

GENDER AND GENDER AGREEMENT IN JARUÁRA (ARAUAN)

by

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ABSTRACT

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Nouns in Jarúára, a language of Amazonia, are divided into two gender classes, masculine and feminine. A small subclass of nouns have their gender suppressed when they are inalienably possessed. In inalienable possession, the gender of the noun phrase is determined by the gender of the possessor.

Gender agreement at the clause level is determined not only by the gender of the governing nominal; the person, number and animacy of the governing nominal may also be important. In transitive clauses gender agreement may be governed by the subject or the direct object, depending on which clause construction is involved.

Gender agreement is typically marked in the verb and inalienably possessed nouns, and this is mainly accomplished through vowel alternations.

Comparisons are made in each of these areas with four other Arauan languages: Madija, Paumari, Jamamadi, and Deni.

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## INTRODUCTION

The Arauan family of languages are spoken by tropical forest peoples scattered in various parts of the Purus and Juruá river basins, in southwestern Amazonia. All are located in Brazil, except for some of the Madija (Culina, Kulina) groups, which are in Peru.

Information has not yet been published on all the Arauan languages, but those about which something has appeared in print are Madija, Paumari, Jamamadi, and Deni. The published sources are: for Madija: Adams 1962, Adams and Marlett 1987, Kanaú and Monserrat 1984, and Monserrat and Silva 1986; for Paumari: Odmark 1977, 1987, Chapman 1976, 1986 and 1988; for Jamamadi: Barbara Campbell 1985, 1986, Robert Campbell 1977, 1987, and Campbell and Campbell 1981; and for Deni: Moran and Moran 1977, Lois Koop 1981/82, and Gordon Koop 1988.

In addition to these, Derbyshire 1986 contains extensive data from Paumari, Jamamadi, and Deni, and Matteson 1972 contains word lists from Madija, Paumari, and Jamamadi. Derbyshire 1986 lists a number of unpublished sources in the bibliography, and I shall refer to other unpublished sources in this thesis.<sup>1</sup>

The Arauan languages were classified by Noble (1965) as a subgroup of Arawakan, and comparative studies by Matteson (1972) and Derbyshire (1986) agree with this conclusion. The subject of this thesis, the Jaruára language, has not been the subject of any previous study, published or unpublished, although Matteson's (1972) comparative study did include a

Jaruára word list, establishing it as an Arauan language, most closely related to Jamamadí.

Jaruára is spoken by about 130 people just west of the Purus River in Brazil, near the city of Lábrea. Data for this study were gathered during 18 months of noncontinuous contact with the Jaruára, including a total of six months in a Jaruára village and about three months of additional company with Jaruára people outside of their home area.

This thesis examines one aspect of Jaruára grammar, gender. As in Arauan languages in general, in Jaruára there are masculine and feminine nouns, and there is agreement with these, both within the noun phrase and at the clause level. My goal is two-fold. First, I intend to describe the main facts of gender and gender agreement in Jaruára. Secondly, I intend to show how Jaruára is basically similar (with respect to gender) to the other four Arauan languages mentioned above, while there are also differences, some of them quite significant. Because I am not fluent in Jaruára, and because I have only a small number of transcribed texts available to me, the generalizations I make must necessarily be considered hypotheses. For these hypotheses to be fully supported (and in some cases, worked out in more detail) more research will be necessary. This being the case, I expect that this thesis will be less useful to other linguists than it has been to me as a stepping stone in my own research. But I do intend to keep on learning Jaruára, the Lord willing, so I hope this thesis will show my intention to do writing which will be more useful to other linguists.



## CHAPTER 1

### GENDER OF NOUNS

Nouns in Jaruára have an inherent gender which is either masculine or feminine. What Adams and Marlett (1987:1) say for Madija is also true for Jaruára, and for Arauan languages in general: "These labels [i.e. masculine and feminine] should be taken in approximately the same way they are taken in Romance languages." There is no marking on the nouns themselves to distinguish masculine from feminine nouns; rather, the evidence for gender is the agreement that it triggers, especially in the verb. (For the sake of simplicity, in this section I only use intransitive clauses, few of which have gender agreement anywhere except in the verb. Gender agreement can also be seen within the noun phrase, and in transitive clauses, and these are covered in chapters 2 and 3, respectively.)

