that Miguel beat up) dies’ (8:1:23)

In this case one could argue that the irrealis nature of a conditional construction renders iconity of ordering irrelevant – the person had not actually died at the time of speaking.

In the following example, however, there is no morphology that would make the temporal ordering irrelevant; the action of wrapping up must precede the killing, since that is precisely how a boa kills:

- (14) [maa-u-ai [pĩmpĩa-hã] [pĩmpĩa-hã]]
 [kill.HIAF-REL-COP:3:DECL [wrap.up-PLU:SEQ+3:SS] [wrap.up-PLU:SEQ+3:SS]]
 ‘(the boa) killed (the man) having wrapped him up’ (Text 1:11)

In fact, the relation of the ‘wrapping up’ to the ‘killing’ may be the crucial point: the postposed sequential clauses represent a manner linkage, not a temporal one, and a better translation might be ‘he killed the man by wrapping him up’. This reading is supported by the fact that the sequential clause is repeated, a construction associated with adverbs but not clauses

In sum, iconic ordering of temporal clauses is the norm, and those few examples that depart from iconic ordering can be shown to have properties that suggest they are not considered purely temporal clauses by speakers.

12.2.1.3 Mood/modality marking

Mood/modality marking offers further support for the subordinate status of dependent verbs. Mood/modality is marked on independent verbs (see §8.7 for details of the markers

and §11.5 for details of the clause-level properties) and has scope over the whole clause. This can be seen clearly with three clause types which are morphologically represented both on the verb and elsewhere in the clause: speculative, which marks a constituent of the clause as the locus of speculation; polar interrogative, which assigns uncertainty marking to constituents; and content interrogative, which suppresses apocope within the clause and assigns uncertainty marking. Crucially, all of these markers may be suffixed equally to subordinate verbs as to NP and adverbial constituents. The following illustrative examples are repeated from §9.7:

- (15) [pasuni mini-tu-hama-a-ku-ĩ-**fa**] [wahuku
 [evil.spirit arrive-APPLIC-1PL.OBJ-IMPV-SIM:1/3-DS-UNCERT] [how
 uwi-mai-inu-aita-mi]
 save.oneself-POT-NR-COP-2]
 ‘if an evil spirit comes across us, how can you save yourself?’ (6:11:8)
- (16) ami-**fa** [lima wi-tasa-mi-**fa**] wakiya-a-tsu-mi-ka
 2SG-UNCERT [*Lima* go:PFV-INTENT-2-UNCERT]_{COMPLEMENT} want-IMPV-NEG-2-POLINT
 ‘do you want to go to Lima?’ (2:2:64)

The relationship may be even closer, such as in the following auxiliary construction:

- (17) numi-na [tsupi-a-kũ-**tsu** puha-tai]
 wood-ACC [cut-IMPV-SIM+3:SS-SPEC1 live+IMPV:3-SPEC2]
 ‘perhaps he is cutting wood’

And the following speech-report complement:

- (18) [jiiha ani-a-ha-i wi-tasa-nu-**fa**] ta-wa-ka
 [very desire-IMPV-1SG-DECL go:PFV-INTENT-1SG-UNCERT] say+IMPV-3-POLINT
 ‘is she saying “I really want to go”?’ (Obs)

Subordinate clauses are characterised by lack of mood/modality: not only do they have none of their own, they also do not necessarily share the mood/modality of the controlling clause. This can be seen in example (13) above, where the hortative marking of the controlling clause does not have scope over the subordinate clause. But compare the following example, where imperative mood **does** have scope over the subordinate clause:

(19) [hu-ĩ kana-ha-mi] kajini wi-ta
 [PRX-LOC sleep-PLU:SEQ-2:SS] tomorrow go:PFV-IMP

‘sleep here and go tomorrow’ Lit: *having slept here, go tomorrow* (Text 2:21)

This can be compared to Genetti’s (2005) discussion of “participial” (=converbal) forms in Dolakhā Newar:

“[O]ne cannot predict scope of illocutionary force simply on the basis of syntax; non-structural factors must also be taken into account.” (Genetti 2005: 68)

Gordon (1983, 1986:266ff.) reports a similar set of syntactic properties for dependent clauses in Maricopa (Yuman). However Gordon’s evidence shows that dependent clauses differ in their positioning possibilities, according to the semantics of the linkage. Thus:

“Clauses which are temporally related to a reference clause or which are expressing a kind of loose conjunction of events between the dependent and the reference clauses cannot be center-embedded. Dependent clauses which serve as complement clauses, as modifying clauses, and as reason clauses can be center-embedded within their reference clauses.” (Gordon 1983:89)

It would be interesting to investigate whether any such restrictions apply to Aguaruna subordinate clauses. Unfortunately, since centre-embedded clauses are rare in texts, it would require detailed elicitation to understand what the possibilities are, and so must await future research efforts.

12.2.1.4 Modification relationship

The final piece of evidence for the subordinate status of dependent clauses is the modification relationship. Cosubordinate clauses are semantically coordinate, and do not express logical relations between clauses – their truth value does not affect that of the final clause. In Aguaruna, conditional and concessive relations are both indicated with subordinate clause constructions – see examples in §12.2.7.

12.2.2 Temporal clauses

Temporal clauses are typically formed with sequential or simultaneous clauses, two of the basic subordinate clause types shown in table 12.2 above; but a range of other options is also available. The distinction between temporal and consequence clauses is

neutralised in sequential clauses that express action prior to that of the controlling clause. Thompson & Longacre (1985) note that such a neutralisation is not unexpected:

“[T]wo events which are mentioned together as being simultaneous or adjacent in time are often inferred to be causally related.” (Thompson & Longacre 1985: 181)

The distinction can be made, however, using a case-marked pronoun to form a bridging construction, in which locative case indicates a temporal relation and instrumental case a consequence relation (§12.4).

The following description divides the temporal clause types on the basis of whether the action of the subordinate clause is (A) prior to that of the controlling clause; (B) simultaneous with that of the controlling clause; or (C) future to that of the controlling clause.

A Prior action

Prior action may be marked with one of the following five constructions:

1. A sequential clause, which may be SS (example 2 above) or DS:

(20) [yawaã ikina-mataĩ] [ma-a-ha-i]
 [dog flush.out:PFV:SEQ-1/3:DS] [kill-HIAF-1SG-DECL]
 ‘when the dog flushed (the agouti) out, I killed it’ (6:5:59)

2. A bridging construction (SS or DS) – see example (70) below.

3. The non-inflecting subordinator *-ma* (NON.A/S>A/S) with perfective stem, as in the following example:

(21) [ipini-ma] [nĩ ikam_yawaã tru tru tru waha-a-u]
 [trap:PFV-NON.A/S>A/S] [3SG jaguar roar roar roar call-IMPFV-REL]
 ‘when (they) trapped (it), the jaguar was going “roar roar roar!”’ (6:4:156)

4. Where the controlling clause represents a stretch of time rather than a point in time (i.e. ‘since’), this is expressed with a subordinate form of the verb *nan̄kama* ‘begin’

(22) [mi-na apa-hu ha-ka-mataĩ] [nan̄kama-sa-nu] bitaik
 [1SG-ACC father-PERT:1SG die-INTS:SEQ-1/3:DS] [begin-SBD-1SG:SS] orphan
 huwa-ka-u-aita-ha-i
 stay-INTS-REL-COP-1SG-DECL
 ‘since my father died, I remain an orphan’

5. Terminative *-kama* indicates that termination of an ongoing action in the subordinate clause coincides with the start of a new action in the controlling clause. This marker only appears in SS clauses, such as the following:

- (23) [tʃapayã dii-kamã] [aĩntsu-na ... waina-kã]
 [look.over.edge:PFV:SEQ+3:SS look-TERM+3:SS] [person-ACC ... see-INTS:SEQ+3:SS]
 ‘looking over the edge, on looking they saw a person ...’ (6:3:26)

B Simultaneous action

Where a temporal subordinate clause expresses a state or event that is simultaneous with that expressed by the controlling clause, one of the following six constructions is used:

1. Simultaneous clause marked with *-ku* (SS or DS):

- (24) [antu-ina-ku] [wi-aha-mi]
 [hear-PL:IMPFV-SIM+1PL:SS] [go:PFV-PL-HORT]
 ‘when we hear, let’s go’

- (25) [nu-na muunta auhumatu-ina-ku-ĩ] [wainakasã ta-wa
 [ANA-ACC elder tell-PL:IMPFV-SIM1/3-DS] [in.vain+3 say+IMPFV-3:EXCL
 tu-ia-ha-i]
 say-REMPAST-1SG-DECL]

‘when the elders were telling that (story), I would say “they’re talking rubbish!”’ (6:2:88)

2. Imperfective DS clause. These clauses have a locative nuance, as can be seen in the following examples; evidence that the DS suffix *-(n)ĩ* may have developed from the homophonous locative suffix (see §§9.4.2.4ff.).

- (26) [kabisa-na apihi-kã itipahu-ã waha-a-ĩ]
 [skirt-ACC fold-INTS:SEQ+3:SS put.on-HIAF:SEQ+3:SS stand-IMPFV:1SG/3-DS]
 [ikam_yawaã tsikin wahau-ka-u]
 [jaguar suddenly stop-INTS-REL]

‘having folded his skirt and put it on, he was standing when the jaguar suddenly arrived’ (6:4:80)

- (27) [hu-ĩ puha-ĩ] [ta-a-ta]
 [PRX-LOC live+IMPFV:1/3-DS] [come-HIAF-IMP]

‘come here, where I am’

3. Repetitive subordinate clause with *-kawa* (accompanied by partial reduplication in the verb root). This form is only used in SS clauses.

- (28) [buu buuta-kawã] [wi-u]
 [REDUP cry+IMPFV-REPET+3:SS] [go:PFV-REL]
 ‘crying and crying he went’ (7:3:34)

4. Relative clause formed with the imperfective stem and the subject relativiser *-u*.

- (29) [yakĩ wa-kã iki-ta-u-na]
 [above go.up-INTS:SEQ+3:SS sit-APPLIC+IMPFV-REL-ACC]
 [yunuma-tu-ka-u-ai]
 [approach-APPLIC-INTS-REL-COP:3:DECL]_{FC}
 ‘he approached (the boa) that was sitting up above’ (Text 1:8)

5. Non-inflecting subordinate clause marker *-tatamana* (A/S>O/E):

- (30) [utʃi akai-kĩ yumiŋmat hũʋa-tatus wi-tatamana]
 [youth go.down-TRF:SEQ+3:SS well arrive:PFV-INTENT+3:SS go-A/S>O/E]
 [ikama_yawaã tipĩ-hu-ka-u-ai]
 [jaguar lie.down-APPLIC-INTS-REL-COP:3:DECL]
 ‘the youth having gone down the hill, while he was going to the well, the jaguar pounced on him’ (6:4:54)

6. Non-person-marking subordinator *-ma* (NON.A/S>A/S) with imperfective stem:

- (31) [ta-ma] [nu utʃi tʃitʃa-a-kũ]
 [say+IMPFV-NON.A/S>A/S] [ANA child speak-IMPFV-SIM+3:SS]
 ‘when they said that to him_i, that youth_i was saying...’ (6:4:47)

C Future action

Where the action of the subordinate clause follows that of the controlling clause, one of the following constructions is used.

1. Speech report with future controlling clause gives the sense of ‘until’

(32) [mi-na duku-hu tsauqa-ha-ti tu-sa-nu]
 [1SG-ACC mother-PERT:1SG recover-PLU-JUSS say-SBD-1SG:SS]

[kuitama-a-ku-nu puhu-tata-ha-i]
 [care.for-IMPV-SIM-1SG:SS live:PFV-FUT-1SG-DECL]

‘I will stay here looking after my mother until she gets well’ Lit. *saying “may she recover”*

2. A sequential clause with future controlling clause gives the sense of ‘until’ (note that the subordinate clause in the following example is centre-embedded in the controlling clause)

(33) [hu-ĩ puhu-sa-nu [wawiku kũyu-a-mataĩ]
 [PRX-LOC live-SBD-1SG:SS [Wawik subside-HIAF:SEQ-1/3:DS]

wi-tata-ha-i]
 go:PFV-FUT-1SG-DECL]

‘I will stay here until the Wawik river subsides, then I’ll go’

3. An imperfective DS subordinate clause with negative polarity gives the sense of ‘before’, that is, ‘while not yet’

(34) [ta-a-u-ai] [kaŋkapi ta-a-tsu-ĩ-ka]
 [come-HIAF-REL-COP:3:DECL] [Kagkap come-IMPV-NEG-1/3:DS-FOC]

‘(the jaguar) arrived before Kagkap had arrived’ (6:4:90)

4. A frustrative subordinate clause may also give the sense of ‘before’

(35) [aha-numa nuwa wi-u wau-takamã]
 [garden-LOC woman go:PFV-REL arrive-FRUST+3:SS]

‘before the woman who had gone to the garden arrived, (her husband butchered and cooked her dog)’ (6:5:51)

12.2.3 Consequence clauses

Consequence clauses express a relation of causality; the action or state expressed by the controlling clause is a consequence of that expressed by the subordinate clause. As noted above, consequence blurs with temporal succession when the action of the subordinate clause is prior to that of the controlling clause.

Consequence can be divided into two groups: (A) prior action; and (B) non-prior action.

A Prior action

Where the situation described by the subordinate clause is prior to that of the controlling clause, the same set of markers is used as for prior temporal above.

1. Sequential temporal clause (SS) – DS clauses expressing prior action are typically encoded with bridging constructions, as in example (72) below

(36) [nuwa makitʃiki nanʃkai-na usupa-hã] hiina-ki-u
[woman one fruit-ACC crave-PLU:SEQ+3:SS] go.out-TRF-REL
'a woman craved fruit, so she went out (to get it)' (6:1:1)

2. Non-person-marking subordinator *-ma* (NON.A/S>A/S) with perfective stem

(37) [suwima-ma] buuta-wa
[beat:PFV-NON.A/S>A/S] cry+IMPFV-3:EXCL
'he's crying because he was beaten!'

B Non-prior action

1. Non-temporal subordinate clause

(38) [waamaki hiuʃa-tata-u asa] [[ayu tu-sa]
[quickly arrive:PFV-DESID-REL COP:SBD/SEQ+1PL:SS] [[ok say-SBD+1PL:SS]
wa-aha-maia-hi-i]
go.up:PFV-PL-INTPAST-1PL-DECL]

'(the driver told us we had to pay him and) because we wanted to get home quickly, we said "ok" and got onto the truck' (2:2:238)

Contrast the following two examples; in (39) a DS imperfective clause indicates a temporal relation:

(39) [wi huu-a-ĩ] [ʃinta-hã tipa-u
[1SG collect-IMPFV:1/3-DS] [wake-PLU:SEQ+3:SS lie.down+IMPFV-REL
wai-tu-ka-mĩ]
see-1SG.OBJ-INTS-RECPAST:3:DECL]
'as I was taking (things), the one who was awake saw me'

In (40), a similar situation is described using a non-temporal subordinate clause, highlighting the causal nature of the linkage:

(40) [au ʃinta-hã puha-u asã] [mi-na-ka
 [DST wake-PLU:SEQ+3:SS live+IMPFV-REL COP:SBD/SEQ+3:SS] [1SG-ACC-FOC

wai-tu-ka-mĩ]
 see-1SG.OBJ-INTS-RECPAST:3:DECL]

‘because he was awake, he saw me’

2. Speech report

(41) buuta-wa-i [simon wi-a-wa-i tu-sã]
 cry+IMPFV-3-DECL [Simon go-IMPFV-3-DECL say-SBD+3:SS]

‘It’s crying because Simon’s going’ Lit. *saying* “Simon’s going” (Obs)

3. The subordinate clause (typically a rhetorical question) may be introduced with *wajki* ‘because’ < ‘why’; in the same construction the controlling clause may be introduced with bridging anaphoric *nu* + instrumental case (as above)

(42) utʃi nu-na yu-ã [wajki kiiwi-ʃa
 child ANA-ACC eat-HIAF:SEQ+3:SS [why centipede-UNCERT

yu-taĩ-ka-aita ii-ʃa] [nu-i]
 eat-NON.A/S:NR-POLINT-COP 1PL-UNCERT] [ANA-INSTR]_{BRIDGE}

[ha-ka-u tuwahanĩ]
 [die-INTS-REL NARR]

‘the child having eaten that (centipede), because “are centipedes food we eat?” – because of that (the child) died.’ (6:1:21)

4. Non-inflecting subordinator *-tatamana* (A/S>O):

(43) nuni [nu-na nuwĩ-na nuni wikaiuqa-tatamana]
 thus [ANA-ACC wife:PERT:1PL/3-ACC thus walk-A/S>O/E]

[dutikã suwimka-na susa-ia tuwahanĩ]
 [do.that:PFV:SEQ+3:SS punishment-ACC give.ATT-REMPAST:3 NARR]

‘and so he punished that wife of his who had done such a thing’ Lit. *who had gone thus* (6:5:79)¹²⁵

5. Apposition

¹²⁵ Note in this example that *dutikã* is not a bridging form, as it does not refer back to the preceding clause.

- (44) [wi-ka yawaã-tʃau-aita-ha-i [ĩhu-tu-hã
 [1SG-FOC dog-NEG.REL-COP-1SG-DECL [gang.up-APPLIC-PLU:SEQ+3:SS
 suwima-ma a-tinu-nu]] [wi-ka wakitu-ki-tata-ha-i
 beat:PFV-NON.A/S>A/S COP-FUT+NR-1SG]] [1SG-FOC go.back-TRF-FUT-1SG-DECL
 mi-na nuŋka-hu-ĩ]
 1SG-ACC land-1SG-LOC]

‘I am not a dog, to be beaten by gangs of people; (so) I will go back to my land’ (8:1:32)

12.2.4 Possible Consequence

Possible consequence is marked with the apprehensive suffix; the consequence alluded to is always an undesirable one.

- (45) [wakitu-ki-ta ami-ka] [mǎ-tama-i-numi]
 [go.back-TRF-IMP 2SG-FOC] [kill-2.OBJ-APPR-3PL:APPR/REMPAST]
 ‘you go back, lest they kill you’ (8:1:29)

The apprehensive verb is typically embedded in a speech report construction, as in the following example from a story about a woman who finds an egg and takes it home to hatch:

- (46) [takimpa-hã kuitama-ka-u-ai]i[iha] [ha-ka-ĩ
 [hatch-PLU:SEQ+3:SS care.for-INTS-REL-COP:3:DECL well] [die-INTS-APPR+3SG
 tu-sã]
 say-SBD+3:SS]

‘having hatched it, she cared for it well, lest it should die’ Lit. ...*saying* “*lest it die*” (4:4:21)

Note that this example differs structurally from the DS **purpose** clause (type IIp) in (51) above only in its use of the apprehensive suffix. But unlike purpose, **possible consequence** is expressed with a speech report even when the two clauses have the same subject:

- (47) []i[iha yu-a-mi-i] [ha-ka-i-ha tu-sa-mi]
 [well eat-IMPV-2SG-DECL] [die-INTS-APPR-1SG say-SBD-2:SS]

‘you eat well so that you won’t die’

Possible consequence may also be implied with a direct speech report, without apprehensive marking.:

(48) [au-kI amu-ka-tata-hama ta-kũ-ka]
 [DST-RESTR finish-INTS-FUT:3-CNTR.EX say+IMPFV-SIM+3:SS-FOC]

[untsu-hĩ-na uhu-kã awa-sa-ma]
 [right.hand-PERT:1PL/3-ACC hide-INTS:SEQ+3:SS put-ATT-NON.A/S>A/S]

‘saying “hey, he’ll finish them all!” they hid his right hand...’ (4:4:318)

That is “they hid his right hand *lest he finish them all*”.

Unlike other clause combining constructions, the subordinate clause typically **follows** the controlling clause in a possible consequence linkage, as in examples (45, 46, 47). The order is reversed in (48), and the apprehensive-marked construction may also be ordered with the subordinate clause first, as in (49) below. This example comes from a myth about young Etsa (the sun) and Ajaim, a cannibal who killed and ate Etsa’s mother and raised the boy as his own. When Etsa goes out hunting every day, Ajaim brings out the skull of the mother and plays it as one would blow a jug. He makes Etsa wear a necklace that rattles loudly, so that he will hear him coming home and have time to hide the skull before Etsa catches him playing with it.

(49) [ĩtsã antu-ka-ĩ tu-sã] [tiŋkapi-na
 [Etsa hear-INTS-APPR.+3 say-SBD+3:SS] [necklace-ACC

naha-tu-ã di-tu-a-ia tuwahamĩ]
 make-APPLIC-HIAF:SEQ+3:SS hang-APPLIC-HIAF-REMPAST:3 NARR]

‘lest Etsa should hear, (Ajaim) made him a necklace and hung it on him’ (4:4:89)

This atypical ordering can be attributed to the conflict between syntax and semantics; syntactically a finite clause is typically the final one, and semantically the focal clause (in Dixon’s (forthcoming) terminology) is typically final. In the case of possible consequence, the focal clause is subordinate, and the preference for the focal clause to be final may override the usual preference for a finite clause to be final.

12.2.5 Purpose clauses

Two types of clause explicitly indicate **purpose**: intentional clause (SS) and speech report (DS). Both are also used in complementation; in fact there is no surface grammatical distinction between a purpose clause and a complement clause, hence the term “complementation strategy” is appropriate.