Observe the following sentences (abbreviations are identified in Appendix A):<sup>2</sup>

- (1) Sani        amo-ke.  
     Jane(F) sleep-DECL+F  
     'Jane is sleeping.'
- (2) Eti        kana-ni kita-ka.  
     Edi(M) run-NOM strong-DECL+M  
     'Edi is running fast.'
- (3) Sire                tofiyo-ke.  
     cold. spell(F) end-DECL+F  
     'The cold spell is ending.'

- (4) Aba bita-ka.  
 fish(M) bitter-DECL+M  
 'The fish tastes bitter.'

In intransitive clauses such as these, there is regular feminine verb agreement with female subjects and masculine agreement with male subjects, as in (1) and (2) above, respectively (in the notation, (F) (M) refer to inherent gender, whereas (+F) (+M) refer to morphological marking for gender agreement<sup>3</sup>). Based on comparison with clauses such as (1) and (2), it is concluded that sire 'cold spell' (3) is a feminine noun, and aba 'fish' (4) is a masculine noun, since they govern feminine and masculine verb agreement, respectively (Jane (1) is a female, and Edi (2) is a male). In fact, all nouns representing animal and plant species, other natural phenomena, and objects can be divided into two classes according to their inherent gender.

Table 1 below gives an idea of how nouns are divided into gender classes in Jaruára. In the table I have included percentages wherever there is a split.

Table 1. Distribution of Jaruára nouns according to gender class.

Category	N	Feminine	Masculine
1. Human beings and animals	all	by sex of individual	
2. Animal species	321	15%	85%
3. Heavenly bodies	4		all
4. Plant species	229	47%	53%
5. Other natural phenomena	42	93%	7%

(Table 1 cont.)

Category	N	Feminine	Masculine
6. Objects and concepts	85	78%	22%
7. Place names	12	75%	25%

Examples illustrating the first category of table 1, "human beings and animals," are listed below.

- (5) Kona Abono ohi-na-re-ka, yama soki-ya.  
Kona Abono(M) cry-AUX-PST.1(+EYEW)+M-DECL+M darkness-OBL  
'Kono Abono cried last night.'
- (6) Rosira kama-haba-awine-ke.  
Lucilia(F) come-FUT+F-INFR+F-DECL+F  
'Lucilia will come (I think).'
- (7) Okobi sawi-hibona-ka.  
1S+POSS+father(M) come-INTENT+M-DECL+M  
'My father will come.'
- (8) Okobi hina-kasima ama-ke.  
1S+POSS+father(M) 3-POSS+younger.sister(F) be-DECL+F  
'She is my father's younger sister.'
- (9) Yara fana yoo-nine-ke.  
non-Indian woman(F) walk.in.water-AUX+F-DECL+F  
'The non-Indian woman is walking in the water.'
- (10) Inamatewe amo-ka.  
infant(M) sleep-DECL+M  
'The baby boy is sleeping.'
- (11) Inamatewe heko-ke.  
infant(F) hiccup-DECL+F  
'The baby girl has the hiccups.'
- (12) Winine-ke haro.  
live+F-DECL+F there+F  
'She lives over there.'

In (5)–(12), the verb suffixes agree in gender with the sex of the person who is the subject of each clause. In all four languages for which information is available (Madija, Paumari, Dení, Jamamadí), female persons and animals govern feminine agreement, and males govern masculine agreement (Shirley Chapman, personal communication; Adams and Marlett 1987:1,2; Lois Koop 1981/82:254; Barbara Campbell, personal communication). This is true whether the person is referred to by name (5,6), by kinship term (7,8) or by another noun (9–11). It is also true when there is no noun (or pronoun) in the clause which refers to the person; that is, the subject is understood (12).

There is an important exception to this rule, and that is that there are many cases in Jaruára discourse where masculine agreement is used referring to females, as in (13) and (14):

- (13) Manira watami-mona-ka.  
 Manira dream-REPORT+M-DECL+M  
 '(Someone said) Manira had a dream.'
- (14) Rosira toha-re-ka, yobe-ya.  
 Lucilia be-PST.1(+EYEW)+M-DECL+M house(M)-OBL  
 'Lucilia is in the house.'

At this point I could only guess at why this might occur. However, it is safe to say that cases such as these do not invalidate the semantic basis for the labels "masculine" and "feminine," for at least two reasons: (1) feminine agreement is never used referring to males; and (2) in almost all the cases in which masculine agreement is used referring to a female, feminine agreement can also be used. Compare, for example, (6) and (14),

where the subject is the same person, but two different agreement patterns were used on different occasions.