1. Intentional dependent clause (SS):

12.2.7 Conditional and concessive clauses

Conditional and concessive clauses mark logical relations between clauses. Both are formed from subordinate clauses with the addition of a further suffix, and in both cases, the added suffix is also used with nominals.

12.2.7.1 Conditional clauses

The protasis in a conditional linkage may be one of the three basic subordinate clause types, namely non-temporal, sequential or simultaneous (table 12.2), and takes the conditional suffix *-ka*. The protasis may be SS or DS. The form of the apodosis is constrained, but perhaps only by pragmatics: all examples in my corpus are future, potential or imperative forms.

- (54) [wakɪɥa-a-ku-mi-ka] [yu-a-ta]
[want-IMPV-SIM-2-COND] [eat-HIAF-IMP]
'if you want, eat!'

- (55) [kaʃini yuta-tʃa-ku-ĩ-ka] [wi-tata-ha-i] [mi-na]
[tomorrow rain+IMPV-NEG-SIM-1/3:DS-COND] [go:PFV-FUT-1SG-DECL] [1SG-ACC]
aha-hu-ĩ-ka taka-a-ku-nu]]
garden-PERT:1SG-LOC-FOC work-IMPV-SIM-1SG:SS]]
'if it doesn't rain tomorrow, I will go to work in my garden'

Counterfactual conditional has the same form, but the apodosis takes the potential stem:

- (56) [ami wi-tʃau-aita-ku-mi-ĩ-ka] [ʃiiha ania-sa-nu]
[2SG go:PFV-NEG:REL-COP-SIM-2-DS-COND] [well be.happy-SBD-1SG:SS]
puhu-mai-inu-aita-ha-i]
live-POT-NR-COP-1SG-DECL]
'if you had not gone, I would be happy'

- (57) [nu-na waji-na duʃiki-a-tʃa-ku-nu-ka]
 [ANA-ACC spider.monkey-ACC laugh.at-IMFPV-NEG-SIM-1SG:SS-COND]
- [tuku-mai-nu awaki-ka-ha-i] tuha-ʃa
 [shoot-POT-NR overcome-1SG-DECL] BUT-ADD
- [duʃiki-mai-nu-na waina-ka-nu nu-na duʃiki-a-ku-nu
 [laugh.at-POT-NR-ACC see-INTS:SEQ-1SG:SS ANA-ACC laugh.at-IMPV-SIM-1SG:SS
 tuku-tʃa-ha-i]
 shoot:PFV-NEG-1SG-DECL]

‘if I hadn’t laughed at that monkey, I would have been able to shoot it; but having seen that it was funny, laughing at it I didn’t shoot it’ (7:1:41)

Typically the protasis precedes the apodosis, but this is not always the case – see example (13) above. A homophonous suffix *-ka* marks focus on nouns, and this is probably the same as, or the source of, the conditional suffix (cf. Haiman 1978 for the development of conditional marking from topic or focus marking).

12.2.7.2 Concessive clauses

Concessive clauses are marked with the suffix *-ʃakama* ~ *-ʃa*. The following example is from a story in which a young man goes to the river alone, even though he knows there is a man-eating jaguar in the vicinity:

- (58) [imau a-ĩ-ʃa]
 [INTENS.LOC COP-1/3:DS-CONCESS]
- [wi-a-kũ uku-ki-u-ai]
 [go-IMPV-SIM+3:SS leave-TRF-REL-COP:3:DECL]
- ‘although (the jaguar) was right there, he went (outside) and left’ (6:4:33)

The following example is from the story of a man who tames a bear cub, naming it Chunu:

- (59) [tʃunu mina-mi-ka ta-ma-ʃa]
 [Chunu arrive+IMPV-2-POLINT say+IMPV-NON.A/S>A/S-CONCESS]
- [ayatak imau ikima-sa-u]
 [only INTENS.LOC sit-ATT-REL]
- ‘although (the man) said “Chunu, are you coming?”, (Chunu) just sat at a distance’ (3:6:60)

In the following examples the concessive marker appears on a bridging verb, as discussed in §12.4.1:

- (60) [waamaki hu-hu-ki-ta-humi waha-a-u]
 [quickly take-1SG.OBJ-TRF-IMP-2PL call-IMPV-REL]
 [nuni-taĩ-ƶakama] [antu-ka-tʃa-aha-u a-ina-wa-i]
 [do-SBD:1/3:DS-CONCESS]_{BRIDGE} [listen-INTS-NEG-PL-REL COP-PL:IMPV-3-DECL]
 ‘he called out “quickly take me away!”, but although he did that, they didn’t listen’ (6:4:78)

- (61) [aƶanta wafi-kI iŋkuã-ka-ha-i]
 [wife+VOC spider.monkey-RESTR meet-INTS-1SG-DECL]
 [nuni-ka-nu-ƶa] [tuku-tʃa-ha-i]
 [do.that-INTS-1SG:SS-CONCESS]_{BRIDGE} [shoot:PFV-NEG-1SG-DECL]
 ‘honey, I only found a spider monkey, but I didn’t shoot it’ (7:1:34)

The same marker *-fa(kama)* also appears on nominals and adverbs marking additive, and in that role may give a concessive reading, as in the following example with the time word *kafi* ‘at night’:

- (62) wi-mi dikas kafi-ƶa
 go:PFV-HORT really night-ADD
 ‘let’s go, really, even though (it is) night’ (8:1:74)

12.2.8 Subordination: summary

We have seen that subordinate clauses can have complex nested hierarchical relationships, and are not simply linear. Many semantic types of linkage can be indicated by subordinate clauses, and the only other construction that comes close to subordination in frequency of use is bridging, described in §12.4. The highly hypotactic profile is one of the most distinctive features of Aguaruna grammar.

12.3 Coordination

There is no coordinating conjunction (‘and’); clauses may be coordinated by asyndetic parataxis, but subordination is far more common than coordination. The advantage of subordination is that it offers richer options for expressing temporal and

aspectual relations between the linked clauses. Bridging constructions (discussed in §12.4) function as coordinators.

Two particles are used to link clauses but neither is a true coordinator. The particle *atsa* is used only in questions, typically to disjoin NPs, with the sense ‘or’. A second particle *tuhã* can be used as a contrastive conjunction (‘but’) to link clauses but also appears in the absence of a clause linkage expressing counter-to-expectation.

12.3.1 Contrastive coordination

Contrast is expressed by two finite clauses, of which the second is introduced with *tuhã* ‘but’, typically also with the concessive suffix *-fa(kama)*. The following example is illustrative, as is example (57) above.

- (63) [sintʃi wakiŋa-ia-ha-i wi-tasa-nu] [tuhã-ʃa kakahus
 [strongly want-REMPAST-1SG-DECL go:PFV-INTENT-1SG:SS] [but-CONCESS easily
 wi-mai-inu atsu-yi]
 go-POT-NR exist:NEG-REMPAST:3:DECL]

‘I really wanted to go, but it was not easy to go (lit. *it was not easily go-able*)’ (2:2:33)

Use of *tuhã* is not always strictly contrastive, and there is some semantic overlap with consequence linkage. There is an implication of unexpectedness in the following example: the man knew that there was a jaguar prowling around so it is surprising that he decided to go outside alone.

- (64) [yumi atsu-taĩ] [tuhã-ʃa [ayu untsu wi-kI-ʃa
 [water exist:NEG-SBD:1/3:DS] [but-CONCESS [ok well 1SG-RESTR-ADD
uti-ta-ha-i tu-sã] akai-ki-u-ai]
bring:PFV-IFUT-1SG-DECL say-SBD+3:SS] go.down-TRF-REL-COP:3:DECL]

‘there was no water, so he said “ok, well I’ll bring it by myself” and went down (to the well)’ (6:4:52)

The same particle may also mark a rejection linkage, of the type ‘instead of x, y’, as in the following example:

(65) [dakita-a-u apa-hĩ-haĩ wi-ta-na] [tuhã
 [refuse-IMPFV-REL father-PERT:1PL/3-COMIT go-ACTNR-ACC] [but

duku-hĩ-haĩ imaʃi wi-a-u ʃiiha]
 mother-PERT.3-COMIT INTENS.ADV go.IMPERV-REL well]

‘He refused to go with his father, but went more with his mother.’ (6:5:12)

The particle *tuhã* must have originated as a marker of speaker’s attitude, and is used widely in speech reports in narrative. In the following example, a woman wants to bury her dead baby, but every time she selects a spot, the villain Manchumush tells her she cannot bury it there – the woman doesn’t know that Manchumush is a cannibal, and wants to eat the corpse.

(66) tuhã-ʃa tu-ĩ uku-mai-inu-aita-ha tu-taĩ
but-CONCESS where-LOC bury-POT-NR-COP-1SG say-SBD:1/3:DS

‘saying “but where can I bury it?”’ (6:1:9)

Use of *tuhã* reflects the woman’s surprised attitude, as it is unlikely that every spot she selects should turn out to be unsuitable.

The fact that discourse markers such as *tuhã* typically appear in clause-initial position would have facilitated a reanalysis of [CLAUSE] [*tuhã* CLAUSE] as a complex sentence [[CLAUSE] *tuhã* [CLAUSE]].

12.3.2 Disjunctive coordination

Disjunction uses *atsa* ‘or’. It is only used in questions.

(67) [nihamantʃi wakiuʒa-mi-ka] [atsa tsamau wakiuʒa-mi-ka]
 [*masato* want:IMPFV-2-POLINT] [or *chapo* want:IMPFV-2-POLINT]

‘Do you want *masato* (manioc beer) or *chapo* (plantain beer)?’

The verb of the second clause is typically the same, and can be omitted – so the construction is effectively NP disjunction.

The word *atsa* also means ‘no’, and is related to the negative existential verb *atsu*; the use in questions can be considered as “thinking aloud”, where the asker answers their own question (the first option) in the negative and then asks a second question: *do you want masato? ...no, I guess not ...do you want chapo?*

This type of disjunction is very rare in my corpus, although probably more common in conversation.

12.3.3 Asyndetic coordination

Corbera (1994: 324-5) discusses asyndetic coordination using parataxis. Example (68) is Corbera's (44a).

- (68) *Antuk áyatak yúwawai wasúmkamui kánawai*
antuku ayataka yu-a-wa-i wasumkama-a-wa-i kana-wa-i
Antuk only eat-IMPV-3-DECL play-IMPV-3-DECL sleep+IMPV-3-DECL
'Antuk only eats, plays and sleeps'

Because Aguaruna uses zero-anaphora, example (68) could in fact consist of three sentences, equivalent to English 'Antuk only eats. He plays. He sleeps.'; this is shown in (69) with the potential sentences bracketed; Ø represents the null subject (understood from context to be Antuk).

- (69) [antuku ayataka yu-a-wa-i] [Ø wasumkama-a-wa-i]
[*Antuk* only eat-IMPV-3-DECL] [Ø play-IMPV-3-DECL]
[Ø kana-wa-i]
[Ø sleep+IMPV-3-DECL]
'Antuk only eats. (He) plays. (He) sleeps'

This doesn't work logically however: if Antuk only eats, he cannot also play and sleep. The word *áyatak* 'only' must have scope over all three verbs, therefore they must all be part of one sentence. Note that I have no examples in my own data where this kind of structure can be shown to exist.

12.4 Bridging constructions

As discussed above, Aguaruna lacks coordinating conjunctions, instead utilising a highly hypotactic syntactic profile to link clauses by subordination, or occasionally through apposition. There is a third option, however – the bridging construction – which can be considered a "best of both worlds" amalgam of subordination and coordination.

There are two formally distinct bridging constructions:

1. The first uses a subordinate form of one of the pro-verbs. The most common are those formed with the pro-verbs *nuni* and *nutika* (both based on the anaphoric pronoun *nu*) ‘do’ (see §3.11.1.2 for a description of derivational morphology involved in creating pro-verbs)¹²⁶
2. The second, less common, construction uses an oblique case-marked form of the anaphoric pronoun *nu* itself

In the following description bridging forms in examples are bracketed separately with the label BRIDGE.

12.4.1 Bridging verbs

Bridging verbs are used immediately following a finite verb. The bridging verb refers anaphorically to the preceding clause, and indicates temporal/causal and switch-reference relations between it and the following clause. Consider the following example:

(70) [yunuma-tu-ka-u-ai] [nuni-ka-mataĩ] [nu-na
 [approach-APPLIC-INTS-REL-COP:3:DECL] [do-INTS:SEQ-1/3:DS]BRIDGE [ANA-ACC

atʃi-ka-u-ai aĩntsu-na paŋki]
 grab-INTS-REL-COP:3:DECL person-ACC boa]

‘(the person) approached (the boa), then the boa grabbed that person’ (Text 1: 8-9)

In this example, the bridging verb shows that the action of the preceding clause is prior to that of the following clause, and that the subject is different; neither of these useful pieces of information is marked in the preceding clause itself, because it is an independent clause.

An interesting question is that of constituency. The bridging verb is syntactically a separate clause, subordinate to and intonationally grouped with the following finite clause, while it is functionally very like a conjunction. Examples (59) and (61), however, have bridging verbs marked with the concessive suffix, showing that they are semantically associated with the preceding clause.

Similarly, a bridging verb may take the conditional suffix, as in the following example where the bridging verb functions as a disjunctive coordinator:

¹²⁶ Similar constructions in other languages have been labelled “tail-head” or “head-tail” linkage.

(71) [myerkoles-tin wi-tata-ha-i] [nuni-a-tʃa-ku-nu-ka]
 [Wednesday-TIME go:PFV-FUT-1SG-DECL] [do-IMPV-NEG-SIM-1SG:SS-COND]]_{BRIDGE}

[byernes-tin wi-tata-ha-i]
 [Friday-TIME go:PFV-FUT-1SG-DECL]

‘I’ll go on Wednesday, or if not, I’ll go on Friday’

In the following example, a bridging construction indicates a consequence relation between the two clauses:

(72) [mi-na apa-hu mā-kahatu-a-u a-yi]
 [1SG-ACC father-PERT:1SG kill-1PL.OBJ-HIAF-REL COP-REMPAST:3:DECL]

[nuni-ka-mataĩ] [auhu-a-tsu-u-ka papi-na-ka]
 [do-INTS:SEQ-1/3:DS]]_{BRIDGE} [study-IMPV-NEG-REL-FOC book-ACC-FOC]

[puhu-ia-ha-i]
 [live-REMPAST-1SG-DECL]

‘my father was a murderer, and because of that, I was unable to study (because the family had to go into hiding for fear of retribution)’ (2:2:17)

12.4.2 Bridging pronouns

Unlike the verbal type, bridging anaphoric *nu* appears directly following a subordinate clause, and serves to specify its relation with the controlling clause. Recapitulative *nu* appears either in locative (*nu-ĩ*) or instrumental case (*nu-i*), marking a temporal or causal relation respectively. This is the only marking strategy that explicitly differentiates the two semantic types in constructions where a subordinate clause expresses an action prior to that of the controlling clause. Example (73) below illustrates the locative case-marked form, and example (74) illustrates instrumental case marking:

(73) [arias pablo-haĩ mai-mataĩ] [nu-ĩ]
 [Arias Pablo-COMIT bathe+LOAF:SEQ-1/3:DS] [ANA-LOC]]_{BRIDGE}

[mai-ta-ha-i]
 [bathe+LOAF-IFUT-1SG-DECL]

‘After Arias and Pablo have bathed, then I’ll bathe’

(74) [aʃina-ka] [nu-i] [bote-numa tʃimpima-ha]
 [finish-INTS:SEQ+1PL:SS] [ANA-INSTR]]_{BRIDGE} [boat-LOC board:PL-INTS:SEQ+1PL:SS]

‘because we had finished (the class), we boarded the boat (to go home)’ (2:2:220)

Although typically used to relate a subordinate clause to its controlling clause, the pronominal bridging construction occasionally functions as a coordinator linking finite clauses, as in the following example:

- (75) [siima-a-ha-i] [nu-i] [kaha-hu
 [sweat-IMPV-1SG-DECL] [ANA-INSTR]_{BRIDGE} [sleepiness-PERT:1SG

 puhu-hu-ta-wa-i]
 live-APPLIC-1SG.OBJ+IMPV-3-DECL]

 ‘I’m hot, so I’m tired’

The pronominal bridging construction is much less common in narrative than the verbal type.

12.4.3 Functions of bridging constructions

Bridging constructions are a conspicuous and distinctive feature of Aguaruna narrative, and play an important role in discourse organisation. The widespread use of bridging verbs underscores the pervasiveness of participant tracking in Aguaruna discourse, and shows that the phenomenon is not limited to switch-reference between a dependent clause and its matrix clause. The analyst is left with the impression that Aguaruna speakers are so accustomed to expressing referent-tracking information, as it is obligatorily marked on the subordinate verbs which make up the vast majority in a narrative, that they feel obliged to add it, by way of a bridging verb, whenever a finite clause appears.

Pronominal bridging plays a useful role in eliminating the ambiguity that is inherent in prior action linkages between temporal and consequence linkage.

12.5 Speech Reports

Speech report constructions are common in Aguaruna discourse, both in reporting actual speech and vocalisations, and in complementation strategies relating to thought and intentionality.

In its basic form, a speech report construction is not really clause combining: the quoted speech is an argument, and does not express a proposition to be related to the matrix verb. However, a speech report is typically a sentence that expresses a proposition, so it is inevitable that the speech report construction has been extended into clause-linking uses, in particular complementation. In all of the extended uses, a subordinated form of the verb *tu*

‘say’ is used, and seems to be developing in the direction of a general speech report marker and complementiser.

In addition, a number of verbal suffixes have apparently developed from periphrastic constructions with *tu* ‘say’ – see §8.1.

12.5.1 The speech report

The speech report itself is a more-or-less verbatim quote, and the deictic centre is that of the original speaker (OS), except that overt pronouns referring to the current speaker (CS) and current addressee (CA) are shifted to the deictic centre of the CS – what Aikhenvald (2008) calls “Current-Speaker-oriented semi-direct speech” (§12.5.1.1).

There is only one speech-report construction, that is to say, one cannot adjust the deictic centre of a speech report for stylistic purposes. Essentially, then, Aguaruna uses direct speech.

The speech report always precedes the speech verb, and the only constituent that may intervene between the two is the subject of the speech verb; this is in fact quite rare.

(76) yutupisa nuwanu-ĩ a-wa-i ti-mayi
Yutupis ANA-LOC exist-3-DECL say+LOAF-INTPAST:3:DECL

‘It’s there, at *Yutupis* (stream)” he said.’ (6:2:90-91)

The subject of the speech verb is not usually expressed, being recoverable from morphology or context. When it is expressed, the most common position is preceding the speech report:

(77) nuwa ai ti-u-ai
 woman ok say+LOAF-REL-COP:3:DECL

‘The woman said “ok”.’ (6:4:43)

Rarely, the subject of the speech verb may intervene between the speech report and the speech verb, as in (78):

(78) daka-hu-ma-ta yatsu-hu tu-hu-ti-mĩ
wait-1SG.OBJ-DUR-IMP brother-PERT:1SG say-APPLIC-1SG.OBJ+LOAF-RECPAST:3:DECL

‘“Wait for me” my brother said to me.’ (6:4:41)

The subject of the speech verb is the only constituent that may come between the speech report and the speech verb.

12.5.1.1 Semi-direct speech

As noted above, speech reports are essentially verbatim quotes, and the deictic centre is that of the OS. When a pronoun or verb references a current SAP participant (i.e. CS or CA), however, the deictic centre shifts to that of the CS. So CS is always referred to as first person and CA is always referred to as second person, regardless of their status in the original quote. Such shift never happens with non SAP participants, so shifted and unshifted reference may appear within the same quote. To put it another way, a single speech report may contain pronominal and verbal reference from the deictic centre of the OS and the CS simultaneously. The incompleteness of the shift makes this semi-direct speech (Aikhenvald 2008).

The table below summarises the deictic centre indexed by pronouns and pertensive marking (in the first column) and verbal marking (in the second column) for first, second and third person (I have no data on plural persons).

PERSON	Pronoun/pertensive	Verbal marking
1	CS	OS
2	CS	CS/OS
3	OS	OS

Table 12.5: Deictic shift in speech reports

Below I shall discuss some examples to illustrate the shifts. The following is a straightforward example of semi-direct speech. The speech report attributed to the OS (Pablo) is literally ‘I saw your child’. But that is not what Pablo is understood to have said: he saw the CA’s child, not the CS’s. The pertensive marking is shifted to the CS’s deictic centre, but the verbal marking is not shifted; the two translations given, using indirect and direct speech, show how the partial deictic shift gives the Aguaruna construction properties of both.

(79) pablo utʃi-hu-mi-na waina-ka-ma-ha-i ti-mĩ
 Pablo child-PERT-2-ACC see-INTS-RECPAST-1SG-DECL say+LOAF-RECPAST:3:DECL

‘Pablo said that he saw your child’

OR

‘Pablo said “I saw his_{CA} child”’ lit. *P. said “I saw your child”*

The following example shows a similar shift of perturbive marking to the CS's deictic centre, this time with a first-person possessor. Again the verb is still marked from the OS's deictic centre, so the first person subject refers to the OS.