Nouns referring to animals follow the same patterns as that of human beings (without the above exception, as far as I know), but only when the sex of the individual animal is being specified. Otherwise, each animal species has its own inherent gender (cf. category 2, below), which is used when the animal's sex is not in focus. The noun kato 'cat,' for example, is feminine (15), but the person who said (16) was specifying that the cat in question was a male.

- (15) Kato    ohi-nine-ke.  
       cat(F) cry-AUX+F-DECL+F  
       'The cat is crying.'
- (16) Kato    ino        wata-ka-ra.  
       cat(M) name+M exist-DECL+M-NEG+M  
       'The cat doesn't have any (other) name.'
- (17) Kobaya        wa-ka,                                yobe        bofe-ya.  
       wild.pig(M) be.located+M-DECL+M house(M) beneath-OBL  
       'The wild pig is under the house.'
- (18) Kobaya        bite                                amo-ke.  
       wild-pig(F) offspring+F sleep-DECL+F  
       'The young female wild pig is sleeping.'

In the same way, the gender of a masculine species (17) can be overridden so that agreement is feminine (18). In such cases the words fana 'female' or maki 'male' can also be added, although they need not be.

Under the second category in table 1, "animal species," I have included all fauna species, not just mammals.

- (19) Yome    habo-na-re-ka.  
       dog(M) bark-AUX-PST.1(+EYEW)+M-DECL+M  
       'The dog is barking.'
- (20) Okomo            ita-ka,            o-teme-ya.  
       insect.sp(M) sit+M-DECL+M 1S-foot-OBL  
       'The okomo insect is lodged in my foot.'
- (21) Maka    to-ka-ra-ke,                            yama kabani-ya.  
       snake(F) away-go-PST.1(+EYEW)+F-DECL+F jungle-OBL  
       'The snake went away in the jungle.'
- (22) Amiko            ayaka-ra-ke.  
       bird.sp(F) call-PST.1(+EYEW)+F-DECL+F  
       'The amiko bird is calling.'

Among animals there is a great preponderance of masculine species, and this is also true of all major subcategories (mammals, birds, fish, insects). There are a few small sub-categories that are all masculine: ants (13 species), wasps (9 species), and mollusks (7 species).

All the names of heavenly bodies I have elicited are masculine, but so far there are only four: bahi 'sun,' abariko 'moon,' amowa 'star,' and maya 'morning/evening star.'

- (23) Bahi    to-ka-ka.  
       sun(M) away-go-DECL+M  
       'The sun is going down.'
- (24) Abariko waha-to-na-ka.  
       moon(M) shine-3-AUX-DECL+M  
       'The moon is shining.'

The distribution of plant species according to gender is almost half and half, quite different from that of animals.

- (25) Itaoba            homa-re-ka,                                 hike-ya.  
tree.sp(M) lie-PST.l(+EYEW)+M-DECL+M there-OBL  
'The itaoba tree is lying over there.'
- (26) Sai                          wani-te-ama-ka.  
vine. sp(M) last-CUST-AF-DECL+M  
'The sai vine lasts a long time.'
- (27) Yawita                  arabo-ka.  
palm. sp(M) bloom-DECL+M  
'The yawita palm is blooming.'
- (28) Erimao      sina-ri      kita-ke.  
lemon(F) sour-NOM strong-DECL+F  
'The lemon is very sour.'

There doesn't seem to be any significant difference between domesticated and wild species, but palms are predominately masculine (66% of 30 species).

The category "other natural phenomena" includes such nouns as yifo 'fire,' faha 'water,' boni 'wind,' yati 'stone,' wami 'ground,' and others. The only masculine nouns in this category that I have seen are hiyabo 'termite nest,' atiwa 'thorn,' and yama hote 'fog.'

- (29) Faha                    fowa-hara-ke.  
stream(F) flood-PST.1(+EYEW)+F-DECL+F  
'The stream is flooded.'
- (30) Yama hiwe kita-ke.  
summer(F) strong-DECL+F  
'The summer is hot.'
- (31) Atiwa                wa-ka,                    o-teme    kari.  
thorn(M) sit+M-DECL+M ls-foot the.one+M  
'There is a thorn in my foot.'

The nouns in the “objects and concepts” category are mostly man-made objects, plus a few names of foods, sicknesses, and other

miscellaneous concepts. The nouns in this category are predominantly feminine, but a significant number are masculine.

- (32) O-noko-ya kiyefo yana-ke.  
 1S-eye-OBL small.tumor(F) grow-DECL+F  
 'There is a small tumor near my eye.'
- (33) Bohasa foye-hino-ka, oko makari  
 eraser(M) be.hidden-PST.1(-EYEW)+M-DECL+M 1S+POSS clothing(F)  
 ka boso-ya.  
 POSS pocket(F)-OBL  
 'The eraser is hidden in my pocket (I think).'
- (34) Farina na-awine?  
 manioc.meal(F) exist-INFR+F  
 'Is there any manioc meal?'
- (35) Yifo sosoki-na-re-ka.  
 hammock(M) black-AUX-PST.1(+EYEW)+M-DECL+M  
 'The hammock is black.'

As for place names, although I have elicited a large number of names of villages and streams, I do not know the gender of most of them yet. It is clear, though, that some are masculine and some feminine.

- (36) Faha ebote to-ka-time-ya, Botofeyo  
 river(F) big away-go-upstream-OBL Porto.Velho(F)  
 to-hine-ke.  
 3-be+F-DECL+F  
 'Porto Velho is upstream (from here).'
- (37) Yemete ka-yabo-ka-ra.  
 Yemete. stream(M) ?-long-DECL-NEG+M  
 'Yemete is not a long stream.'

(These names are often nouns or noun phrases referring to something else, so presumably in these cases it is the gender of the fish or tree or whatever the main noun is that determines the gender of the place name.



For example, Faha biri and Wasa are two names of streams. Faha biri means literally 'small stream,' and wasa is the name of a fish. The names of the streams correspond in gender to the gender of faha 'stream' (feminine) and of wasa 'fish species' (masculine), respectively.)

What generalizations can be made regarding the gender classes of nouns in Jaruára based on these data? First, aside from cases where a noun references the actual known sex of a person or animal, there are few categories where gender is predictable based on semantic criteria. The exceptions are heavenly bodies, which are all masculine, and some subgroups of animal species. The vast majority of nouns, however, are not predictable in this way. Only tendencies can be observed: animal species tend to be masculine, plant species tend to be half and half, and natural phenomena (excluding heavenly bodies) and objects and concepts tend to be feminine.

For the categories for which only tendencies can be observed in Jaruára, the tendencies for the other Arauan languages are similar, except that in Paumari, objects and place names are all feminine; and in Madija, the nouns I have called "objects and concepts" are mostly (about 2/3) masculine (Shirley Chapman, personal communication; Monserrat and Kanaú 1984, Adams and Marlett 1987:2; Lois Koop 1981/82:254; Barbara Campbell, personal communication).

As in Jaruára, there are few semantic categories of nouns in the other four languages which have predictable gender. Interestingly, all heavenly bodies in all four languages are masculine, except for amohua 'star' in Madija, which is feminine (Shirley Chapman, personal communication; Monserrat and Kanaú 1984; Koop 1981/82:254; Barbara

Campbell, personal communication). Barbara Campbell (personal communication) says that the tree species which the Jamamadí say are inhabited by spirits are all masculine, but this does not seem to have any validity in Jaruára, since a Jaruára man told me that all plants have a spirit, and many of them are feminine.<sup>4</sup> The category I have called "other natural phenomena" contains a majority of feminine names in Madija, Dení,<sup>5</sup> and Paumarí (Monserrat and Kanaú 1984; Lois Koop 1981/82:254; Shirley Chapman, personal communication), just as in Jaruára.

The unpredictability of the gender of nouns in most categories in the Arauan languages is not surprising, given the evidence that nouns change in gender over time in these languages. In table 2 I show that this is true, by comparing the gender of cognates in three of the languages. Table 2 does not contain a complete list of cognates in the three languages listed, but is based on a somewhat cursory examination of the Kulina (Madija) dictionary (Kanaú and Monserrat 1984) and a Paumarí word list (Shirley Chapman, personal communication). But the relative numbers of cognates (50 for Jaruára–Paumarí and 81 for Jaruára–Madija) do reflect the fact that Jaruára is much more closely related to Madija than to Paumarí (cf. Matteson's (1972) similar conclusion); so these lists are probably not a bad reflection of the total picture. (The number of Paumarí–Madija cognates (26) is low, since I was not looking for Paumarí–Madija cognates independent of Jaruára.) What the table shows is that a large number of cognates have evolved different genders in different languages. Specifically, 20% (10 out of 50) of Jaruára–Paumarí cognates counted are of different genders in the two languages, and for Jaruára–Madija it is 33% (27 out of 81). Furthermore, there is every indication that changes in

gender of nouns have occurred in all the Arauan languages. Witness the seven cases (out of 26) of cognates with different genders in the table when Paumarí and Madija are compared.