- (80) [pablo tu-hu-ti-mĩ] [utʃi-hu-na]
 [Pablo say-APPLIC-1SG.OBJ+LOAF-RECPAST:3:DECL] [child-PERT:1SG-ACC]
 waina-ka-ma-ha-i tu-sã]]
 see-INTS-RECPAST-1SG-DECL say-SBD+3:SS]]

‘Pablo told me that he saw my child’ Lit: *Pablo_(OS) said to me_(CS): “I_(OS) saw my_(CS) child”*

This example is ambiguous: it could just as well be interpreted as ‘Pablo told me he saw his own child’, where the speech report is treated entirely as a direct quote. It seems to be the case, however, that the applicative marking on the speech verb means the interpretation as referring to the CS's child is preferred.

The following examples illustrate purpose clauses couched as speech reports, with apprehensive marked verbs. In both examples, the speech report is the same, and the subordinate clause translates literally as ‘...saying “may I not fall”’. This is clearly direct speech, as the deictic centre is that of the OS. In example (a), OS and CS are the same, so deictic shift is irrelevant, and in (b), neither CS nor CA is involved.

- (81) a. [wi numi-na minaa-ha-i] [iyaa-ha-i-ha tu-sa-nu]
 [1SG wood-ACC lay.down:PFV-1SG-DECL] [fall-PLU-APPR-1SG say-SBD-1SG:SS]
 ‘I’ve lain a log down (across the stream) so as not to fall’
- b. [numi-na minaa-mĩ] [iyaa-ha-i-ha tu-sã]
 [wood-ACC lay.down:PFV-RECPAST:3:DECL] [fall-PLU-APPR-1SG say-SBD+3:SS]
 ‘he laid a log down (across the stream) so as not to fall’

The following example shows the different treatment of a CA subject of the apprehensive-marked verb. Here the second person pronoun and subject marking refer to CA, not OA. This sentence is basically indirect speech, as the entire contents of the speech report are shifted to the deictic centre of the CS.

- (82) [numi-na minaa-mĩ] [ami iyaa-i-mi tu-sã]
 [wood-ACC lay.down:PFV-RECPAST:3:DECL] [2SG fall:PFV-APPR-2 say-SBD+3:SS]
 ‘he laid a log down so that you wouldn’t fall’ Lit: *he laid a log down saying may you not fall*

When the CS is subject of the speech report, however, the verbal marking does not shift, as in the following example:

- (83) [numi-na minaa-mĩ] [mi-na iyaa-ĩ]
 [wood-ACC lay.down:PFV-RECPAST:3:DECL] [1SG-ACC_(CS) fall:PFV-APPR+3]
 tu-sã]
 say-SBD+3:SS]

‘he laid a log down so that I wouldn’t fall’

Here the verb of the speech report is third person, literally ‘...saying “may he not fall”’, while the pronominal subject has shifted. Note also that the first person pronoun, although it is the subject, is marked with accusative case.

Table 12.5 shows that second person verbal marking is variable. In example (82) above, the verbal marking shifts to mark the CA subject as second person. But in the following example, the verb of the quote is third person, although its subject too is the CA.

- (84) [apa ami-na [mi-haĩ nuwina-ti tu-sã]
 [father:PERT:2 2SG-ACC [1SG_(CS)-COMIT marry:PFV-JUSS say-SBD+3:SS]
 su-hu-sa-tinu-ĩ]
 give-1SG.OBJ-ATT-FUT+NR-NONVIS.COP:3]

‘your father will give you to me in marriage’

Here the purpose clause translates literally as ‘...saying “may she_(CA) marry me_(CS)”’. The first-person pronoun shows a shift to the CS’s deictic centre, while the verb does not. It is likely that the modality of the speech report plays a role. Both (82) and (84) are functionally purpose clauses, and are not necessarily intended to convey actual quotes. Now, apprehensive modality is available for all persons, so can be shifted as in (82). Jussive mood, however, is only possible with a third-person subject. The same form (at least etymologically) marks imperative when combined with a second-person subject. It is possible then that the third person marking in (84) has been retained to enable marking of jussive mood, as imperative marking would imply a direct quote. Clearly more work is required to ascertain the full range of deictic centre shift in speech reports, contrasting in particular actual quotes with purpose clauses and the like. It should also be borne in mind that all of these examples are elicited, and (84) in particular is grammatically unusual in having two SAP objects. Further analysis of data will, I hope, provide more natural examples.

At the beginning of a speech report a change of intonation is not common. Although sometimes the report is delivered at a higher pitch, typically it is not made clear until the speech verb that the preceding material is in fact a speech report. There may be a clear intonation break between the speech report and the following constituent; in other cases, the speech verb follows closely.

Example (87) (cf. also 91 above) shows an apparently discontinuous speech report. However, in all such cases, there must be one speech verb for every section of speech. So although this may be one discontinuous speech report in a pragmatic sense, syntactically there are two speech reports.

(87) *kaŋkapi ikama aʃina-ka-u-ai wi-mi tu-sã*
Kagkap forest+LOC go:PL-INTS-REL-COP:3:DECL go:PFV-HORT say-SBD+3:SS

kuntinu ma-a yu-a-mi tu-sã
animal kill-HIAF:SEQ+1PL:SS eat-HIAF-HORT say-SBD+3:SS

aʃina-ka-u-ai
go:PL-INTS-REL-COP:3:DECL

‘Kagkap went to the forest saying “let’s go”, saying “let’s kill animals and eat” he went.’ (6:4:11)

Speech reports can be nested within other speech reports. (88) is an extreme example:

(88) [*itsã tahima-taĩ itsã tahima-a-wa-i iista [mi-na*
[sun reach.noon-SBD:1/3:DS sun reach.noon-IMPV-3-DECL come.on [1SG-ACC

nuwa-haĩ [ũyu-tu-sa-ta] tu-sa-mi yumi ʃiki-sa-mi
wife-COMIT [accompany-1SG.OBJ-ATT-IMP] say-SBD-2:SS water draw-SBD-2:SS

iwa-ka-mi mama au-sa-mi yu-a-ku-mi
CAUS+go.up-INTS:SEQ-2:SS manioc put-ATT:SEQ-2:SS eat-IMPV-SIM-2:SS

daka-hu-ma-ta] yatsu-hu tu-hu-ti-mĩ
wait-1SG.OBJ-DUR-IMP] brother:PERT-1SG say-APPLIC-1SG.OBJ+LOAF-RECPAST:3:DECL

nunu dutika-mi ti-u-wai] [ta-ma nuwa
ANA do:PFV-HORT say+LOAF-REL-COP:3:DECL] [say+IMPV-NON.A/S>A/S woman

ai ti-u-wai]
ok say+LOAF-REL-COP:3:DECL]

‘When it reached noon, he said “it’s noon, come on, my brother said to me “go with my wife, saying “*come with me*”, draw the water and bring it up, put the manioc in, and eat it while you wait for me” - let’s do that”; when he said that, the woman said “ok”.’ (6:4:38)

See §12.5.3 below for discussion of the development of *tu-sã* (say-SBD+3:SS) as a speech report marker.

12.5.1.4 Speech Verbs

The most common speech verb by far is *tu* ‘say’, the use of which is illustrated in the following examples:

- (89) a. wainakasã ta-wa tu-ia-ha-i
in.vain+3 say+IMPFV-3:EXCL say-REMPAST-1SG-DECL

‘‘He’s lying!’’ I used to say.’ (6:2:89)

- b. wi-ka yamai-ki ha-ta-numa puha-ha-i
1SG-FOC now-RESTR die-ACTNR-LOC live+IMPFV-1SG-DECL

ti-u-wai
 say+LOAF-REL-COP:3:DECL

‘‘Now I’m about to die’’ she said.’ (6:6:31)

The only other verb that can be used with a speech report is *waha*, which has the primary meaning ‘stand’, and can be used as a copula (§3.2.2) and an auxiliary verb (§6.4.1). In addition, *waha* may be used to represent animal vocalisations, as in (90), and to report human speech that is shouted or similar (91). In the latter two senses, I gloss *waha* as ‘call’.

- (90) imau wakĩ-ia hau hau wahu-taĩ
 INTENS.LOC cliff-ABL ONOM ONOM call-SBD:1/3:DS

‘when (the puma) called “hau, hau” from a distant cliff...’ (7:3:9)

- (91) kaŋkapi waha-ina-u yatsu-mi-na ikama yawaã
Kaŋkapi+VOC call-PL:IMPFV-REL brother:PERT-2SG-ACC jaguar

yu-a-wa-i waha-ina-u
eat-IMPFV-3-DECL call-PL:IMPFV-REL

‘‘Kagkap!’’ they were calling, ‘‘a jaguar is eating your brother’’ they were calling.’ (6:4:66)

Other speech verbs are never accompanied directly by a speech report, but may be accompanied by a subordinate clause of the form [speech report say-SBD]; some examples of verbs that can take such subordinate clause complements are:

A speech report is not obligatory with *tu* ‘say’, which unlike other verbs is of indeterminate underlying transitivity (§11.4.3.3). *waha* ‘stand’ / ‘call’ is only interpreted as a speech verb when a speech report is present.

So speech reports are structurally a kind of object, but clearly have a rather special syntactic status.

12.5.3 Speech report marker *tus*

tu-sã (say-SBD+3:SS) is often used as a kind of reporting marker, directly following the speech report and then followed by another speech verb. In this context, it generally appears in the phonologically reduced form *tus* – this reduction does not follow the usual rule of apocope, as the underlying form has only two syllables. The examples in §12.5.1.4 above showed this use of *tus*; in the following example, the verb *tu* ‘say’ itself is the speech verb:

(96) ayú tus tímatãĩ

[ayú tu-sã] ti-matãĩ
 [ok say-SBD:3:SS] say+LOAF:SEQ-1/3:DS

‘when (the child) said “ok”...’ (lit. *when (the child) said, saying “ok”*) (6:1:46)

It looks as if *tus* is heading towards grammaticalisation as a speech report marker, whereby such constructions as (97) will become general.

(97) [speech report *tus*] speech verb

The phonological reduction of *tusã* > *tus* suggests that it normally follows the speech report closely enough that it is treated as part of the same phonological word; as a result, it is subject to apocope. In practice, however, there can be a clear intonational break between a speech report and *tus*.

At most, this is a grammaticalisation-in-progress: *tus* is still transparently a subordinated form of *tu* ‘say’. This is clear from the fact that it is marked for person and number of the subject. In addition, a construction with a speech report followed by *tus* does not **require** any other speech verb, indicating that *tus* is considered a full speech verb rather than a grammatical morpheme.

B: Expressing non-vocal thoughts

In addition to reporting speech, the speech report construction has been generalised to cover non-verbal **vocalisations** and extended to express **thoughts** and **intentions**. This is analogous to the use of the Quechua verb *ni-* ‘say’, as reported by Adelaar (1990):

“[T]he meaning of *ni-* to a large extent extends beyond that of a verb of communication. And...the verb *ni-* demands a message complement in directly quoted speech... The above combination of facts compels speakers to use quotations in sentences which do not refer to actual speaking in order to render the content of a mental activity.” Adelaar (1990:4-5)

12.5.4.2 Vocalisations

Speech reports are used to represent non-verbal vocalisations, whether human (100) or non-human (101). For animal vocalisations the verb *waha* ‘stand/call’, is used. The same verb used with a verbal speech report indicates shouting (cf. 91).

(100) buu buuta-kawã sih tu-sã
REDUP cry+IMPFV-REPET+3:SS boohoo say-SBD+3:SS
‘Crying and crying, going “boohoo”.’ (7:6:108)

(101) ikama_yawaã tru tru tru waha-a-u
jaguar ONOM call-IMPFV-REL
‘The jaguar was going “roar roar roar!”.’ (6:4:157)

Onomatopoeic representations of non-vocal sounds can appear with verbs describing their production in a construction similar to speech reporting (102), as can sound-symbolic words (103); however these forms are never accompanied by speech verbs, and are syntactically manner adverbs rather than verbal arguments.

(102) tu tu awatu-taĩ
ONOM ONOM hit-SBD:1/3:DS
‘When he hit it: “tap! tap!”...’ (6:2:39)

(103) pakit anuhũ-kã
SYM stick.on-INTS:SEQ+3:SS
‘Having stuck it on with a slap...’ (6:2:33)

12.5.4.3 Thought and Intention

Some examples of speech report constructions are ambiguous as to whether the author of the speech report actually spoke aloud. Example (104) comes from a story about a woman who goes out alone to look for fruit and gets lost. As she was alone, it is unlikely that the words couched as a quote were actually spoken aloud.

- (104) *hiina-kĩ* *wi-u-ai* *wiɯɯa* *wi-a-kawã*
 go.out-TRF:SEQ+3:SS go:PFV-REL-COP:3:DECL REDUP go-IMPV-REPET+3:SS
- tupika-kĩ-ta-ha-i* *tu-sã* *tupika-kĩ* *wiɯɯa*
 run-TRF-IFUT-1SG-DECL say-SBD+3:SS run-TRF:SEQ+3:SS REDUP
- wi-a-kawã* *hĩɯɯa-u-ai* *mantʃumutʃi*
 go-IMPV-REPET+3:SS arrive:PFV-REL-COP:3:DECL *Manchumuch*
- puha-mau-numa*
 live+IMPV-NON.A/S:REL-LOC

‘Having gone out she kept going, saying “I will run”, and she went on running and arrived at the place where *Manchumuch* (a mythical cannibal) lives.’ (6:1:3)

Other cases more clearly involve thought rather than actual spoken words. Example (105) comes from a story in which a man camping out in a hut hears a puma growling outside and wonders what the noise is.

- (105) *wahĩ* *tuhã-ʃa* *wahĩ* *ta-wa* *tu-sã* [*anintaima*
 what BUT-ADD what say+IMPV-3 say-SBD+3:SS [think
- puha-ĩ*]
 live+IMPV:1SG/3-DS]

‘as he was thinking “what said that?”...’ (lit. *as he was thinking, saying “what said that?”*) (7:3:22)

The same construction is used to express **intention** in (106):¹²⁸

- (106) [*yu-a-ta-ha* *ta-ma*] *nuni* *ayamhu-ma-kã*
 [eat-HIAF-IFUT-1SG:EXCL say+IMPV-NON.A/S>A/S] thus defend-REFL-INTS:SEQ+3:SS
- ‘when (the puma) tried to eat him, having defended himself like that...’ Lit: *when (the puma) said “I will eat him!”*... (7:3:45)

In (53) a speech report expresses **reason**:

¹²⁸ This type of construction is the historical source of the desiderative suffix *-tata* (§8.3.5.6).

(107) aima-a-kū imamkima-sā inta-ha-i-ha tu-sā
 fill-IMPV-SIM+3:SS be.careful-SBD+3:SS break-PLU-APPR -1SG say-SBD+3:SS

‘Filling it carefully, lest he should break it (lit. *saying* “*may I not break it*”).’ (7:6:55)

Example (108) expresses **cause**; it refers to a cow that was mooing as we passed it in a canoe:

(108) buuta-wa-i simonka wi-a-wa-i tu-sā
 cry+IMPV-3-DECL Simon go-IMPV-3-DECL say-SBD+3:SS

‘It’s crying because Simon’s going’ Lit: ...*saying* “*Simon’s going*” (Obs)

This example is grammatically parallel to example (100) above, in which the same verb *buutu* ‘cry’ appears, and a vocalisation is clearly indicated.

Example (109) is similarly ambiguous: it is apparently a **purpose** clause and a direct speech report at the same time:

(109) nuwa-na yumi fiki-ki-ta tu-sā awima-ma
 woman-ACC water draw-TRF-IMP say-SBD+3:SS send:PFV-NON.A/S>A/S

‘when they sent a woman to draw water...’ Lit: ...*saying* “*draw some water*” (6:3:25)

Larson (1978: 93) contrasts the following examples of **reason** (a) and **purpose** (b) (the glosses in both examples are mine):

(110) a. *wétajai* “*pjustí*” *táu ásan*

wi-tata-ha-i puhu-sa-ti ta-u asa-nu
 go:PFV-FUT-1SG-DECL stay-ATT-JUSS say+IMPV-REL COP:SBD/SEQ-1SG:SS

‘I will go because I want him to stay.’

b. *wétajai* “*pjustí*” *túsan*

wi-tata-ha-i puhu-sa-ti tu-sa-nu
 go:PFV-FUT-1SG-DECL stay-ATT-JUSS say-SBD-1SG:SS

‘I will go in order that he stay.’

I mentioned above that the form *tus* appears to be developing into a speech report marker. In these examples of speech reports as complement clauses, we see a further development of *tus* into a complementiser. This is not unexpected: Lord (1993) describes such a grammaticalisation path in African languages, and Heine & Kuteva (2002: 261ff) give examples of ‘say’ verbs developing into cause and purpose markers and complementisers.

Similar grammaticalisation of speech report constructions has very likely led to many verbal suffixes expressing futurity, desire and intention, that appear to have developed from forms of *tu* ‘say’ – see discussion in §8.1.

12.6 Complementation

Complementation is the embedding of an entire clause as a core argument of a matrix clause (Dixon 2006). In Aguaruna there is no one construction that can be termed complementation, as all of the clause types used as complement clauses also have other functions. Complement clauses with the same subject as the matrix clause take the following forms:

1. Nominalised or relativised clause
2. Subordinate intentional clause

Where the subject of the complement clause is different from that of the matrix verb, different constructions are used:

3. Speech report
4. Embedded question
5. Apposition(?)

The type of complement clause selected depends upon the semantics of the matrix verb. The complementation strategies are described below; the fifth strategy is marginal, hence the question mark. The following table lists the main complement taking verbs and the strategies employed for SS and DS complement clauses.

VERB	GLOSS	COMPLEMENT CLAUSE TYPE	
		SS	DS
wakiŋa	‘want’	intentional clause	speech report
dakitu	‘refuse’	- <i>ta</i> nominalisation	apposition
waina	‘see’	–	relative clause; apposition
antu	‘hear’	–	relative clause
dika	‘know’	–	relative clause; indirect question
dikapi	‘feel’	relative clause	–
naŋkama(na)	‘begin’	- <i>ta</i> nominalisation; relative clause	–
umi	‘complete’	- <i>ta</i> nominalisation	–

Table 12.6: Complement-taking verbs and their complement clause types

Apposition can be considered a strategy to cover DS complementation with some verbs. For example, *dakitu* ‘refuse’ cannot take a dependent DS complement, so a construction such as the following must be used:

- (111) [wi-ka uma-hu-na-ka awima-tʃa-tata-ha-i]
 [1SG-FOC sibling-1SG-ACC-FOC send:PFV-NEG-FUT-1SG-DECL]
- [dakita-a-ha-i]
 [refuse-IMPV-1SG-DECL]
- ‘I will not send my sister away; I refuse to do it’ (8:1:36)

It seems to be stretching the point to call this a complement clause (*I refuse to send my sister away*): there are two apposed independent clauses. But note that the second clause *I refuse* is incomplete without the first. And compare example (135) below, where an apposed finite clause is clearly functioning as the complement of the verb *waina* ‘see’.

The conclusion to be drawn here is that the distinction between complementation and other types of clause-combining is not always clear-cut syntactically, and this can be ultimately ascribed to the lack of specific complementation constructions in Aguaruna.

Note that although almost all attested examples of complement clauses are in O function, this is not a grammatical requirement. Example (43) in Chapter 10 shows a complement clause formed with the action nominaliser *-ta* in A function, and example (133) below shows an embedded question complement clause in S function.

12.6.1 Same-subject complement clauses

12.6.1.1 Action nominaliser *-ta*

A verb nominalised with the action nominaliser *-ta* can fill the same types of functions as any noun, including subject and object roles. When a nominalisation is object of a complement-taking verb, as in (112), it functions as a complement clause.

- (112) *dakita-a-u* [*apa-hĩ-haĩ* *wi-ta-na*]
refuse-IMPV-REL [father-PERT:1PL/3-COMIT go-ACTNR-ACC]
'he refused to go with his father' (6:5:12)

- (113) *naŋkama-a-u-ai* [*anintaĩ* *tsupi-hu-ta-na*]
begin-IMPV-REL-COP:3:DECL [heart cut-APPLIC-ACTNR-ACC]
'he began to cut (the boa's) heart' (3:1:107)

The use of *-ta* in discourse is rather rare, the most common *-ta* complement-taking verbs are the two illustrated: *dakitu* 'refuse' and *naŋkama* 'begin'. The less common verb *umi* 'complete (a task)' also takes a *-ta* nominalisation:

- (114) [*taka-ta-na*] *umi-ka-ha-i*
[work-ACTNR-ACC] complete-INTS-1SG-DECL
'I've completed my work'

For other uses of *-ta* nominalisations, see §10.4.1.

12.6.1.2 Relativisations

Relative clause complements are formed with the non-subject relativiser *-mau*, which functions as an action nominaliser. In the following example, the Marañón river is the subject of the verb 'begin', and the relativised clause is the object, literally '*the Marañón began a flooding*'.

- (115) *naŋkamana-amai* *mahanu* [*amauha-mau-na*]
begin:PFV-DISTPAST:3:DECL *Marañón* [rise+IMPV-NON.A/S:REL-ACC]
'the Marañón began to rise' (2:2:214)

The following example shows a relativised clause complement of *wakiuŋa* 'want'..

- (116) [papi auhu-mau-na-ka] sintʃi wakiʃa-a-u asa-nu
 [book study-NON.A/S:REL-ACC-FOC] strongly want-IMPV-REL COP:SBD/SEQ-1SG:SS
 ‘Because I really wanted to study...’ (2:2:29)

The following example shows “double relativisation”; the verb *tuku* ‘shoot’ is relativised with *-mau*, functioning as an action nominalisation, and this form is then relativised with the encliticised relativiser construction as a focussing strategy:

- (117) nanʃkama-a-u-ai [[piʃaka-utʃi a-ina-u-na]
 begin-HIAF-REL-COP:3:DECL [[bird-DIM COP-PL:IMPV-REL-ACC]
 tuku-a-mau-a = nu-na]
 shoot-HIAF-NON.A/S:REL-COP:3=ANARel-ACC]
 ‘he began to shoot small birds’ Lit: *he began [that which is the shooting of small birds]*
 (4:3:63)

The verb *d#kapɨ* ‘feel’ is a copula, taking two nominative case-marked arguments. In the following example, the copula complement clause is functioning as a complementation strategy:

- (118) [aʃi aintsu a-ina-u] [ikama_yawaã-na-ka kakahus
 [all person COP-PL:IMPV-REL]_{CS} [jaguar-ACC-FOC easily
 maani-mai-inu-tʃau] dikapi-ina-u
 fight-POT-NR-NEG:REL]_{CC} feel-PL:IMPV-REL
 ‘all the people felt (that they were) unable to fight a jaguar’ (6:4:5)

12.6.1.3 Subordinate intentional clauses

The intentional subordinating suffix is used to form complements of verbs of **wanting** and **intention**.

- (119) [yu-a-tasa-nu] wakiʃa-a-ha-i
 [eat-HIAF-INTENT-1SG] want-IMPV-1SG-DECL
 ‘I want to eat’

This is structurally identical to a purpose clause (cf. Dixon 2006: 39).

Purpose can also be encoded using a simultaneous temporal subordinate clause marked with the suffix *-ku*:

- (120) *wi-tata-ha-i* [*mi-na aha-hu-ĩ-ka taka-a-ku-nu*]
 go:PFV-FUT-1SG-DECL [1SG-ACC garden-PERT:1SG-LOC-FOC work-IMPV-SIM-1SG:SS]
 ‘I will go to work in my garden’

The example translates literally as *I will go, working in my garden*. This construction provides a useful test for distinguishing complement clauses from purpose clauses: although both types can be encoded with the intentional suffix, only the purpose clause can be encoded using a *-ku* subordinate clause.

12.6.1.4 Rhetorical question embedded in speech report

Rhetorical questions have a variety of uses; in the following example, a rhetorical question couched as a speech report functions as the complement of the verb *wakiya* ‘want’.

- (121) [*wi-ƒa wahuka-nu-ki unuima-ha-nu aankan ƒitƒa-a-u*
 [1SG-UNCERT how-1SG-FOC:INT learn-PLU:SEQ-1SG:SS thus speak-IMPV-REL
 a-ha tu-sa-nu] *sintƒi wakiya-ia-ha-i*
 COP-1SG say-SBD-1SG:SS] strongly want-REMPAST-1SG-DECL

‘I really wanted to learn to speak like that (i.e. in Spanish)’ lit. *I wanted saying “how will I speak like that, having learned (it)?”* (2:2:15)

12.6.2 Different-subject complement clauses

12.6.2.1 Speech report

Where the subject of the main clause is different, a speech report construction is used for the complement clause of *wakiya* ‘want’. In the following example, the speech report construction itself forms a subordinate clause dependent on the verb *wakiya* ‘want’.

- (122) [*nĩ yu-a-ti tu-sa-nu wakiya-a-ha-i*
 [3SG eat-HIAF-JUSS say-SBD-1SG:SS] want-IMPV-1SG-DECL
 ‘I want him to eat’ (lit. *I want, saying “let him eat”*)

Note in the following example that the matrix verb *wakiya* ‘want’ is marked with applicative and first person singular object.

(123) dita a-ina-u wakiŋa-hu-tu-ina-wa-i
 3PL COP-PL:IMPFV-REL want-APPLIC-1SG.OBJ-PL:IMPFV-3-DECL

[apu a-ti tu-sã]
 [chief COP-JUSS say-SBD+3:SS]

‘they all want me to be chief’ lit. *they want (for my benefit) saying “let him be chief”*

12.6.2.2 Relative clause

For the verbs *waina* ‘see’ and *antu* ‘hear’, a relative clause may be used. This blurs with genuine relativisation (cf. Dixon 2006).

(124) [utʃi-hu-mi mina-u-na] waina-ka-ma-ha-i
 [child-PERT-2 arrive+IMPFV-REL-ACC]_{NP} see-INTS-RECPAST-1SG-DECL

‘I saw your child coming’ OR ‘I saw your child, who was coming’

But complement clauses are more typically expressed with a non-subject relativisation, marked with *-mau*.

(125) [mina-kũ kanta-a-mau-na] antu-ka-ma-ha-i
 [arrive+IMPFV-SIM+3:SS sing-IMPFV-NON.A/S:REL-ACC] hear-INTS-RECPAST-1SG-DECL

‘I heard him singing as he came’

(126) [ami taka-a-mau-na-ka] wi waina-ka-ma-hamĩ-i
 [2SG work-IMPFV-NON.A/S:REL-ACC-FOC] 1SG see-INTS-RECPAST-1SG>2SG.OBJ-DECL

‘I saw you working’

The controlling verb in (126) is marked for second-person object, making this look like a relative clause construction: *I saw you who were working* – compare example (123) above, where the main verb must take applicative marking to license an extra object, showing that the complement clause must be functioning as an object. If this were true relativisation, however, the subject relativiser would be used, as the subject of the relativised verb is the common argument. Instead, the relativiser is functioning as an action nominaliser. Compare a true (headless) object relativisation:

(127) [ami nahana-mau-na-ka] waina-ka-tʃa-ma-ha-i
 [2SG make:PFV-NON.A/S:REL-ACC-FOC]_{NP} see-INTS-NEG-RECPAST-1SG-DECL

‘I didn’t see what you made’

In this example the object of the relativised verb is the common argument.

A non-subject relativisation can also function as complement of *dika* ‘know’, as in the following example. Note that this example could be parsed as relativisation (*I know myself who was seen by you*), as the common argument of the relative clause (first person singular) is also marked as (reflexive) object on the verb of the matrix clause, but it is better analysed as complementation, with the reflexive marking representing the object-raising described in §12.5.1.2.

- (128) *dika-a-ma-ha-i* [*ami wai-tu-ka-mau-na-ka*]
 know-IMPV-REFL-1SG-DECL [2SG see-1SG.OBJ-INTS-NON.A/S:REL-ACC-FOC]
 ‘I know you saw me’

In the following example, a participant nominalisation is the object of *waina* ‘see’:

- (129) [*duʃiki-mai-inu-na*] *waina-ka-u-ai*
 [laugh.at-POT-NR-ACC] see-INTS-REL-COP:3:DECL
 ‘he saw that it was funny’ Lit: *he saw the one that was able to be laughed at* (7:1:20)

This is similar to the subject relativisations exemplified above, as the distinction between a nominalisation functioning as a complement clause and one functioning as a nominal argument, as in the following example, is not clear cut:

- (130) [*maani-inu-na*] *waina-ka-ma-ha-i*
 [fight-NR-ACC] see-INTS-RECPAST-1SG-DECL
 ‘I saw a warrior’

12.6.2.3 Embedded questions

The verb *dika* ‘know’ takes a DS complement clause formed with an embedded question. The question takes the same form as it would if it were direct: there is no overt mood marking on the verb, but apocope is suppressed (see §8.7.3 for morphological details).

- (131) *wi-ka iki dika-a-tsu-ha-i* [*wahī a-wa*]
 1SG-FOC not.yet know-IMPV-NEG-1SG-DECL [what exist-3]
 ‘I don’t know yet what there is (for dinner)’ (Obs)

- (132) *dika-a-ha-i* [*ya puha-wa*]
 know-IMPV-1SG-DECL [who live+IMPV-3]
 ‘I know who is there’

In the following example the embedded question is an S argument, as the construction takes advantage of the S=O ambitransitivity of all verbs marked with the potential suffix *-mai* (see §7.3.3, §11.4.3.2).

- (133) [tu wakiŋa-a-mi] dika-mai-tsu-u-i
 [which want-IMPV-2] know-POT-NEG-3-DECL
 ‘(I) can’t know which one you want’ Lit. *which (one) you want is unknowable*

In the following example, the indirect question is a complement to a complex predicate consisting of the adverb *diik* ‘watching’ and the auxiliary verb *tɪpi* ‘lie down’:

- (134) wi iwa-sa-nu diik tɪpi-sa-ta-ha-i
 1SG be.awake-SBD-1SG:SS watching lie.down-ATT-IFUT-1SG-DECL
 [wahĩ-ki aika-hama-a-wa]
 [what-FOC:INT do-2.OBJ-IMPV-3]
 ‘I’ll lie awake, watching what is doing this to you’ (6:2:5)

The examples illustrate that the same construction can be used for subject or object complement clauses, and with both positive and negative polarities of the matrix verb. All interrogative words can take part in such constructions. Heine & Kuteva (2002) note that this is an expected grammaticalisation path for question words:

‘Questions provide a not uncommon structural template to develop noninterrogative grammatical markers.’ (Heine & Kuteva 2002: 250)

12.6.2.4 Apposition

Complementation can be achieved by apposition of clauses, as in the following example:

- (135) [waina-ka-u-ai] [kanu hapi-ki-mau-a=iman
 [see-INTS-REL-COP:3:DECL] [canoe drag-TRF-NON.A/S.REL-COP=INTENS.NR_{Rel}
 taha-a-kũ akai-ki-u-ai]
 clear-IMPV-SIM:3:SS come.down-TRF-REL-COP:3:DECL]
 ‘he saw (that) something as big as a canoe being dragged had come down clearing (a path through the undergrowth)’ (Text 1:5-6)

There is no overt object of the verb ‘see’, but the apposed finite clause describes what was seen, and thus functions as a complement clause. The meaning of the verb would be incomplete without the apposed clause. See also example (111) above.

12.6.3 Other uses of complement clause constructions

All of the constructions illustrated above as complement clauses are also used in other functions. Because there is no simple ‘complementation’ construction, nor any construction with complementation as its sole function, these forms can be described as **complementation strategies**, that is, appropriation of various clause combining and subordinating constructions in complementation function, due to the absence of any dedicated complementation device in the grammar (cf. Dixon 1995, 2006).

Chapter 13: Discourse Organisation

13.1 Introduction

In this chapter I will discuss some pragmatic properties of narrative structure. I first consider the properties of grammatical units greater than the sentence, then describe participant tracking, focus and constituent ordering. Finally I briefly address source of information marking.

A major aspect of contemporary Aguaruna discourse that lies outside the scope of this grammar is code-switching and calquing from Spanish. Bilingual schools have been in operation among the Aguaruna since the mid 1950's, and it is estimated that only 35% of the population is monolingual (Wise 1999: 309). §2.9 discusses some effects of Spanish on the Aguaruna phonological system, and §3.12 mentions some nativisation strategies in borrowed words. A detailed study of the effects of language contact with Spanish could itself fill a thesis, and is a major lacuna in our knowledge of contemporary Aguaruna that future research should address.

13.2 Suprasentential constituents

The sentence in Aguaruna consists minimally of finite predicate. However, the majority of sentences in a discourse are considerably longer than this, due to the highly hypotactic nature of the grammar. We have already seen (§11.2.4) that the concept of sentence is a difficult one for Aguaruna, and perhaps not a relevant one. In particular, bridging constructions can be used to link finite clauses into one sentence, or solely for narrative continuity between separate sentences.

13.2.1 Paragraph

The paragraph as a discourse unit is composed of one or more sentences. The relation between the participants in a paragraph is not one of grammatical relations, that is, arguments of a verb, nor of logical relations, that is, interclausal relations. Rather, the relations exist purely at the level of the discourse, tying together events and concepts more loosely than syntactic relations do.

There are two major diagnostics that alert the listener to the presence of paragraphs in extended narrative: intonation and bridging constructions. The two phenomena are not independent of each other.

A paragraph forms an intonational unit. It typically ends with a falling pitch on the last word, and is followed by a pause. A following paragraph then begins with a high pitch falling over the first word to the regular unmarked pitch.

A discourse-initial paragraph will begin by introducing participants. The first word of following paragraphs is typically a bridging verb. This is the word that receives the marked paragraph-initial intonation mentioned above. In traditional stories, another lexical cue is the frequent use of the narrative modality marker *tuwahamĩ* to end paragraphs.

Below are the first two paragraphs of the story of *Mánchumuch*, the cannibal (the vertical line | marks a sentence break, and the pilcrow symbol ¶ marks a paragraph break):

- (1) [nuwa makitʃiki naŋkai-na usupa-hã] hiini-ki-u tuwahamĩ
 [woman one fruit-ACC crave-PLU:SEQ+3:SS] go.out-TRF-REL NARR ¶
 [nuni-kã] [hiini-kĩ] wi-u-ai
 [do-INTS:SEQ+3:SS] BRIDGE [go.out-TRF:SEQ+3:SS] go:PFV-REL-COP:3:DECL |
 [wiŋa wi-a-kawã] [tupika-ki-ta-ha-i tu-sã]
 [REDUP go-IMPV-REP+3:SS] [run-TRF-IFUT-1SG-DECL say-SBD+3:SS]
 tupika-kĩ]
 run-TRF:SEQ+3:SS]
 [wiŋa wi-a-kawã] hiŋa-a-u-ai mantʃumutʃi
 [REDUP go-IMPV-REP+3:SS] arrive-HIAF-REL-COP:3:DECL *Manchumuch*
 puha-mau-numa
 live+IMPV-NON.A/S:REL-LOC ¶

Below is a fairly literal translation, retaining the sentence and paragraph markers:

‘a woman, having craved fruit, went out they said ¶

having done that, having gone out she went |

going and going, saying “I will run”, having run, going and going, she arrived at the place where *Manchumuch* lives ¶ (6:1:1)

The first paragraph consists of just one sentence, and ends with the narrative modality marker *tuwahamĩ*. The next paragraph begins with bridging verb *nuni-kã* (do.that-

the core participants. In this way, participant tracking strategies of one kind or another pervade even the loosest paratactic clause-combining constructions.

The table below summarises the constructions that have been described in previous chapters:

STRATEGY	DESCRIBED IN
Canonical switch-reference (SS/DS marking)	§9.4
Non-canonical switch-reference (A/S>O; non.A/S>A/S)	§9.5
Relativisation	§10.3
Bridging constructions	§12.4
Pro-verb selection	§3.11.1.2

Table 13.1: Participant-tracking strategies

Canonical switch-reference indicates whether the subject of a subordinate clause is the same as or different from that of the controlling clause. This marking is obligatory in all subordinate clauses.

Non-canonical switch-reference goes a step further, in that it conveys information about the role of a common argument in both clauses. This marking appears only in two types of subordinate clause, and is typologically unusual, although common in Panoan languages (Loos 1999).

The use of relativised clauses is a common and highly effective participant tracking strategy: the choice of relativiser indicates the grammatical role of the shared argument in the relative clause, and NP case-marking indicates its role in the matrix clause. As discussed in §9.5, a relativisation construction is probably the ultimate origin of the two non-canonical switch-reference marking subordinators.

The final strategy is bridging constructions. These are a very distinctive feature of Aguaruna narratives and serve to illustrate the pervasive nature of participant tracking strategies. Bridging constructions typically follow finite clauses in narratives, and are formally subordinate to the following clause. Two important aspects of bridging constructions deserve a fuller treatment:

1. Switch-reference marking is obligatory in subordinate clauses, but not in finite clauses. A bridging construction links two finite clauses, and involves “summing up” the action of the first clause with a pro-verb that is formally subordinate to the second. Because it

is subordinate, the bridging pro-verb marks switch-reference and temporal/causal relations between the two clauses, thus functionally simulating the switch-reference marking involved in subordination. This phenomenon serves to demonstrate just how important participant tracking is to Aguaruna speakers; in narratives, typically almost every finite clause is followed by a bridging pro-verb, so that although participant tracking markers are formally restricted to subordinate verbs, in practice they appear on every clause.

2. Following from point (1) is the question of sentence/paragraph constituency. An intuitively appealing *a priori* definition of a sentence is that it consists of a single finite clause and any subordinate clauses, or (rarely) two or more finite clauses linked by a conjunction. Now, there are clear examples in which two clauses joined by a bridging construction comprise a single sentence – the bridging construction functions as a conjunction. The question then is: how to determine which bridging constructions form sentences and which do not? Clearly some do not, otherwise a typical narrative would consist of only a few or even just one sentence.

The choice of pro-verb in a bridging construction is an important cue to anticipated discourse prominence of one of the participants. As described in §3.11.1.2, pro-verbs are formed with one of two verbalisers: *-ni* or *-ti(ka)*, of which the former indicates subject prominence and the latter object prominence.

Definite participants are typically ellipted, and tracked only through verbal marking. When there is a change in the core participants, the new NP taking the subject or object role may be overtly stated, either with a pronoun or full NP. A continued subject is typically restated with a focus-marked third person singular pronoun *nĩ-ka* (3SG-FOC).

Full NP arguments are associated with the pragmatic function of introducing participants, where they may be accompanied by the numeral *makitʃiki* ‘one’ functioning as an indefinite article. They are also used to reintroduce participants as subjects or objects where they did not have that role in the preceding clause.

The use of overt NPs in participant tracking of course relates to focus marking; I have already mentioned that a pronominal continued subject typically takes the focus suffix *-ka*. Below we shall see how focus marking correlates with constituent order.

13.4 Focus

Narrative is driven by events and actions, and various techniques are used to bring events, actions and states represented by predicates to the foreground or background. The past tense system reflects this, as shown in §8.3.4, as past tenses can be arranged in terms of distance from the present, but the choice of tense also functions to foreground or background the events or states represented. Reported speech was shown in §12.5 to have a number of important functions beyond quoting, and reported speech may be used to highlight important events in a narrative (Larson 1978). Such techniques help to drive the narrative and ensure that the audience/addressee is able to keep track of the main narrative line, and they interact with the participant tracking strategies already described.

In the following sections I will consider specific strategies for foregrounding a particular participant of a clause, beyond the marking of grammatical role. There are two general techniques: focus is marked on NPs and topicality is signalled by constituent ordering (§13.5). Focus marking plays an important role in discourse by bringing the addressee's attention to information that is not obvious from context. There are two morphological strategies for focussing an NP:

1. Focus suffix *-ka*
2. Relativised copula construction

13.4.1 Focus with *-ka*

The focus suffix can be attached to any pronoun or nominal to focus it. Focus marking is used in the following contexts:

- A. Reintroducing participants
- B. Contrasting NPs
- C. In parenthetical clauses
- D. In negated clauses

The four contexts are described in the following sections.

A. Reintroducing participants

When major participants in a narrative are reintroduced as core arguments, they are typically restated as full NPs and given focus marking, as in the following example. The boa and its victim, the man, are the main characters of the story, but the preceding context

had another man as subject, who found the boa wrapped around the dead man and killed it. Now both the boa and the first man are reintroduced as subject and object respectively:

- (4) [[nu-ka paŋkĩ-**ka**] kuwiŋkaha ati-hã]
 [[ANA-FOC boa-**FOC**] SYM unwrap-PLU:SEQ+3:SS]
- [aintsu-na-**ka** ŋita-kĩ] ahapa-a-u-ai
 [person-ACC-**FOC** push-TRF:SEQ+3:SS] throw.out-HIAF-REL-COP:3:DECL

‘(when the boa was killed), that boa unwrapped the person “kuwiŋkaha!”, pushed him out and discarded him.’ (Text 1:33)

This function of focus marking clearly ties in with participant tracking, and the same focus is used to restate a continued subject, typically using a pronoun: *nĩ-ka* (3SG-FOC).

B. Contrasting NPs

Contrast is indicated with counter-presuppositional focus. In the following example, each of the two contrasted NPs is focus-marked:

- (5) [tikitʃi-**ka** nuwina-sã batsata-ina-ĩ]
 [other-**FOC** marry-ATT:SEQ+3:SS live:PL-PL:IMPFV:3-DS]
- [nu-**ka** nuwina-tʃau-utʃi a-haku-i]
 [ANA-**FOC** marry-NEG:REL-DIM COP-NARRNR-COP:3:DECL]

‘while the others were married, that guy remained unmarried’ (6:9:2)

This is a basic function of focus marking, as contrast always involves countering a supposition that the addressee is assumed to hold.

C. In parenthetical clauses

Narratives often contain asides in which the narrator explains some point that may be misunderstood. This clearly fits with the function of focus marking, as the narrator assumes that the audience is unaware of the information being presented, and may even hold a contrary presupposition.

The following example appears in a traditional story; the narrator felt the need to explain the archaism *tsampaunumi* ‘manioc leaves’. The subject *muunta* ‘adult’ takes the focus marker.

- (6) [nu-na tsanimpa-na dukĩ-na] tsampaunumi
 [ANA-ACC manioc.plant-ACC leaf:PERT:1PL/3-ACC] tsampaunumi

muunta-ka tu a-haku a-ina-wa-i
 adult-FOC say COP-NARRNR COP-PL:IMPFV-3-DECL

‘the elders used to call those manioc leaves “*tsampaunumi*”’ (6:2:22)

The following example is elaborating on the particular type of boa that is eating the man in an appositional equative clause; the subject again takes focus marking.

- (7) [nu-ka] [ʃukuima akapi-na yu-a = nunu]
 [ANA-FOC]_{CS} [boa.sp liver-ACC eat-IMPFV:3=ANA:REL]_{CC}

‘that was a *shukuim* boa, that eats livers’ (Text 1:13)

D. In negated clauses

Focus marking of at least one constituent is obligatory with negative polarity. In the following example the S argument is marked.