Table 2.--Selected cognates in three Arauan languages with gender class.

Jaruára	Madija	Paumarí	Gloss
abariko (M)	adasico (M)	masiko (M)	moon
bahi (M)	maji (M)		sun
amowa (M)	amohua (F)		star
bani (M)	bani (F)		large animal (gen.)
awi (M)	ahui (F)		tapir
kobaya (M)	anobedse (M)		peccary sp.
bato (M)	bado (F)		deer
yao (M)	dsaho (M)		sloth ap.
awa yafi (M)	dsapi (M)		rat sp.
yowi (M)	dsohuiji (F)		monkey sp.
yotomi (M)	dsotomi (M)		coati
wafa (M)	huappa (M)		monkey sp.
hiyama (M)	jidsama (M)		peccary sp.
misa (M)	misse (M)		porcupine
moto (M)	modo (F)		anteater
wisi (M)	pissi (F)	ibisi'di (F)	monkey sp.
sawa (M)	sahua (M)	nami saba'oni (M)	weasel
sinama (M)	ssinama (F)		agouti
tamakori (M)	tamacori (M)	jamako (F)	monkey sp.
yome (M)	dsomaji (M)	jomahi hiihiha (F)	jaguar
mase biri (M)		masi (F)	bat
sabira (M)	ssabira (M)	saba'o (M)	otter sp.
koka (M)	coca (M)	kokajori (M)	woodpecker sp.
tehe (M)	teje (M)	tihi (M)	seagull
okoko (M)	ococo (F)		pigeon sp.
biriri (M)	ppiriri (F)		bird sp.
masawari (M)		amasava (M)	heron sp.
kere (M)	qqere (M)		kingfisher
sibiri (M)	sibiri (F)	sabira (M)	hawk
tano (M)	tano (M)		bird sp.
anafi (M)	anopi (M)		egret
bobo (M)	bobo (M)		owl sp.
yawiro (M)	dsaboro (M)	javira (M)	heron sp.
kawasiro (M)	cahasiro (M)	siro (M)	bird sp.
koyofi (M)	cossohui (H)	kojoi (F)	bird sp.

(Table 2 cont.)

Jaruára	Madija	Paumari	Gloss
tafo (M)	dapo (M)		bird sp.
yaki (M)	dsaqqui (M)		toucan
taokoro (M)		tavikororo (M)	bird sp.
aba (M)	aba (M)	aba isana (M)	fish (gen.)
bahama (M)		bahama (M)	catfish sp.
bayaro (M)		bajara (M)	fish sp.
sako (M)	ssaco (M)	sako (M)	fish sp.
siraba (F)		siraba (M)	fish sp.
bote (M)	botani (F)	bo'dani (F)	stingray
imati (M)	minati (M)	mina'di (M)	electric eel
korobo (M)	ccorobo (M)		fish sp.
kowa (M)	cahue (M)		tortoise
korakaka (M)	torocaca (F)		frog sp.
maka (F)	macca (M)	makha (M)	snake (gen.)
taro (M)	daro (M)		mollusk sp.
awani (M)	ahuani (F)		wasp (gen.)
wabo (M)	babo (M)		tick
yomasa (M)	dsomahuassa (M)		scorpion
wahana (M)	huajano (F)		insect sp.
wanakori (M)	huanaconi (F)		spider
mahi (M)	mehi (M)		ant sp.
mafo (M)		mafo (M)	ant sp.
bita (M)		bitha (M)	mosquito
kamati (M)	camati (M)	kama'i (M)	lice
moho (M)	mojo (M)		moth
somi (M)	ssomi (M)	daomi (M)	worm
ora (M)	ora (M)		tree sp.
sina (F)	ssina (M)		tobacco
toto (F)	totore (F)		bamboo sp.
awa (F)	ahua (M)	ava (F)	tree (gen.)
wasina (F)		vasini (F)	tree sp.
kona (F)		akana (F)	plant sp.
*sirika (M)		siriga (M)	tree sp.
*kafe (F)		kafi (F)	coffee
biha (F)	bija (F)		potato sp.
*seseo (F)	ssedso (M)	fijsao (F)	beans
yawita (M)	dsahida (F)		palm sp.
yawana (F)	dsahuana (F)		palm sp.
yanifara (M)	dsani (F)		palm sp.
wafe (F)	huepe (F)		cotton
omi (F)	imi (F)		tree sp.
hawa (F)	jahua (F)		palm sp.
*ahosi (F)	ajohe (F)	aroso (F)	rice
kaira (M)		kaira (F)	guava
*kana (F)		kana (F)	sugar cane
*raraya (F)		naraja (F)	orange

(Table 2 cont.)