- (8) [mi-na apa-hu-ka] atsa-wa-i
 [1SG-ACC father-1SG-FOC] exist:NEG+IMPFV-3-DECL

‘I have no father’ (2:2:73)

And in the following example (reproduced from §11.4.5, example 70), the O argument is marked:

- (9) [aʃi aĩntsu a-ina-u] [ikam_yawaã-na-ka kakahus
 [all person COP-PL:IMPFV-REL]_{CS} [jaguar-ACC-FOC easily

maani-mai-inu-tʃau] dikapi-ina-u
 fight-POT-NR-NEG:REL]_{CC} feel-PL:IMPFV-REL

‘all the people felt that they were unable to fight a jaguar’ (6:4:5)

Negative always has a counter-suppositional nuance, as it is marked with respect to positive polarity.

13.4.2 Relativised copula

The relativised copula is a second focus construction, typically used for reintroducing major participants in a narrative. In the following example, the subject NP *datsa-utʃi-a=nu* (youth-DIM-COP:3=ANA) could be translated literally as ‘that which is the youth’. There is no grammatical function to the relativisation, as there is no modification involved.

- (10) datsa-utʃi-a = nu [puyathu-sã] [wakiuʃa-hu-sã]
 youth-DIM-COP:3=ANARel [take.interest-SBD+3:SS] [want-APPLIC-SBD+3:SS]

[dii-a-kũ]
 [look-IMPV-SIM+3:SS]

‘that youth, watching with great interest and desire...’ (2:1:5)

In the following example a relativised copula construction also takes the focus marker *-ka*:

- (11) nuwina-mau-a = nu-ka ʃiiha piŋkiha-utʃi
 marry-NON.A/S:NR-COP:3=ANARel-FOC well good-DIM

naŋkaima-ki-u-ai
 pass-TRF-REL-COP:3:DECL

‘that wedding passed very beautifully’ (2:1:16)

The relativised copula construction is rather similar to a cleft, but syntactically different. If (11) were a true cleft construction one would expect something that could be translated literally as: *it was the wedding [that passed very beautifully]*. In the Aguaruna construction, however, a literal translation would be *[(that) which is the wedding] passed very beautifully*. The use of a copula construction is a feature in common with clefts, but the “wrong half” of the clause is relativised.

13.5 Constituent order

Basic constituent order is predicate final; this is obligatory in subordinate clauses and the unmarked ordering in finite clauses. There is however considerable scope for variation.

Only a few constructions require a fixed constituent order – they are listed below:

1. Temporal/causal subordinate clause > subsequent action (dependent or independent clause) (§12.2.2)
2. Full verb > auxiliary verb (§6.4)
3. Genitive-marked possessor NP > possessum (no intervening material) (§5.5)

In any other construction, constituent ordering follows the tendencies described below.

In keeping with the verb-final preference, a main clause is normally the last in a clause-chain; departures from this tendency are restricted to a few semantic linking types (see Chapter 12).

In terms of narrative structure, foregrounding of the main line of the narrative is achieved through the choice of past tense markers. Likewise, non-event-line clauses are backgrounded by using the appropriate tense markers. With respect to constituents, at least the following three principles interact:

1. OV order is the default
2. Clause-initial topic position
3. Postverbal position – old information

So the following is the canonical clause framework:

[TOPIC/SUBJECT] [O] V [OLD INFORMATION] [AFTERTHOUGHT]

The OV ordering is to be expected given the unmarked verb-final tendency. Below I shall describe the tendencies for positioning other constituents.

13.5.1 Positioning of core arguments

The A or S argument normally takes the clause-initial position, giving AOV/SV ordering. Some adverbs, question words, focussed O and pronominal O arguments take clause-initial position. When an overt O argument is neither focussed nor pronominal, there is a strong preference for OV ordering, with no intervening material. Typically an overt full A NP will take postverbal position if the O is initial, and a similar relation holds between E and O arguments: if O is clause-initial, E takes the postverbal position.

When there is an indirect (E) object in addition to O, ordering is typically (A)EOV or (A)OVE – that is, overt O and E arguments do not typically occur in OEV order, as is to be expected given the preference for OV mentioned above. The E then is treated as topical unless it is old information.

A pronominal O argument typically takes the clause-initial topic position. In the following examples, the A arguments are also pronominal and follow the O.

- (12) a. mi-na ami dakuma-hu-ka-ta
 1SG-ACC 2SG imitate-1SG.OBJ-INTS-IMP
 ‘take a photo of me’ (Obs)

- b. nu-na wi-ʃa ta-ha-i
 ANA-ACC 1SG-ADD say+IMPFV-1SG-DECL

‘I also tell that (story)’ (6:2:96)

In the following example, the pronominal determiner of a discontinuous O NP is clause initial, while the head follows the verb, as does the A argument.

- (13) [nu-na] aʃi-ka-u-ai [aintsu-na] [paŋki]
 [ANA-ACC]_O grab-AKT-REL-COP:3:DECL [person-ACC]_O [anaconda]_A

‘the anaconda grabbed that person’ (Text1:9)

13.5.2 Positioning of other constituents

Adverbs and oblique NPs typically take either clause-initial or clause-final position. Phonological weight could play a role, as they are typically multiword constituents.

Discourse particles typically take clause-initial position, and question words take the clause-initial focus position, regardless of the word class.

- (14) a. wahuka yu-taiami
 how eat-NORM
 ‘how does one eat (this)?’

- b. tu wi-a-mi
 where go-IMPFV-2
 ‘where are you going?’

- c. wahĩ-na simoŋka ta-wa
 what-ACC *Simon* say+IMPFV-3
 ‘what is Simon saying?’

This may be a rule rather than a tendency: one native speaker has told me that an example such as (a) cannot be reordered, so ***yutaiami wahuk* is ungrammatical. However note the following example, where the pronominal determiner of a split NP takes clause-initial position:

- (15) nu-ʃa waã-ki muunta-ʃa miŋkai-ka-ĩ
 ANA-UNCERT why-INT:FOC adult-UNCERT disappear-INTS-3:PFV
wahuka-mV-ki tu-sã
how-?-INT:FOC say-SBD:3:SS

‘saying “why did that guy disappear? what can have happened?”...’ (Text 1:17)

Subordinate clauses normally precede the main clause, but this position is not fixed.

There are two principles that govern the positioning of subordinate clauses:

1. Temporal, causal and logical relations – ordering of clauses with respect to these relations is always iconic
2. Phonological weight of the dependent clause – a heavy dependent clause is more likely to follow the main verb

Where these principles do not apply, the general preference is for the controlling verb to be sentence-final.

13.5.3 Word order within constituents

In contrast to the free constituent order, word order within constituents is more predictable. There is, however, some variation possible. Apparently the only constraint is that within a possessive NP, the possessor (marked as genitive) must directly precede the possessum (marked with possessive), with no intervening material.

However, this may not be the case with pronominal possessor:

- (16) ? mi-na atuʃat sai-hu puha-wa-i
 1SG-ACC far brother.in.law-PERT:1SG live+IMPFV-3-DECL
 ‘my brother-in-law lives far away’

This example is grammatical but infelicitous. The more usual ordering would be [*mina sai-hu*] *atuʃat puha-wa-i*, with the NP remaining contiguous.

The genitive form arises ultimately from accusative marking, with phonological attrition of the final /n/. This attrition was made possible by the close phonological bond between the possessor noun and the following possessum, and this is why the genitive-marked possessor must always be in that position.

As noted above, subordinate clauses are always verb-final – but this applies only to morphologically subordinated clauses. The embedded question in the following example (repeated from Chapter 12, example 42) is not verb final:

- (17) utʃi nu-na yu-ã [waŋki kiiwi-ʃa
 child ANA-ACC eat-HIAF:SEQ+3:SS [why centipede-UNCERT
 yu-taĩ-ka-aita ii-ʃa] [nu-i]
 eat-NON.A/S:NR-POLINT-COP 1PL-UNCERT] [ANA-INSTR]_{BRIDGE}
 [ha-ka-u tuwahaĩ]
 [die-INTS-REL NARR]

‘the child having eaten that (centipede), because “are centipedes food we eat?” – because of that (the child) died.’ (6:1:21)

13.6 Source-of-information marking

Aguaruna does not have grammaticalised evidentiality, in that marking of information source is not an obligatory category (Aikhenvald 2004). There are, however, two important strategies that supply such information. The first evidentiality strategy is the distinct narrative modality, used in traditional stories (§8.7.8). Use of narrative modality necessarily implies that the information being related is not firsthand – in fact narrative modality is marked with forms of the verb *tu* ‘say’, conforming to Aikhenvald’s (2004) observation that reported evidentiality may arise from a speech report construction:

“Reported speech and quotations may develop epistemic and other overtones similar to those of reported evidentials” (Aikhenvald 2004: 132)

The second common technique is to use verbs marked with the relativiser *-u* in non-firsthand contexts. This strategy is most noticeable in traditional stories, where the majority of finite verbs are marked with *-u*, and often (perhaps redundantly?) combined with narrative modality.

Note, however, the following example of marking with *-u*, which suggests that the relativised verb may be used to mark more general evidentiality than hearsay. The example comes from a story in which a group of people were forced to flee their home after being attacked, and were hiding out in the forest during the night. One of the refugees hears movement and says:

- (18) [aĩtsu-a = nu-ni-inu] mina-u
 [person-COP:3=ANA_{Rel}-VR-NR] arrive+IMPFV-REL
 ‘something like a person (is) coming’ (8:1:73)

This is clearly not hearsay, rather it appears to be functioning as an inferred or non-visual evidential. Again, this type of evidentiality strategy is attested cross-linguistically:

“Deverbal nominals of all sorts, including deverbal nouns, participles, gerundives, gerunds, converbs, and infinitives, can all acquire evidential overtones” (Aikhenvald 2004: 118)

Aikhenvald does not specifically mention relativised clauses, but the Aguaruna data clearly fit into her typology, which covers any desubordination of a non-finite verb form to mark non-firsthand information source. There is an iconicity to this phenomenon, as the reduction in categories marked on the verb corresponds to a reduced certainty on the part of the speaker. Clearly there is little point for a speaker in marking tense and mood in a clause when they are not even completely certain of the truth of the proposition expressed.

Nominalisations heading complex predicates do not have the same non-firsthand connotation in Aguaruna, unlike the situation described by Aikhenvald (2004: 119) for Tucano. This further supports the view that it is the lack of finite verbal categories that is associated with the non-firsthand overtones of relativised verbs in Aguaruna – complex predicates mark all finite verbal categories on the auxiliary verb.

13.7 Summary

Much work remains to be done in the area of discourse organisation. In particular, the subtle interplay of morphological marking, zero anaphora and constituent ordering in signalling topicality requires further study. And the existence of source-of-information marking is an as-yet unexplored area of Aguaruna grammar. Collection and analysis of conversational data will be an important step in understanding how source-of-information marking works.

Text 1: A man is eaten by a boa

Recorded in Centro Wawik, 5 October 2004. About 3 min 40 sec.

Told by Tito Nanchijam Pegas, age about 50, resident of Nuevo Belén, Wawik River

The following story is a typical “cautionary tale” type traditional story. It tells the story of a man who was out hunting and came across the trail of some large animal, which turned out to be a boa. He followed the trail, and was killed by the boa. The man’s family then went to look for him, found the boa eating his corpse, killed the boa and took the corpse home. A brief moral at the end questions why the man followed the trail without knowing what had made it.

(1)¹²⁹ *ya dúʃakam*

ya nu-ʃakama

ya ANA-ADD

‘ok, this (story) too’

(2) *bákitʃik múun ahakuí*

makitʃiki muunta a-haku-i

one adult exist-NARRPAST-COP:3:DECL

‘There was a man.’

(3)¹³⁰ *núnin wíkáɪuʃak wíuwai kuntínun mantumátatus*

nuni-inu [wíkáɪuʃa-a-kũ wí-u-ai]

do.that-NR [walk-IMPV-SIM+3:SS go:PFV-REL-COP:3:DECL]

[kuntinu-na mantu-ma-a-tatus]

[animal-ACC kill+APPLIC-REFL-HIAF-INTENT:3:SS]

‘That very (man) went walking to kill animals for himself.’

¹²⁹ The first word is the Spanish interjection *ya*.

¹³⁰ The idiom “go walking to kill animals” is the standard way of referring to going hunting.

(4) *núnik wíkái wíkáikawā ítsā akáuḡāi yapáŋkī miníuwai*

nuni-kā [wíkái wíkaiṡa-kawā]
do.that-INTS:SEQ+3:SS [REDUP walk-IMPV-REPET+3:SS]

[ítsā akauṡa-ĩ] [yapahu-kĩ]
[sun set-IMPV:1/3-DS] [be.hungry-TRF:SEQ+3:SS]

mini-u-ai
arriving:PFV-REL-COP:3:DECL

‘Having done that, walking and walking, as the sun was setting he was arriving (home) having got hungry.’

(5) *núnik híŋ taátatus minikmá wainkáuwai*

nuni-kā [híŋ-nĩ ta-a-tatus]
do.that-INTS:SEQ+3:SS [house:PERT:3-LOC come-HIAF-INTENT:3:SS]

[mini-kamā] waina-ka-u-ai
[arrive-TERM+3:SS] see-INTS-REL-COP:3:DECL

‘Having done that, as he arrived wanting to get to his house he saw (that)...’

(6)¹³¹ *kánu hapikbàuwaíman tahák akaikúwai*

[kanu hapi-ki-mau-a = iman]
[canoe pull-TRF-NON.A/S:REL-COP:3=INTENS.NR_{Rel}]

[taha-a-kũ] akai-ki-u-ai
[clear.undergrowth-IMPV-SIM+3:SS] come.down-TRF-REL-COP:3:DECL

‘something as big as a canoe being dragged had come down clearing a path through the undergrowth.’

(7) *núnikmatāi wahĩ húnikĩ tus patáitus diiyák wíuwai*

nuni-ka-matāi [wahĩ huni-ka-ĩ tu-sā]
do.that-INTS-1/3:DS [what do.this-INTS-IPAST:3 say-SBD+3:SS]

[patai-tu-sā] [dii-a-kũ]
[follow-APPLIC-SBD+3:SS] [see-IMPV-SIM+3:SS]

wi-u-ai
go:PFV-REL-COP:3:DECL

‘After it did that, following it, saying “what did this?”, he went watching.’

¹³¹ This is a finite clause, but it functions as a complement clause to the preceding finite verb *wainkauwai* ‘he saw’ – see §12.6.2.4.

- (8) *núnik wíkamã nuwanũĩ páŋkiŋ ímau wĩĩ iikuakĩ yakí wákã ikítun yunúmtukui*

nuni-kã [wi-kamã] nuwanu-ĩ [paŋki-ka]
do.that-INTS:SEQ+3:SS [go-TERM+3:SS] ANA-LOC [boa-FOC]

[ímau wĩ] [iikua-kĩ]
[INTENS.LOC go:PFV:SEQ+3:SS] [come.back-TRF:SEQ+3:SS]

[yaki wa-kã] iki-tu-u-na]
[above go.up-INTS:SEQ+3:SS] sit-APPLIC:PFV-REL-ACC]

yunuma-tu-ka-u-i
approach.below-APPLIC-INTS-REL-COP:3:DECL

‘Having done that, when he went there, (there was) a boa that had gone away, come back and gone up (a tree) and was sitting, and he approached it from below.’

- (9) *núnikmatãĩ núna atŋikuí aintsún páŋki*

nuni-ka-matãĩ nu-na atŋi-ka-u-i
do.that-INTS:SEQ-1/3:DS ANA-ACC grab-INTS-REL-COP:3:DECL

aĩntsu-na paŋki
person-ACC boa

‘When he did that, the boa grabbed that man.’

- (10) *núnik kaŋkaŋnúm náŋkama pipiŋkasuã ihĩã iwakuí buúktŋinum itsapís atúsui*

nuni-kã [kaŋkahi-numa naŋkamã]
do.that-INTS:SEQ+3:SS [lower.leg:PERT:3-LOC begin:PFV:SEQ+3:SS]

[pipiŋkasuã ihĩ-ã]
[SYM wrap.up-HIAF:SEQ+3:SS]

iwa-ka-u-i [buuki-utŋi-numa
CAUS+go.up-INTS-REL-COP:3:DECL [head-DIM-LOC

itsapi-sã] atu-sa-u-i
poke.out-SBD+3:SS] lean.against-ATT-REL-COP:3:DECL

‘Having done that, starting at his lower leg it wrapped him up and worked its way up to his head, so that only a little bit poked out, and it leaned him (up against a tree).’

(11) *dútikā máuwai pimpián pimpián*

dutika-ã ma-a-u-ai
do.that-HIAF:SEQ+3:SS kill-HIAF-REL-COP.3.DECL

[pimpia-hã] [pimpia-hã]
[wrap.up-PLU:SEQ+3:SS] [wrap.up-PLU:SEQ+3:SS]

‘Having done that to him, it killed him by wrapping him up.’

(12) *núnik maã hũĩ akáptfinum tʃĩŋkãĩ*

nuni-kã [maã] [hu-ĩ
do.that-INTS:SEQ+3:SS [kill-HITR:SEQ+3:SS] [PRX-LOC

akapĩ-utʃi-numa tʃĩŋka-ĩ]
liver-DIM-LOC make.hole-LOAF:SEQ+3:SS]

‘Having done that, having killed him, having made a hole in his liver here...’

(13)¹³² *dúka fukúim akapín yùwanunú*

nu-ka [ʃukuima akapĩ-na yu-a = nunu]
ANA-FOC [boa.sp liver-ACC eat-IMPV:3=ANA:REL]

‘that was a *shukuim* boa, that eats livers’

(14) *nunú nũĩ akáptfinum tʃĩŋkãĩ utúk akapnúm utukã akapín yuhák pútut pútut awáhak*

[nunu nu-ĩ akapĩ-utʃi-numa tʃĩŋka-ĩ]
[ANA ANA-LOC liver-DIM-LOC make.hole-LOAF:SEQ+3:SS]

[utu-kã] [akapĩ-numa utu-kã]
[go.in-INTS:SEQ+3:SS] [liver-LOC go.in-INTS:SEQ+3:SS]

[akapĩ-na yu-hu-a-kũ] [putut putut
[liver-ACC eat-APPLIC-IMPV-SIM+3:SS] [SYM SYM

awaha-a-kũ]
CAUS+stand-IMPV-SIM+3:SS]

‘That one there, having made a hole in the liver, having entered into the liver, it was eating his liver, (taking bites) making the sound “putut putut!”...’

¹³² This clause is a parenthetical aside, to explain the fact that the snake went for the dead man’s liver. The narrative is taken up again in the following line.

- (15) *aĩntsuń pĩduáŋ níŋka ímaŋ ũũ wahás buúktĩnum ĩtsapĩs puhús yuu puháya túwahaĩ*

[aĩntsu-na pĩnua-hã] [ní-ka ímaŋ ũũ
[person-ACC wrap.up-PLU:SEQ+3:SS] [3s-FOC INTENS.ADJ smother

waha-sã] [buuki-utĩi-numa ĩtsapi-sã
stand-SBD+3:SS] [head-DIM-LOC poke.out-SBD+3:SS

puhu-sã] yu puhu-a-ia túwahaĩ
live-ATT+3:SS] eat live-IMPV-REMPAST:3 NARR

‘having wrapped up the man, it was completely smothering him up to his head so only a little bit poked out, and it was eating (him).’

- (16) *núnikmatãĩ miŋkaikámãĩ*

nuni-ka-matãĩ [miŋkai-ka-matãĩ]
do.that-INTS:SEQ-1/3:DS [disappear-INTS:SEQ-1/3:DS]

‘When (the boa) did that, when (the man) disappeared...’

- (17) *dúfa wáaŋ muúntaf miŋkaikáĩ wahúkamki tus*

nu-ŋa waã-ki muunta-ŋa miŋkai-ka-ĩ
ANA-UNCERT why-FOC:INT adult-UNCERT disappear-INTS-3:PFV

wahuka-mV-ki tu-sã
how?-FOC:INT say-SBD+3:SS

‘saying “why did that guy disappear? what can have happened?”...’

- (18) *patahĩ áinau afintúk*

pata-hĩ a-ina-u afina-tu-kã
family-PERT:1PL/3 COP-PL:IMPV-REL go:PL-APPLIC-INTS:SEQ+3:SS

‘the man’s family having gone...’

- (19) *wikaitáĩŋ hu wiháma hukĩuqaháma tus*

wikai-tãĩ-ka hu wi-hama hu-ki-a-hama
walk-NON.A/S:NR-FOC PRX go-CNTR.EX PRX-RESTR-COP:3-CNTR.EX

tu-sã
say-SBD+3:SS

‘saying “the path goes here, this is it”...’

(20) *wikaikamã wainkáuwai*

[wikaĩtu-a-kamã] waina-ka-u-ai
[walk-TERM+3:SS] see-INTS-REL-COP:3:DECL

‘upon walking, they saw (the man’s tracks).¹³³’

(21)¹³⁴ *núnik wainák nawín waitúk patáituk iní inímkawã itám núĩ hĩũãũf taáttak tsĩnkĩkĩ
nu akaitúkbaun diís*

nuni-kã [waina-kã] [nawĩ-na
do.that-INTS:SEQ+3:SS [see-INTS:SEQ+3:SS] [foot:PERT:1PL/3-ACC

wai-tu-kã] [patai-tu-kã] [ini
see-APPLIC-INTS:SEQ+3:SS] [follow-APPLIC-INTS:SEQ+3:SS] [REDUP

inima-kawã] [ita-ma] [nu-ĩ
take.with-REPET+3:SS] [CAUS+come-NON.A/S>A/S] [ANA-LOC

hĩũa-utĩ ta-a-tata-kũ] [tsĩnkĩ-kĩ]
house-DIM come-HIAF-FUT-SIM+3:SS] [branch.off-TRF:SEQ+3:SS]

[nu akai-tu-ki-mau-na] [dii-sã]
[ANA go.down-APPLIC-TRF-NON.A/S:REL-ACC] [look-SBD+3:SS]

‘After doing that, after seeing (that), after they saw his foot(prints), after following him, taking (the footprints?) with them, when they brought (them), (the footprints) branched off there, going to the house, as they were looking at the place where the footprints went down that way...’

(22) *hu akáikihama tus*

hu akai-ki-hama tu-sã
PRX go.down-TRF:3-AFFECT say-SBD+3:SS

‘saying “he’s gone down here”...’

¹³³ That the zero-marked object of the verb ‘see’ is ‘the man’s footprints’ is not made clear until the following sentence; without the following clarification, it would be assumed that they saw the man.

¹³⁴ This passage is a little confused; ‘the man’s tracks’ is the object of the verb ‘see’, but then the verbs ‘take with’ and ‘cause to come’ seem as if they should have the man as the object – although they have not seen him yet. Then the idea of ‘branching off for home’ also fits better with a human subject. It seems that ‘footprints’ is being treated like a human subject, and that the verbs ‘take with’ and ‘cause to come’ are being used figuratively, referring to following the tracks. It should be noted that native speakers who helped with transcription and translation also found the wording slightly odd.

(23) *diikmã páŋki fukúim nunú yúwak píduáŋ aintsún puhúhun ihíuqahu*

[dii-kamã] [paŋki fukuima nunu yu-a-kũ]
 [look-TERM+3:SS] [boa boa.sp ANA eat-IMPFV-SIM+3:SS]

[piŋua-hã] [aintsu-na puhu-ha-u-na]
 [wrap.up-PLU+3:SS] [person-ACC live-APPLIC+IMPFV-REL-ACC]

ihíuqa-aŋa-u
 discover:PFV-PL-REL

‘upon looking, they discovered that *shukuim* boa that was there eating, having wrapped up the man.’¹³⁵

(24) *núnik ihíuqã diiyám nunú páŋkĩ húĩ akapnúm utuká akapín yuhák*

nuni-kã [ihíuqã]
 do.that-INTS:SEQ+3:SS [discover:PFV:SEQ+3:SS]

[dii-a-ma] [nunu paŋkĩ hu-ĩ]
 [look-IMPFV-SBD:NON.A/S>A/S] [ANA boa PRX-LOC]

akapi-numa utu-kã [akapi-na]
 liver-LOC enter-INTS:SEQ+3:SS [liver-ACC]

yu-hu-a-kũ]
 eat-APPLIC-IMPFV-SIM+3:SS]

‘Having done that, having discovered (the boa), as they were looking at it, that boa having entered here into the liver, it was eating (the man’s) liver...’

(25) *pútit pútit awáhak*

putit putit awaha-a-kũ
 SYM SYM CAUS+call-IMPFV-SIM+3:SS

‘(taking bites) making the sound “putit putit”...’¹³⁶

¹³⁵ The verb *puhu* ‘live’ appears to be acting as an auxiliary for the preceding two verbs.

¹³⁶ *waha* ‘stand’ / ‘call’ is used with speech reports to represent vocalisations of animals or shouting etc. of humans. The causative form here takes the sound symbolic *putit* as a speech-report-like object, so can be translated as ‘causing the noise *putit* to be produced’.

(26) *panán hiínak ídaim ídaim ídaim aták yǎǎfmatũã yúwak aták hiínak ídaim ídaim ídaim wahá puhutǎĩ*

[panan hiina-a-kũ] [ídaim ídaim ídaim atak
[SYM go.out-IMPV-SIM+3:SS] [SYM SYM SYM again

yauntfma-tu-ã] [yu-a-kũ] [atak
dive.in-APPLIC-HIAF:SEQ+3:SS] [eat-IMPV-SIM:3:SS] [again

hiina-a-kũ] [ídaim ídaim ídaim waha puhu-tǎĩ]
go.out-IMPV-SIM+3:SS] [SYM SYM SYM stop live-SBD:DS]

‘coming out “panan!”, (sticking out its tongue) “ídaim! ídaim! ídaim!” and having dived in (to the corpse) again (it was) eating, then coming out again (sticking out its tongue) as it made the sound “ídaim! ídaim! ídaim!”...’¹³⁷

(27) *diiyá diiyákũã wahúpa asáŋ hínnũã ánik utukǎf tus*

[diiya dii-a-kawã] [wahupa asã-ki
[REDUP look-IMPV-REPET+3:SS] [how.much COP:SBD+3:SS-FOC:INT

hiina-a-wa [ani-kã utu-kã-ǵa]
go.out-IMPV-3 [do.thus-INTS:SEQ+3:SS go.in-INTS:SEQ+3:SS-UNCERT]

tu-sã]
say-SBD+3:SS]

‘(the family members were) looking and looking, saying “after how much time does it come out, after it’s gone in?”...’

(28)¹³⁸ *diiyám dúkap ásã núna akapín yuhák utúk puhutǎĩ*

[dii-a-ma] [dukapi asã] [nu-na
[look-IMPV-NON.A/S>A/S] [enough COP:SBD+3:SS] [ANA-ACC

akapi-na yu-hu-a-kũ] [utu-kã
liver-ACC eat-APPLIC-IMPV-SIM+3:SS] [go.in-INTS:SEQ+3:SS

puhu-tǎĩ]
live-SBD:DS]

‘as they were looking at it, after enough time it had gone in to eat the liver...’

¹³⁷ The sound-symbolic word *ídaim* is related to the verb *ídaima* ‘stick out one’s tongue’ and the noun *ídai* ‘tongue’.

¹³⁸ The word *ásã* was added during transcription.

(29) *ayú tus*

ayu tu-sã

ok say-SBD+3:SS

‘saying “ok”...’

(30) *idaiyás diiyá diiyákũã batšítan šíŋ ítsa ítsakís ututã̃ huwátkiuwai*

[idaiya-sã]

[diiya dii-a-kawã]

[batšita-na

[leave-SBD+3:SS] [REDUP look-IMPV-REPET+3:SS] [machete-ACC

šiiha itsa itsaki-sã] [utu-tã̃]

well REDUP sharpen-SBD+3:SS] [go.in-SBD:DS]

huwa-tu-ki-u-ai

approach-APPLIC-TRF-REL-COP:3:DECL

‘leaving, watching and watching, sharpening a machete well, as (the boa) went in they approached it.’

(31) *núnik huwátkĩ hũqantáuwai*

nuni-kã

[huwa-tu-kĩ]

do.that-INTS:SEQ+3:SS [approach-APPLIC-TRF:SEQ+3:SS]

hũqã̃-tu-a-u-ai

arrive-APPLIC-IMPV-REL-COP:3:DECL

‘Having done that, having approached, they got close.’

(32)¹³⁹ *núnik h̄iuyantún kuntùt̄f̄ihiahúka anánt̄f̄if w̄ĩ iyá puhúttaman bat̄f̄ítai pisút awat̄í
taṅk̄ít tsup̄íkui*

nuni-kā [[h̄iuyã-tu-u-na]
do.that-INTS:SEQ+3:SS [[arrive-APPLIC-REL-ACC]

[kuntu-ut̄fi-hi-a = hu-ka anant̄f̄i-ḡa w̄ĩ
[neck-DIM-PERT:3-COP:3=PRX-FOC thin-ADD go:PFV:SEQ:3:SS

iyã puhu-tatamana] [bat̄f̄ita-i pisut
fall.forward live-A/S>O] [machete-INSTR SYM

awat̄í] taṅk̄ít tsupi-ka-u-i
hit+LOAF:SEQ+3:SS] SYM cut-INTS-REL-COP:3:DECL

‘Having done that, as (the boa’s) thin neck went falling towards the person who was approaching, having hit it “slash!” with the machete, he cut (the hit) “whack!”.’

(33) *dútikam dúka p̄aṅkiṅ kuwiṅkahá atihá āintsnak̄ f̄iták̄i ahápauwai*

dutika-a-ma [nu-ka paṅk̄i-ka kuwiṅkaha
do.that-HIAF-NON.A/S>A/S [ANA-FOC boa-FOC SYM

ati-hã] [āintsu-na-ka f̄ita-k̄i]
unwrap-PLU:SEQ+3:SS] [person-ACC-FOC push-TRF:SEQ+3:SS]

ahapa-a-u-ai
throw.out-HIAF-REL-COP:3:DECL

‘When he had done that (to the boa), that boa unwrapped (the person) “kuwiṅkaha!”, pushed the person out and discarded him.’

(34)¹⁴⁰ *dútikam nu āints puhú wahás hákã iyántui*

dutika-a-ma [nu āintsu puhu waha-sã]
do.that-HIAF-NON.A/S>A/S [ANA person white stand-SBD+3:SS]

[ha-kã] iyã-ta-u-i
[die-INTS:SEQ+3:SS] fall.forward-APPLIC+IMPFV-REL-COP:3:DECL

‘When it did that to him, the man who was very pale, fell forward having died.’

¹³⁹ *bat̄f̄ita-i* (machete-INSTR) was corrected during translation from original *bat̄f̄ita-haĩ* (machete-COMIT).

¹⁴⁰ The wording in this clause makes it sound as if the man died when he was unwrapped; the locution “fall down dead” is used in Aguaruna in the same sense as in English.

(35)¹⁴¹ *núnikmatāĩ dapiʼʃakama núʃakama paŋkiʼʃakama atíhwi*

nuni-ka-mataĩ dapi-ʃakama nu-ʃakama paŋki-ʃakama
do.that-INTS:SEQ-1/3:DS snake-ADD ANA-ADD boa-ADD

ati-ha-u-i
unwrap-PLU-REL-COP:3:DECL

‘When (the man) did that, the snake, that one, the boa, also unwrapped him.’

(36) *dútikam núnikmatāĩ núwĩ paŋkín mãã nuwadúi núna aĩntsún iyãʃín hukúwai*

dutika-ma [nuni-ka-mataĩ] [nu-ĩ
do.that-HIAF-NON.A/S>A/S [do.that-INTS:SEQ-1/3:DS] [ANA-LOC

paŋki-na ma-ã] nuwanu-i nu-na aĩntsu-na
boa-ACC kill-HIAF:SEQ+3:SS] ANA-INSTR ANA-ACC person-ACC

iyãʃĩ-na hu-ki-u-ai
body:PERT:3-ACC take-TRF-REL-COP:3:DECL

‘When (the boa) did that (to the man), after (the man) did that, (the family) having killed the boa there, then they took the man’s body.’

(37) *núnin ásã aninhás kamĩ núninuk patáitus diimáintʃui*

nuni-inu ásã [aninhasã kamĩ
do.that-NR COP:SBD/SEQ+3:SS [thoughtlessly+3 truly

nuni-inu-ka patai-tu-sã] dii-mai-inu-tʃau-i
do.that-NR-FOC follow-APPLIC-SBD+3:SS] see-POT-NR-NEG-COP:3:DECL

‘That being the case, really he was one who acted thoughtlessly, following (the boa’s tracks) he couldn’t see (the danger).’

(38) *wããs dúʃa núnikabia muúntaʃ an umímkatin ásã ánkafabiaʃa*

wããs nu-ʃa nuni-ka-amaia muunta-ʃa
I.don’t.know.why ANA-UNCERT do.that-INTS-DISTPAST:3 adult-UNCERT

[aan umim-ka-tinu ásã]
[MED be.doomed-INTS-FUTNR COP:SBD/SEQ+3:SS]

aani-ka-tʃa-amaia-ʃa
do.that-INTS-NEG-DISTPAST:3-CONCESS?

‘I don’t know why that man acted like that, did that although he was doomed to die.’

¹⁴¹ This sentence was considered to be unnecessary and repetitious by consultants working on transcription.

(39) *nunú dúʃakam nuni dúik múun páŋki yúwam asáuwai*

nunu nu-ʃakama nuni duik_muunta [paŋki
ANA ANA-ADD thus ancestor [boa

yu-a-ma] a-sa-u-ai
eat-IMPV-NON.A/S>A/S] COP-ATT-REL-COP:3:DECL

‘That also (happened), a man in the olden days was eaten by a boa.’¹⁴²

(40) *dúʃakam áuŋmatbau nuni áwai dúʃakam*

nu-ʃakama auhuma-tu-mau nuni a-wa-i nu-ʃakama
ANA-ADD tell-APPLIC-NON.A/S:REL thus exist-3-DECL ANA-ADD

‘That story also exists.’

¹⁴² This use of a clause subordinated with *-ma* as a copula complement is unusual – see §9.5.3.

Text 2: Extracts from Pablo's autobiography

Recorded in Centro Wawik, 24 August 2004. Total text is about 18 min.

Told by Pablo Santiak Kajekui, age 42, resident of Centro Wawik

This text consists of three extracts from a relatively long narrative recounting Pablo's life. Pablo was born in Chikais, a community located on the Marañón River about 8km due north of Centro Wawik, and moved to Wawik at a young age.

Section 1 starts at the beginning of the narrative. Pablo introduces himself and tells about how he was first exposed to education as his father was learning to read and write at the school for adults.

(1) *mína dáahuk pábloi*

mi-na naa-hu-ka pablo-i
1SG-ACC name-PERT:1SG-FOC Pablo-COP:3:DECL

'My name is Pablo.'

(2) *wíka akínawaithai komunidad tʃikáis*

wi-ka akina-u-aita-ha-i komunidad tʃikais
1SG-FOC be.born:PFV-REL-COP-1s-DECL community Chikais

'I was born in the community Chikais.'

(3) *tũha píipitʃ áĩ*

tũha piipitʃi a-ĩ
but small COP:1SG/3-DS

'But when I was little...'

(4) *mína apáj papí múun áunbaunum áuhak wʃakũĩ*

mi-na apa-hu papi muunta auhu-mau-numa
1SG-ACC father-PERT:1SG book adult read-NON.A/S:REL-LOC

auhu-a-kũ wi-a-ku-ĩ
read-IMPV-SIM+3:SS go-IMPV-SIM-1/3:DS

'when my father went to study at the school for adults...'

- (5) *síntfi wakíyin áyahai wífa áusattasan*

síntfi wakiya-inu a-ia-ha-i wi-ʃa
strongly want-NR COP-REMPAST-1s-DECL 1SG-ADD

auhu-sa-tasa-nu
read-ATT-INTENT-1SG:SS

‘I also very much wanted to study.’

- (6) *núniau asán patáikan wíyahai mína apán wíʔakũĩ*

nuni-a-u asa-nu patai-ka-nu
do.that-IMPV-REL COP:SBD/SEQ-1SG:SS follow-INTS:SEQ-1SG:SS

wi-ya-ha-i [mi-na apa-hu wi-a-ku-ĩ]
go-REMPAST-1SG-DECL [1SG-ACC father-PERT:1SG go-IMPV-SIM-1/3:DS]

‘Because I was doing that (i.e. wanting), having followed (him) I went when my father went.’

- (7) *imani wíkái asán papí mína apán áunbaun unuimátiahai díkasi*

imani wíkaiya asa-nu [papi mi-na apa-hu
INTENS.DEM.ADV walk COP:SBD-1SG:SS [book 1SG-ACC father-PERT:1SG

auhu-mau-na] unuima-tu-ia-ha-i díkasi
read-NON.A/S:REL-ACC] learn-APPLIC-REMPAST-1SG-DECL few

‘Doing that so much, I learned a few of the books that my father was studying.’

- (8) *núniu asámtãĩ mína apán áunɖuwi túsã hintínkaɖtinu uhakábi*

nuni-u asa-mataĩ mi-na apa-hu
do.that-REL COP:SBD-SEQ:1/3:DS 1SG-ACC father-PERT:1SG

[auhu-inu-ĩ tu-sã] hintina-kahatu-inu
[read-NR-COP:3:DECL say-SBD:3:SS] teach-1PL.OBJ-NR

uha-ka-amayi
tell-INTS-DISTPAST:3:DECL

‘When I was doing that, my father told the teacher “he can read!”.’

- (9) *dútikam áusakia tákũĩ áuhiahai wi unuimáthamun*

dutika-a-ma auhu-sa-kia tu-a-ku-ĩ
do.that-HIAF-NON.A/S>A/S read-ATT-IMP:FAM say-IMPV-SIM-1/3:DS

auhu-ia-ha-i [wi unuima-tu-ha-mau-na]
read-REMPAST-1SG-DECL [1SG learn-APPLIC-PLU-NON.A/S:REL-ACC]

‘When he did (i.e. said) that (to him), (the teacher) saying “read!”, I read what I had learned.’

(10) *núnitāi auhaháma díkaháma túsā kaʃín naŋkámsamik áusattami papík túhutiabi*

nuni-taĩ auhu-a-hama dika-a-hama
do.that-SBD:1/3:DS read-IMPV:3-CNTR.EX know-IMPV:3-CNTR.EX

tu-sã kaʃini naŋkama-sa-mi-ka
say-SBD+3:SS tomorrow begin-SBD-2:SS-FOC

auhu-sa-tata-mi papi-ka tu-hu-tu-i-amayi
read-ATT-FUT-2SG:DECL book-FOC say-APPLIC-1SG.OBJ-LOAF-DISTPAST:3:DECL

‘When I did that, saying “he’s reading! he knows how!”, (the teacher) said to me “starting tomorrow you will study”.’

The narrative continues with Pablo describing the problems that forced his family to move and prevented him from continuing his study until he moved to Wawik. Meanwhile, he had a great desire to learn Spanish and see the city, but nobody could take him as his father spoke no Spanish. In section 2 he tells about how he left home as a child to look for work in the *mestizo* settlements.

(11) *wí tikiʃi wínakūĩ wáŋabiahai tʃiriáko*

wi tikitʃi wi-ina-ku-ĩ wi-amaia-ha-i
1SG other go:PFV-PL:IMPV-SIM-1/3:DS go:PFV-DISTPAST-1SG-DECL

tʃiriako
Chiriaco

‘When others were going, I went to Chiriaco.’

(12) *núnikan ñũjáknuf wáinkatʃabiahai*

nuni-ka-nu ñũʎa-ka-nu-ʃa
do.that-INTS-1SG:SS look.for-INTS-1SG:SS-CONCESS

waina-ka-tʃa-amaia-ha-i
see-INTS-NEG-DISTPAST-1SG-DECL

‘Having done that, although I looked, I didn’t find (any work).’

(13) *nuiŋtúf kistián tʃítʃaman dʒkatʃu asán tʃítʃasán inímtanaʃ iniimáintʃau dʒkáphiai*

nuiŋtu-ʃa [kistian_tʃítʃama-na dʒka-a-tʃau
 furthermore-ADD [Spanish-ACC know-IMPV-NEG:REL

asa-nu] [tʃítʃa-sa-nu] iniima-ta-na-ʃa
 COP:SBD-1SG:SS] [speak-SBD-1SG:SS] ask-ACTNR-ACC-ADD

iniima-mai-inu-tʃau dʒkapi-ia-ha-i
 ask-POT-NR-NEG feel-REMPAST-1SG-DECL

‘Furthermore, not knowing Spanish, I felt unable to ask a question by speaking.’

(14) *núniau asán wakítkin midíyahai*

nuni-a-u asa-nu [wakitu-ki-nu]
 do.that-IMPV-REL COP:SBD/SEQ-1SG:SS [return-TRF-1SG:SS]

mini-ia-ha-i
 arrive-REMPAST-1SG-DECL

‘Because of my being that way, having turned back I was coming.’

(15)¹⁴³ *dawínum miná minákuan mesónes taáwabiahai*

[nawi-numa mina mini-a-kawa-nu]
 [foot-LOC REDUP arrive-IMPV-REPET-1SG:SS]

mesones ta-aw-amaia-ha-i
Mesones come-HIAF-DISTPAST-1SG-DECL

‘Coming and coming on foot, I arrived at Mesones Muro.’

¹⁴³ Mesones Muro is a settlement in Imaza district, about 1km from Imaza itself.

- (16) *núnikan núwĩ takát áwai tákũ haántʃin ukukú asán mína hũṽṽhũĩṽṽ utithái tusán midú áyahai*

nuni-ka-nu nu-ĩ [taka-ta a-wa-i
do.that-INTS-1SG:SS ANA-LOC [work-ACTNR exist:IMPFV-3-DECL

tu-a-ku-ĩ] [haantʃi-na uku-ki-u asa-nu
say-IMPFV-SIM-1/3:DS] [clothes-ACC leave-TRF-REL COP:SBD/SEQ-1SG:SS

mi-na hũṽṽ-hu-ĩ-ia uti-ta-ha-i
1SG-ACC house-PERT:1SG-LOC-ABL fetch:LOAF-IFUT-1SG-DECL

tu-sa-n] mini-i-u a-ia-ha-i
say-SBD-1SG:SS] arrive-LOAF-REL COP-REMPAST-1SG-DECL

‘Having done that, there they said to me “there is work”, I said “I left my clothes, so I’ll get them from my house” and was coming back.’

- (17)¹⁴⁴ *núnikan miná minákuan kampamento unión táu áyahai*

nuni-ka-nu [mina mina-kawa-nu] kampamento
do.that-INTS-1SG:SS [REDUP arrive+IMPFV-REPET-1SG:SS] *Campamento*

union ta-a-u a-ia-ha-i
Unión come-IMPFV-REL COP-REMPAST-1SG-DECL

‘Having done that, coming and coming I arrived at Campamento Unión.’

- (18) *ítsã akáũṽṽ núĩ makítʃik hũũṽṽ kistián puhámu aúñ diisán naṅkáiũṽṽ*

ítsã akaiũṽṽ-a-ĩ nu-ĩ [makitʃiki hũṽṽ kistian
sun set-IMPFV:1/3-DS ANA-LOC [one house *mestizo*

puhu-a-mau] au-na dii-sa-nu
live-IMPFV-NON.A/S:REL] DST-ACC look-SBD-1SG:SS

naṅkaiũṽṽ-a-ĩ
pass.by-IMPFV:1/3-DS

‘As the sun was going down, I was looking at a house there that *mestizos* lived in as I passed by...’

¹⁴⁴ Campamento Unión is another settlement in Imaza district.

(19) *nũĩ núwa puháu tu wíamĩ tuhúĩ*

nu-ĩ nuwa puhu-a-u tu wi-a-mi
ANA-LOC woman live-IMPV-REL where go-IMPV-2

tu-hu-tu-ĩ
say-APPLIC-1SG.OBJ-LOAF+3:SS

‘a woman who lived there having said to me “where are you going?”...’

(20) *tákũĩ hũũǰhũĩ wíahai tútaĩ*

tu-a-ku-ĩ hũũǰa-hu-ĩ wi-a-ha-i tu-taĩ
say-IMPV-SIM-1/3:DS house-PERT:1SG-LOC go-IMPV-1SG-DECL say-SBD:1/3:DS

‘when she said that, (I) saying “I’m going to my house”...’

(21) *ĩtsã akíawai hũĩ kanáham kafín wítá túhutkũĩ*

ĩtsã aki-a-wa-i hu-ĩ kana-ha-mi kafini
sun set-IMPV-3-DECL PRX-LOC sleep-PLU-2:SS tomorrow

wi-ta tu-hu-tu-a-ku-ĩ
go:PFV-IMP say-APPLIC-1SG.OBJ-IMPV-SIM:1/3-DS

‘as she said to me “the sun is setting, sleep here and go tomorrow”...’

(22) *ayú tusán wãǰwãwabiahai*

ayu tu-sa-nu wã-aw-amaia-ha-i
ok say-SBD-1SG:SS enter-HIAF-DISTPAST-1SG-DECL

‘saying “ok” I went in.’

(23) *núnikan ãĩ yumáinun ahampúsmatãĩ yuwán kánãĩ*

nuni-ka-nu a-ĩ yu-mai-inu-na
do.that-INTS:SEQ-1SG:SS COP:1/3-DS eat-POT-NR-ACC

ahampu-sa-matãĩ yu-a-nu kana-ĩ
give.food-ATT:SEQ-1/3:DS eat-HIAF:SEQ-1SG:SS sleep+IMPV:1/3-DS

‘Having done that, she offered me food, and having eaten I was sleeping...’

(24) *díkás hũĩ puhusmí wíi haántfin sumáŋkathamĩ tákũĩ*

dikas hu-ĩ puhu-sa-mi wi haantfi-na
truly PRX-LOC live-ATT-HORT 1SG clothes-ACC

suma-hu-ka-ta-hami-i tu-a-ku-ĩ
buy-APPLIC-INTS-IFUT-1SG>2SG.OBJ-DECL say-IMPV-SIM:1/3-DS

‘when she said “better, let’s live (together) here, I’ll buy you clothes”...’

(25) *ayú tusán nuni níina hññ huwákan taká kun puhúyahai mihadái*

ayú tu-sa-nu nuni nĩ-na hññ-nĩ
ok say-SBD-1SG:SS thus 3SG-ACC house:PERT:1PL/3-LOC

huwa-ka-nu taka-a-ku-nu puhu-ia-ha-i
 stay-INTS:SEQ-1SG:SS work-IMPV-SIM-1SG:SS live-REMPAST-1SG-DECL

mihana-i
 year-INSTR

‘so saying “ok” I stayed in her house and worked for a year.’

The young Pablo was still very keen to travel to the city and learn Spanish, and one day an opportunity arose as an officer in the local garrison was going back to Lima and his wife wanted to take a local orphan to raise and educate in the city. Pablo’s father was not around to ask permission, so young Pablo told the officer he was an orphan and went with them. He describes the drive to Lima and his amazement at seeing the cities of Bagua, Chiclayo and Lima for the first time. Section 3 begins when Pablo has recently arrived in the city and is set to work washing dishes in the officer’s wife’s parents’ house. He still only knows a few phrases of Spanish.

(26) *subteniente mína líma iwaṅkáuk ikám wákítak ukúṅkiabi nína wiuṅahĩ hññ*

[subteniente mi-na lima iwa-hu-ka-u-ka]
 [second.lieutenant 1SG-ACC Lima CAUS+go.up-1SG.OBJ-INTS-REL-FOC]

ikama wakítu-a-kũ uku-hu-ki-amayi
 jungle+LOC go.back-IMPV-SIM+3:SS leave-1SG.OBJ-TRF-DISTPAST:3:DECL

nĩ-na wiuṅa-hĩ hññ-nĩ
 3sg-ACC father.in.law-PERT:1PL/3 house:PERT:1PL/3-LOC

‘The second lieutenant who had brought me to Lima left me at his father-in-law’s house when he went back to the jungle.’

(27)¹⁴⁵ *núnikmatāĩ puhāĩ háta naṅkámhuawabi*

nuni-ka-mataĩ puha-ĩ ha-ta
do.that-INTS:SEQ-1/3:DS live+IMPFV:1/3-DS be.sick-ACTNR

naṅkama-hu-aw-amayi
begin-1SG.OBJ-HIAF-DISTPAST:3:DECL

‘After he did that, while I was there, I became ill.’

(28) *dúka sahampíum áĩ*

nu-ka sahampium a-ĩ
ANA-FOC measles COP:1/3-DS

‘That was measles...’

(29) *túhaf nuni háahai tusán*

túha-ʃa nuni ha-a-ha-i tu-sa-nu
but-ADD thus be.sick-IMPFV-1SG-DECL say-SBD-1SG:SS

‘but saying only “I’m sick”...’

(30) *wahúk háaha núna tumáin dikáptsayahai*

[wahuka ha-a-ha] nu-na tu-mai-inu
[how die-IMPFV-1SG] ANA-ACC say-POT-NR

dikapi-tsa-ia-ha-i
feel-NEG-REMPAST-1SG-DECL

‘I did not feel able to say in what way I was sick.’

(31) *núniau asán áyatak háahai túyahai*

nuni-a-u asa-nu ayatak ha-a-ha-i
do.that-IMPFV-REL COP:SBD-1SG:SS only be.sick-IMPFV-1SG-DECL

tu-ia-ha-i
say-REMPAST-1SG-DECL

‘Because of that, I only said “I’m sick”.’

¹⁴⁵ This is an interesting construction, literally “sickness began me”. The verb *ha* ‘die’ translates as ‘be sick’ when it is not in perfective aspect.

(32) *tútãĩ wahúk háapa tuhúťianumĩ*

tu-tãĩ wahuka ha-a-pa
say-SBD:1/3:DS how be.sick-IMPV-2SG:INT/PROHIB

tu-hu-tu-ia-numĩ-i
say-APPLIC-1SG.OBJ-REMPAST-3PL-DECL

‘when I said that, they said to me “in what way are you sick?”.’

(33) *túhaf nuni háahai tusánuk itsĩťtsayahai*

túha-ťa nuni ha-a-ha-i tu-sa-nu-ka
BUT-ADD thus be.sick-IMPV-1SG-DECL say-SBD-1SG:SS-FOC

itsi-hu-tsa-ia-ha-i
explain-APPLIC-NEG-REMPAST-1SG-DECL

‘But saying only “I’m sick” I did not explain to them.’

(34) *núnitãĩ dakimak táwai tuhúťĩ*

nuni-tãĩ dakima-a-kũ tu-a-wa-i
do.that-SBD:1/3:DS be.lazy-IMPV-SIM+3:SS say-IMPV-3-DECL

tu-hu-tu-ĩ
say-APPLIC-1SG.OBJ-LOAF:SEQ+3:SS

‘When I did that, they said about me “he says that because he’s lazy”...’

(35) *túhaf nuni sintťi wauťaťtuyi háta*

túha-ťa nuni sintťi wauťa-hu-tu-yi
BUT-ADD thus strongly overcome-APPLIC-1SG.OBJ-REMPAST:3:DECL

ha-ta
be.sick-ACTNR

‘but the sickness more strongly overcame me.’

(36) *núniakũĩ pláto niháktasan wítakamán wintťainhan iyáutãĩ*

nuni-a-ku-ĩ [plato niha-ka-tasa-nu]
do.that-IMPV-SIM:1/3-DS [plate wash-INTS-INTENT-1SG:SS]

[wi-takama-nu] wintťaina-ha-nu iyau-tãĩ
[go:PFV-FRUST-1SG:SS] faint-PLU-1SG:SS fall-SBD:1/3:DS

‘When it did that, I was trying to go and wash the plates but I fainted and fell down...’

(37) *yamá dikáñtuawabi dikás háamun*

yama dika-hu-tu-aw-amayi dikas
now know-APPLIC-1SG.OBJ-HIAF-DISTPAST:3:DECL truly

ha-a-mau-na
die-IMPV-NON.A/S:REL-ACC

‘now they really knew about my illness.’

(38) *tūhaf wáamak yutúnhabiahai*

tūha-ʃa waamak yutuna-ha-amaia-ha-i
BUT-ADD quickly get.worse-PLU-DISTPAST-1SG-DECL

‘I quickly got worse.’

(39) *núnitāĩ wáamkis médikonum ihítuawahabi*

nuni-tāĩ waamakisã mediko-numa
do.that-SBD:1/3:DS quickly+3 doctor-LOC

ihí-tu-aw-aha-amayi
take-1SG.OBJ-HIAF-PL-DISTPAST:3:DECL

‘When I did that, they quickly took me to a doctor.’

(40) *nūĩ médiko ospital imáta tūtāĩ*

nu-ĩ mediko ospital ima-a-ta tu-tāĩ
ANA-LOC doctor hospital take-HIAF-IMP say-SBD:1/3:DS

‘There, when the doctor said “take him to a hospital”...’

(41) *huhukí ítiababi*

hu-hu-kĩ i-tu-i-aha-amayi
take-1SG.OBJ-TRF:SEQ+3:SS take-1SG.OBJ-LOAF-PL-DISTPAST:3:DECL

‘having picked me up, they took me there.’

Text 3: Hunting

Recorded in Centro Wawik, 8 July 2004. About 2 min 35 sec.

Told by Arias Chamik Ukuncham, age 37, resident of Centro Wawik

The following text was recorded in response to my request to hear about hunting techniques. After the first three lines, it is entirely couched in the ‘normative’ verb form, with first person plural subject as can be seen from the subordinate verb forms.

- (1) *yatsúŋ simóŋ wakíuɣawai íi hutíi iiniáti kúntin maá maátasa wahúk wikáitaiamĩ
nunúna*

yatsu-hu simoŋka wakiuɣa-a-wa-i [ii hutii
brother-PERT:1SG *Simon* want-IMPV-3-DECL [1PL 1PL

iinia-ti kuntu maa maa-tasa wahuk
one.of.us-SAP animal REDUP kill+HIAF-INTENT+1PL:SS how

wikáitaiamĩ] nunu-na
walk-NORM] ANA-ACC

‘My brother Simon wants (to know) how we around here go hunting.’

- (2) *núniu asámtãĩ nĩhãĩ tʃitʃákun puháhai*

nuni-u asa-mataĩ nĩ-hãĩ tʃitʃa-a-ku-nu
do.that-REL COP:SBD/SEQ-1/3:DS 3SG-COMIT converse-IMPV-SIM-1SG:SS

puhu-a-ha-i
live-IMPV-1SG-DECL

‘Because he does (i.e. wants) that, I am conversing with him now.’

- (3) *nĩʃkam dikátatus wakíuɣau asámtãĩ níina uháhai yamáĩ*

nĩ-ʃakama dika-a-tatus wakiuɣa-a-u
3SG-ADD know-HIAF-INTENT+3:SS want-IMPV-REL

asa-mataĩ nĩ-na uha-a-ha-i yamai
COP:SBD/SEQ-1/3:DS 3SG-ACC tell-IMPV-1SG-DECL now

‘And because he wants to know, I am telling him now.’

- (4) *huní íuɣamtayamĩ*

hu-ni iuɣama-taiamĩ
PRX-ALL look.for-NORM

‘We search (for game) like this.’

- (5) *díkatkau nuwáhãĩ tʃitʃasá kaʃín wikáikun wítathai tusá*

díkatkau nuwa-haĩ tʃitʃa-sa [kaʃini]
 first woman-COMIT converse-ATT:SEQ+1PL:SS [tomorrow]

wikaiuqa-a-ku-nu wi-tata-ha-i tu-sa]
 walk-IMPV-SIM-1SG:SS go:PFV-FUT-1SG-DECL say-SBD+1PL:SS]

‘First, having spoken to our wives, saying “tomorrow I will go walking (i.e. hunting)”...’

- (6) *tsawáha yuhúmkauf yuwá káʃik hiinkí wítáyamĩ*

[tsawa-ha] [yuhumaka-utʃi yu-a]
 [dawn-PLU:SEQ+1PL:SS] [food-DIM eat-HIAF:SEQ+1PL:SS]

[kaʃik hiina-ki] wi-taiamĩ
 [early.morning go.out-TFR:SEQ+1PL:SS] go-NORM

‘having woken up, eaten a bit of food and gone out early in the morning, we go.’

- (7) *núnika akahũ húki wíaku kúntin wainkátasa wahasá niimsá*

nuni-ka [akahũ hu-ki]
 do.that-INTS:SEQ+1PL:SS [shotgun take-TRF:SEQ+1PL:SS]

[wi-a-ku] [kuntinu waina-ka-tasa waha-sa]
 [go-IMPV-SIM+1PL:SS] [animal see-INTS-INTENT+1PL:SS stand-SBD+1PL:SS]

niima-sa
 look-SBD+1PL:SS

‘Having done that, having taken our shotguns and gone, we stand looking for animals...’

- (8) *nũĩ wahasá niimsá wákĩ ákuin isáa diisá ukuáku wítáiamĩ*

[nu-ĩ waha-sa] [niima-sa] [wakĩ]
 [ANA-LOC stand-ATT:SEQ+1PL:SS] [look-ATT:SEQ+1PL:SS] [cliff]

akuin isa-a] [dii-sa]
 top stretch.neck-HIAF:SEQ+1PL:SS] [look-ATT:SEQ+1PL:SS]

[uku-a-ku] wi-taiamĩ
 [leave-IMPV-SIM+1PL:SS] go-NORM

‘having stood there looking at the top of a cliff, having stretched out our necks and looked, we leave and go.’

- (9) *apiihánum hiiṭantá nūĩ waĩttsa hiínki wíkamá imániaku kúntin waintáyamĩ*
 [apiiha-uma hiiṭā-tu-a] [nu-ĩ [waitu-sa]
 [thicket-LOC arrive-APPLIC-HIAF:SEQ+1PL:SS] [ANA-LOC [suffer-SBD+1PL:SS]

hiina-ki] [wi-kama] [imani-a-ku]
 go.out-TRF:SEQ:1PL:SS] [go-TERM+1PL:SS] [do.so.much-IMPV-SIM+1PL:SS]

kuntinu waina-taiamĩ
 animal see-NORM

‘Having arrived in thick brush, after getting out of there with difficulty, on going, doing this so much we see an animal.’

- (10) *núnika antúki wíkamá waintáyamĩ kúntin mináuṣkam*

nuni-ka [antu-ki] [wi-kama]
 do.that-INTS:SEQ+1PL:SS [listen-TRF:SEQ+1PL:SS] [go-TERM+1PL:SS]

waina-taiamĩ kuntinu mini-a-u-ṣakama
 see-NORM animal arrive-IMPV-REL-ADD

‘Having done that, going on listening we see animals coming.’

- (11) *núnika wainká máutayamĩ*

nuni-ka waina-ka mau-taiamĩ
 do.that-INTS:SEQ:1PL:SS see-INTS:SEQ:1PL:SS kill-NORM

‘Having done that, having seen it, we kill it.’

- (12) *núnika maá huhúmkuik yúpitṣu huhumtáyamĩ*

nuni-ka [ma-a]
 do.that-INTS:SEQ+1PL:SS [kill+HIAF:SEQ+1PL:SS]

[hu-hu-ma-ku-i-ka] [yupitṣu hu-hu-ma-taiamĩ]
 [take-APPLIC-REFL-SIM-1PL-FOC] [easy take-APPLIC-REFL-NORM]

‘Having done that, having killed it, if we take it away, we easily take it away.’

- (13) *nuníafkuik íi wáinkaf táakuik wíkái wíkáikawa yapáŋki minámunum hintá kǎyũk
bataín pihíkíuf antútayamĩ*

nuni-a-tʃa-ku-i-ka [ii wainaka-ʃa
do.that-IMPV-NEG-SIM-1PL-COND [1PL in.vain+1PL-ADD

ta-a-ku-i-ka] [wíkai wíkaiuʒa-a-kawa]
come-IMPV-SIM-1PL-COND] [REDUP walk-IMPV-REPET+1PL:SS]

[yapahu-ki mini-a-mau-numa] hinta
[be.hungry-TRF+1PL:SS arrive-IMPV-NON.A/S:REL-LOC] path+LOC

kǎyuk batai-na pihiki-u-ʃa antu-taiamĩ
agouti chambira.fruit-ACC gnaw-REL-ADD hear-NORM

‘If we don’t do that, if we come empty-handed, walking and walking when we arrive hungry we hear an agouti gnawing *chambira* fruit in the path.’

- (14) *núnika antúka núĩ ʃitá ʃitámhakuia ʃtsikíʃtahaʃ túsa anintáimtakua tsapúhi puháu
wáinkaik dúʃakam máutayamĩ*

nuni-ka [antu-ka] [nu-ĩ ʃita
do.that-INTS:SEQ+1PL:SS [hear-INTS:SEQ+1PL:SS] [ANA-LOC REDUP

ʃitama-hu-a-kawa] [[ʃtsiki-tʃa-ta-ha-ʃa
crawl-APPLIC-IMPV-REPET+1PL:SS] [[CAUS+jump:PFV-NEG-IFUT-1SG-ADD

tu-sa] anintaima-tu-a-kawa]
say-SBD+1PL:SS] think-APPLIC-IMPV-REPET+1PL:SS]

[[tsapu-hu-i puhu-a-u] waina-ka-i-ka]
[[lift.head-APPLIC-LOAF+3:SS live-IMPV-REL] see-INTS:SEQ-1PL-COND]

nu-ʃakama mau-taiamĩ
ANA-ADD kill-NORM

‘Having done that, having heard that, crawling and crawling there, thinking “I won’t make it jump”, if we have seen it there having lifted its head to look around, we kill that too.’

- (15) *dútika maá dúwi hiŋkahá hukí tsukapsá minitáyamĩ*

dutika-a [maa] nu-i
do.that-HIAF:SEQ+1PL:SS [kill+HIAF:SEQ+1PL:SS] ANA-INSTR
[hiŋka-ha] [hu-ki] [tsukapi-sa]
[tie.up-PLU:SEQ+1PL:SS] [take-TRF:SEQ+1PL:SS] [carry.on.shoulder-SBD+1PL:SS]

mini-taiamĩ
arrive-NORM

‘Having done that, having killed it, consequently having tied it up and taken it we come carrying it over our shoulder.’

- (16) *núnia núniakua ítsã akãũũĩĩ íina núwĩ puhámunum íina hiutĩhiŋ tatáyamĩ*

nuni-a nuni-a-kawa [ítsã akaiũa-a-ĩ]
REDUP do.that-IMPV-REPET+1PL:SS [sun set-IMPV:1/3-DS]

[ii-na nuwĩ puhu-a-mau-numa] ii-na
[1PL-ACC woman:PERT:1PL/3 live-IMPV-NON.A/S:REL] 1PL-ACC

hiũ-utĩi-hĩ-ka ta-taiamĩ
house:PERT-DIM-PERT:1PL/3-FOC come-NORM

‘Going on doing that, as the sun is setting we come to our home, where our wife is.’

- (17) *tũha nu núniktʃattakuik kúntin kaútu wainkáik piníha áuʃkam dakáka kúntin minítkuĩŋ mantúmtayamĩ*

tũha [nu nuni-ka-tʃa-tata-ku-i-ka] [[kuntu
BUT [ANA do.that-INTS-NEG-FUT-SIM-1PL-COND] [[animal

kau-tu-u] waina-ka-i-ka] [pini-ha]
assemble-APPLIC-REL] see-INTS:SEQ-1PL-COND] [build.hide-PLU:SEQ+1PL:SS]

[au-ʃakama daka-ka] [kuntu
[DST-ADD wait.for-INTS:SEQ+1PL:SS] [animal

mini-tu-a-ku-ĩ-ka] mantu-ma-taya-mĩ
arrive-APPLIC-IMPV-SIM:1/3-DS-COND] kill+APPLIC-REFL-NORM:DECL

‘But if we don’t do that, if we have seen animals gathering (to eat), having built a hide and waited for them too, if the animals come we kill them.’

(18) *núniaʃkuik núu dútika maáʃkuik káʃiʃ wítáyamĩ*

nuni-a-tʃa-ku-i-ka [nu dutika-a]
do.that-IMPV-NEG-SIM-1PL-FOC [ANA do.that-HIAF:SEQ+1PL:SS]

[ma-a-tʃa-ku-i-ka] káʃi-ʃa wi-taiamĩ
[kill-IMPV-NEG-SIM-1PL-FOC] night-ADD go-NORM

‘If we don’t do that, if having done all that we don’t kill (the animal), we even go at night.’

(19) *núnika káʃi wĩ wíkái wíkáikawa*

nuni-ka [káʃi wi] [wíkai
do.that-INTS:SEQ+1PL:SS [night go:PFV:SEQ+1PL:SS] [REDUP

wíkaiɰa-a-kawa]
walk-IMPV-REPET:1PL:SS]

‘Having done that, having gone at night, walking and walking...’

(20) *íi wainkáttakuik kúhi wainká yuwítʃu wainká máakuik*

ii waina-ka-tata-ku-i-ka [kuhi waina-ka]
1PL see-INTS-FUT-SIM-1PL-COND [kinkajou see-INTS:SEQ+1PL:SS]

[yuwitʃu waina-ka] ma-a-ku-i-ka
[deer.sp see-INTS:SEQ+1PL:SS] kill-IMPV-SIM-1PL-COND

‘if we see something, having seen a kinkajou, having seen a *yuwichu* deer, if we kill it...’

(21) *áatsa ʃuʃuikíʃ wainkáttakuik núu maá*

aatusa ʃuʃui-kI-ʃa waina-ka-tata-ku-i-ka
thus+1PL armadillo-RESTR-ADD see-INTS-FUT-SIM-1PL-COND

nu maa
ANA kill+HIAF:SEQ+1PL:SS

‘thus if we if we see even just an armadillo, having killed that...’

(22) *wáittsa itá ína nuwĩutʃíhihaĩ akáha ína patahĩ ipása aátsa húʃa kuntínʃakam yutáyamĩ*

[waitu-sa] [ita-a] [ii-na
 [suffer-SBD+1PL:SS] [CAUS+come-HIAF:SEQ+1PL:SS] [1PL-ACC

nuwĩ-utʃi-hĩ-haĩ aka-ha]
 woman:PERT-DIM-PERT:1PL/3-COMIT butcher-PLU:SEQ+1PL:SS]

[ii-na pata-hĩ ipa-sa] aatusa hu-ʃa
 [1PL-ACC family-PER:1PL/3 invite-ATT:SEQ+1PL:SS] thus+1PL PRX-ADD

kuntinu-ʃakama yu-taiamĩ
 animal-ADD eat-NORM

‘having brought it with difficulty, having butchered it with our wives, having invited our family, thus we eat that animal too.’

(23) *íik aátsa wáittsa iuqamsá yúwaithi*

ii-ka aatusa [waitu-sa] [iuqama-sa]
 1PL-FOC thus+1PL [suffer-SBD+1PL:SS] [search-SBD+1PL:SS]

yu-u-aita-hi-i
 eat-REL-COP-1PL-DECL

‘And so, suffering while searching, we are ones who eat.’

References

- Adelaar, Willem F. H. 1990. "The role of quotations in Andean discourse", pages 1-12 of *Papers presented to Simon C. Dik on his 50th birthday*, edited by W. F. H. Adelaar. Dordrecht: Foris
- _____ (with Pieter C. Muysken) 2004. *The Languages of the Andes*. Cambridge: Cambridge University Press
- _____ 2006. "The Quechua impact in Amuesha, an Arawak language of the Peruvian Amazon", pages 290-312 of Aikhenvald & Dixon (Eds) (2006)
- Aikhenvald, Alexandra Y. 1996. "Words, pauses and boundaries: evidence from South-American languages", in *Studies in Language* 20: 487-517
- _____ 2002a. *Language Contact in Amazonia*. Oxford: Oxford University Press
- _____ 2002b. "Typological parameters for the study of clitics, with special reference to Tariana", pages 42-78 of Dixon & Aikhenvald (Eds) (2002)
- _____ 2004. *Evidentiality*. Oxford: Oxford University Press
- _____ 2006. "Grammars in contact: A cross-linguistic perspective", pages 1-66 of Aikhenvald & Dixon (Eds) (2006)
- _____ 2007a. "Typological distinctions in word-formation", pages 1-65 of *Language Typology and Syntactic Description, Second Edition, vol. III*. Cambridge: Cambridge University Press
- _____ 2007b. "Languages of the Pacific coast of South America", pages 183-205 of *The Vanishing Languages of the Pacific Rim*, edited by O. Miyaoka, O. Sakiyama and M. E. Krauss. Oxford: Oxford University Press
- _____ 2008. "Semi-direct speech: Manambu and beyond", to appear in *Language Sciences*
- Aikhenvald, Alexandra Y. and R. M. W. Dixon (Eds) 2006. *Grammars in Contact: A Cross-linguistic Typology*. Oxford: Oxford University Press
- Appel, René and Pieter Muysken 1987. *Language Contact and Bilingualism*. London: Edward Arnold
- Baker, Mark C. 1996. *The Polysynthesis Parameter*. Oxford: Oxford University Press
- Beuchat, Henri and Paul Rivet 1909. "La langue Jibaro ou Siwora", in *Anthropos* 4: 805-22

- _____ 1910. "La langue Jibaro ou Siwora", in *Anthropos* 5: 1053-64, 1109-24
- Bhat, D. N. S. 1994. *The Adjectival Category: Criteria for Differentiation and Identification*.
Amsterdam: John Benjamins
- Blust, Robert 1998. "Seimat vowel nasality: A typological anomaly", in *Oceanic Linguistics* 37(2):
298-322
- Castner, James L. 2004. *Shrunken Heads: Tsantsa Trophies and Human Exotica*. Gainesville, FL:
Feline Press
- Chen, M. and W. S-Y. Wang 1975. "Sound change: Actuation and implementation.", in *Language*
51: 255-81
- Colini, G. A. 1883. "Osservazioni etnografiche sui Givari", in *Atti della R. Accademia dei Lincei*
(3rd series) 11: 337-80
- Comrie, Bernard 1976. *Aspect*. Cambridge: Cambridge University Press
- _____ 1985. *Tense*. Cambridge: Cambridge University Press
- Corbera Mori, Angel 1994. *Fonologia e gramática do Aguaruna (Jívaro)*. Unpublished doctoral
dissertation, University of Campinas, Brazil
- Corbett, Greville G. 2000. *Number*. Cambridge: Cambridge University Press
- Craig, Colette 1991. "Ways to go in Rama: A case study in polygrammaticalization", pages 455-
492 of *Approaches to Grammaticalization, volume II*, edited by E. Closs Traugott and B.
Heine. Amsterdam: John Benjamins
- Croft, William 1991. *Syntactic Categories and Grammatical Relations: The Cognitive Organization*
of Information. Chicago: Chaicago University Press
- Descola, Philippe (trans. N. Scott) 1996. *In the Society of Nature: A Native Ecology in Amazonia*.
Cambridge: Cambridge University Press
- Dik, Simon C. 1989. *The Theory of Functional Grammar: Part I: Structure of the Clause*.
Dordrecht and Providence, RI: Foris
- Dixon, R. M. W. 1982. *Where Have All the Adjectives Gone?*. Berlin: Mouton
- _____ 1994. *Ergativity*. Cambridge: Cambridge University Press

- _____ 1995. "Complement clauses and complementation strategies", pages 175-220 of *Grammar and Meaning: Essays in Honour of Sir John Lyons*, edited by F. R. Palmer. Cambridge: Cambridge University Press
- _____ 2003. "Demonstratives: a cross-linguistic typology", in *Studies in Language* 27(1): 61-112
- _____ 2004a. "Adjective classes in typological perspective", pages 1-49 of *Adjective Classes: A Cross-linguistic Typology*, edited by R. M. W. Dixon and A. Y. Aikhenvald. Cambridge: Cambridge University Press
- _____ 2004b. *The Jarawara Language of Southern Amazonia*. New York: Oxford University Press
- _____ 2006. "Complement clauses and complementation strategies in typological perspective", pages 1-48 of *Complementation*, edited by R. M. W. Dixon and A. Y. Aikhenvald. Cambridge: Cambridge University Press
- _____ (Ed) forthcoming. *The Semantics of Clause Linking*
- Dixon, R. M. W. and Alexandra Y. Aikhenvald (Eds) 1999. *The Amazonian Languages*. Cambridge: Cambridge University Press
- _____ (Eds) 2000. "Introduction", pages 1-29 of *Changing Valency: Case Studies in Transitivity*, edited by R. M. W. Dixon and A. Y. Aikhenvald. Cambridge: Cambridge University Press
- _____ (Eds) 2002. *Word: A Cross-linguistic Typology*. Cambridge: Cambridge University Press
- Durie, M. 1986. "The grammaticization of number as a verbal category", in *Proceedings of the Berkeley Linguistic Society* 12: 355-70
- Fabre, Alain 2005. *Diccionario Etnolingüístico y Guía Bibliográfica de los Pueblos Indígenas Sudamericanos [Updated version of Manual de las Lenguas Indígenas Sudamericanas. Munich: Lincom Europa, 1998]*. Accessed at: <http://butler.cc.tut.fi/~fabre/BookInternetVersio/Alkusivu.html>
- Farrar, Frederic W. 1860. *An Essay on the Origin of Language*. London: John Murray
- Fast, Gerhard and Mildred L. Larson 1974. *Introducción al Idioma Aguaruna*. Documento de Trabajo 3, Lima: Instituto Lingüístico de Verano

- Fast, Gerhard, Ruby Warkentin and Daniel Fast 1996. *Diccionario Achuar-Shiwiar -- Castellano*.
Lima: Instituto Lingüístico de Verano
- Fleck, David W. 2003. *A grammar of Matses*. Unpublished doctoral dissertation, Rice University,
Texas
- Flornoy, Bertrand 1953. *Jivaro: Among the Headshrinkers of the Amazon*. London: The Travel
Book Club
- Foley, William A. and Robert D. van Valin, Jr 1984. *Functional Syntax and Universal Grammar*.
Cambridge: Cambridge University Press
- Gabelentz, Georg von der 1972 [1901]. *Die Sprachwissenschaft: Ihre Aufgaben, Methoden und
bisherigen Ergebnisse*. Second Edition (Reprint). Tübingen: Tübinger Beiträge zur
Linguistik
- Genetti, Carol 2005. "The participial construction of Dolakhā Newar", in *Studies in Language*
29(1): 35-87
- Gnerre, Maurizio 1973. "Sources of Spanish *Jivaro*", in *Romance Philology* 27(2): 203-4
- _____ 1975. "L'utilizzazione delle fonti documentarie dei secoli XVI e XVII per la storia
linguistica Jibaro", pages 79-86 of *Atti del XL Congresso Internazionale degli Americanisti*
vol. 3, edited by E. Cerulli and G. Della Ragione. Genoa: Tilgher
- _____ 1976. "American Spanish *palta* 'avocado': The diffusion of a Quechua word, viewed
in relation to its etymology.", in *Romance Philology* 29(3): 297-310
- _____ 1999. *Profilo Descrittivo e Storico-comparativo di una Lingua Amazzonica: lo Shuar*.
Naples: Istituto Universitario Orientale
- Gordon, Lynn 1983. "Switch reference, clause order, and interclausal relationships in Maricopa",
pages 83-104 of Haiman & Munro (Eds) (1983)
- _____ 1986. *Maricopa Morphology and Syntax*. Berkeley: University of California Press.
- Gordon, Raymond G., Jr. (Ed) 2005. *Ethnologue: Languages of the World, Fifteenth edition*.
Dallas, Texas: SIL International. Accessed at: <http://www.ethnologue.com/>
- Guallart, José María n.d.. *Entre Pongo y Cordillera: Historia de la Etnia Aguaruna – Huambisa*.
Lima: Centro Amazónico de Antropología y Aplicación Práctica
- Haiman, John 1978. "Conditionals are topics", in *Language* 54(3): 564-89

- Haiman, John and Pamela Munro (Eds.) 1983. *Switch-Reference and Universal Grammar*. Amsterdam: John Benjamins
- Harner, Michael J. 1973. *The Jivaro: People of the Sacred Waterfalls*. New York: Anchor Books
- Heine, Bernd and Tania Kuteva 2002. *World Lexicon of Grammaticalization*. Cambridge: Cambridge University Press
- Hengeveld, Kees 1992. *Non-verbal Predication: Theory, Typology, Diachrony*. Berlin: Mouton
- Hornberger, Esteban and Nancy Hornberger 1977. *Diccionario Tri-lingue: Quechua of Cusco-English-Spanish / Tri-lingual Dictionary: Quechua de Cusco-Ingles-Español*. Cusco: LCA
- Jakway, Martha, Horacio Lorenzo C. and Arturo Antonio A. 1987. *Vocabulario Huambisa*. Serie Lingüística Peruana 24, Lima: Instituto Lingüístico de Verano
- Jespersen, Otto 1958 [1924]. *The Philosophy of Grammar*. London: Allen & Unwin
- Jijón y Caamaño, J. 1919. “Contribución al conocimiento de las lenguas indígenas, que se hablaron en el Ecuador interandino y occidental, con anterioridad a la Conquista Española.”, 340-413 of *Boletín de la Sociedad Ecuatoriana de Estudios Históricos Americanos*
- Jiménez de la Espada, Marcos (Ed.) 1965 [1586]. *Relaciones Geográficas de Indias: Perú*. 3 vols., Biblioteca de Autores Españoles, 183-5. Madrid: Atlas. (*non vidi*: cited in Adelaar 2004 and Taylor 1988)
- Joseph, Brian 2002. “The word in Modern Greek”, pages 243-265 of Dixon & Aikhenvald (Eds) (2002)
- Juank, Aij^{iu} 1982. *Aujmatsatai, Yatsuchi: Manual de Aprendizaje de la Lengua Shuar*, vol. 1. Ecuador: Mundo Shuar
- Karsten, Rafael 1935. *The Head-hunters of Western Amazonas: The Life and Culture of the Jibaro Indians of Eastern Ecuador and Peru*. Commentationes Humanarum Litterarum 7(1), Helsingfors: Societas Scientiarum Fennica
- Larson, Mildred L. 1963. “Emic classes which manifest the obligatory tagmemes in major independent clause types of Aguaruna (Jivaro).”, pages 1-36 of *Studies in Peruvian Indian languages*. vol. 1, Texas: SIL International
- _____ 1978. *The Functions of Reported Speech in Discourse*. Texas: SIL International
- Larson, Mildred L. and Lois Dodds 1985. *Treasure in Clay Pots: An Amazon People on the Wheel of Change*. California and Texas: Person to Person Books

- Loos, Eugene E. 1999. "Pano", pages 227-250 of Dixon & Aikhenvald (Eds) (1999)
- Lord, Carol 1993. *Historical Change in Serial Verb Constructions*. Amsterdam and Philadelphia, PA: John Benjamins
- Loukotka, Čestmír (edited by Johannes Wilbert) 1968. *Classification of South American Indian Languages*. Los Angeles: University of California
- Matisoff, James A. 1975. "Rhinoglottophilia: the mysterious connection between nasality and glottality", pages 265-87 of *Nasálfest (Papers from a Symposium on Nasals and Nasalization)*, edited by C. A. Ferguson, L. M. Hyman and J. J. Ohala. Stanford, California: Stanford University Press
- Matthews, P. H. 1997. *The Concise Oxford Dictionary of Linguistics*. Oxford: Oxford University Press
- Nuckolls, Janis B. 1996. *Sounds like Life: Sound-symbolic Grammar, Performance, and Cognition in Pastaza Quechua*. Oxford: Oxford University Press
- Olawsky, Knut J. 2006. *A Grammar of Urarina*. Berlin: Mouton de Gruyter
- Overall, Simon E. forthcoming. "The semantics of clause linking in Aguaruna", to appear in R. M. W. Dixon (forthcoming)
- _____ in preparation. *Frustrative as a verbal category*
- Parker, Steve 1996. "Toward a universal form for 'yes': or, rhinoglottophilia and the affirmation grunt", in *Journal of Linguistic Anthropology* 6(1): 85-95
- Payne, David L. 1978. *Nasalidad en Aguaruna* (Second edition). Serie Lingüística Peruana 15, Lima: Instituto Lingüístico de Verano
- _____ 1981. "Bosquejo fonológico del Proto-Shuar-Candoshi: evidencias para una relación genética", in *Revista del Museo Nacional* 45: 323-377
- _____ 1990a. "Some widespread grammatical forms in South American languages", pages 75-87 of Doris Payne (Ed) (1990)
- _____ 1990b. "Accent in Aguaruna", pages 161-184 of Doris Payne (Ed) (1990)
- Payne, Doris (Ed) 1990. *Amazonian Linguistics*. Dallas: University of Texas Press
- _____ 2001. Review of Dixon & Aikhenvald (1999), in *Language* 77(3): 594-598

- Payne, Thomas E. 1997. *Describing Morphosyntax: A Guide for Field Linguists*. Cambridge: Cambridge University Press
- Pellizaro, Siro and Fausto Osvaldo Náwech 2005. *Chicham: Diccionario Shuar – Castellano*. Quito: Abya-Yala
- Pike, Kenneth L. and Mildred L. Larson 1964. “Hyperphonemes and non-systematic features of Aguaruna phonemics.”, pages 55-67 of *Studies in Languages and Linguistics in Honor of Charles C. Fries*, edited by A.H. Marckwardt. Ann Arbor, Michigan: English Language Institute
- Plungian, Vladimir A. 2001. “Agglutination and flection”, pages 669-678 of *Language Typology and Language Universals*. vol. 1, edited by M. Haspelmath, E. König, W. Österreicher and W. Raible. Berlin and New York: Walter de Gruyter
- Regan, Jaime, Anfiloquio Paz Agkuash, Abel Uwarai Yagkug, and Isaac Paz Suikai 1991. *Chichasajmi: Hablemos Aguaruna I*. Lima: Centro Amazónico de Antropología y Aplicación Práctica
- Rubenstein, Steven 2002. *Alejandro Tsakimp: A Shuar Healer in the Margins of History*. Lincoln, Nebraska: University of Nebraska Press
- Sadock, Jerrold M. and Arnold M. Zwicky 1985. “Speech act distinctions in syntax”, pages 155-196 of *Language Typology and Syntactic Description, vol. 1: Clause Structure*, edited by T. Shopen. Cambridge: Cambridge University Press
- Stark, Louisa R. 1985. “Indigenous languages of lowland Ecuador: History and current status”, pages 157-193 of *South American Indian Languages: Retrospect and Prospect*. Edited by Harriet E. Manelis Klein and Louisa R. Stark. Austin: University of Texas Press
- Stark, Louisa R. and Pieter C. Muysken 1977. *Diccionario Español – Quichua, Quichua – Español*. Guayaquil: Publicaciones de los museos del banco central del Ecuador
- Stirling, M. W. 1938. *Historical and Ethnographical Material on the Jivaro Indians*. Smithsonian Institution Bureau of American Ethnology Bulletin 117: Washington, D.C.: U.S. Government Printing Office
- Taylor, Anne-Christine 1988. *Al Este de los Andes: Tomo II*. Quito: Abya-Yala
- Taylor, Anne-Christine and Ernesto Chau 1983. “Jivaroan magical songs: Achuar anent of connubial love”, in *Amerindia* 8 (no page numbering). Accessed at http://celia.cnrs.fr/FichExt/Am/A_08_04.pdf

- Taylor, Anne-Christine and Philippe Descola 1981. “El conjunto Jívaro en los comienzos de la conquista Española del Alto Amazonas”, in *Bull. Inst. Fr. Et. And.* 10(3-4): 7-54
- Thompson, Sandra A. and Robert E. Longacre 1985. “Adverbial clauses”, pages 171-234 of *Language Typology and Syntactic Description, vol. 2: Complex Constructions*, edited by T. Shopen. Cambridge: Cambridge University Press
- Turner, Glen D. (edited by Stephen H. Levinsohn) 1992. *Una Breve Gramática del Shuar*. Cuadernos Etnolingüísticos 19, Quito: Instituto Lingüístico de Verano
- Up de Graff, F. W. 1923. *Head-hunters of the Amazon: Seven Years of Exploration and Adventure*. London: Herbert Jenkins Ltd.
- Uwarai Yagkug, Abel, Isaac Paz Suikai and Jaime Regan 1998. *Diccionario Aguaruna – Castellano: Awajún Chícham Apáchnaujái*. Lima: Centro Amazónico de Antropología y Aplicación Práctica
- Van Valin, Robert D. and Randy J. LaPolla 1997. *Syntax: Structure, Meaning, and Function*. Cambridge: Cambridge University Press
- Wipio Deicat, Gerardo (revised by Alejandro Paati Antunce Segundo and Martha Jakway) 1996. *Diccionario Aguaruna – Castellano*. Serie Lingüística Peruana 39, Lima: Instituto Lingüístico de Verano
- Wise, M. R. 1999. “Small language families and isolates in Peru”, pages 307-340 of Dixon & Aikhenvald (Eds) (1999)