Jaruára	Madija	Paumari	Gloss
*itaoba (M)		ita'iva (M)	tree sp.
mowe (M)		moi'di (M)	Brazil nut
fare (F)	parahi (F)	para'i (F)	palm sp.
faha (F)		paha (F)	water
yifo (F)	dsippo (M)		fire
wami (F)		nami (F)	soil
neme (F)	meme (F)	nama (F)	sky
siki (F)	ssiqui (M)		sand
atami (F)	adami (F)		hill
ata (F)	ata (F)		marsh
hiyabo (M)	jibo (M)		termite nest
nokobi (F)	noccobiji (M)		door
koyari (M)	ohori (M)		oar
fowa (F)	ppohua (F)		mortar
titisa (F)	ssissite (F)		bow
*kore (F)	coidse (M)	kojira (F)	spoon
makari (F)		makari (F)	clothing
*kanawa (F)	canohua (F)	kanava (F)	canoe
*katoso (F)		katoxo (F)	shotgun shell
*isata (F)		ixada (F)	hoe
*barito (F)		parita (F)	matches
yiwaha (F)		si'aha (F)	pot
yama (F)	dsama (F)		thing
yamata (F)	dsamatapa (M)		food

Note: Asterisked (\*) items are loans from Portuguese or Spanish.

I do not have extensive information concerning the gender of specific nouns in Dení and Jamamadí, but it is suggestive that in Dení, aba 'fish' is feminine (Lois Koop 1981/82:254), which is different from any of the three languages listed in the table. And I know that certain names in Jamamadí differ in gender from their cognates in Jaruára. For example, doise 'lizard' and sire 'turtle' are both masculine in Jamamadí (Robert Campbell, personal communication), whereas the cognates in Jaruára, towisi and sire, are feminine. This seems remarkable, since these two languages are extremely close. (The Jaruára and Jamamadí live near each other and



- (43) Te ka-kiyoma-ke-hi!  
 2P DUAL-enter-toward.speaker-IMP+F  
 'You two come in!'

In Jaruára, whenever there is gender agreement with a first or second person, the agreement is feminine (38–43). This is true whether it is singular (38–40) or plural (41–43); whether represented by a pronoun or not; and whether the person(s) being referred to is/are male or female.

The second point above is exemplified in (44) and (45). In these sentences, there is feminine agreement with subjects which would govern masculine agreement if they were singular. Compare, for example, (19) and (45).

- (44) Yima me fawa-ne-mete-mone-ke, fahi.  
 Juma(M) 3P disappear-AUX-PST.3(-EYEW)+F-REPORT+F-DECL+F so  
 'And so, the Juma [Indians] disappeared.'
- (45) Yome biti me amo-ka-na-ke.  
 dog(M) offspring(M) 3P sleep-DUAL-AUX-DECL+F  
 'The two puppies are sleeping.'

Not all masculine nouns, however, govern feminine agreement when they are plural. Many masculine nouns in Jaruára are like boko 'boko tree' and moto 'motor' in the following examples; they govern masculine agreement even when they are plural.

- (46) Boko tama-ka.  
 tree.sp(M) many-DECL+M  
 'There are many boko trees.'
- (47) Moto fare ka-fama-ka.  
 motor(M) same+M DUAL-two-DECL+M  
 'The two motors are the same.'

It does not appear at all arbitrary which masculine nouns can only govern feminine agreement when they are plural, and which govern masculine agreement whether they are singular or plural. There is a principle that distinguishes between the two groups of nouns, that I shall call "animacy." It appears that people, animals, and heavenly bodies belong in the animate class, and the remaining nouns (trees, objects, etc.) are inanimate. Table 1 could thus be divided in half, with a line separating the first three animate categories from the final four inanimate categories. This is a tentative division, subject to further research.<sup>6</sup>

Of course, the gender agreement distinction between animate and inanimate nouns is lost when it comes to feminine nouns.

- (48) Me fanawi yowiri-na-ma-ke.  
 women(F) sing-AUX-back-DECL+F  
 'The women are singing.'
- (49) Wanako tre to-ha-rawa-ke.  
 butterfly(F) three 3-be-PL-DECL+F  
 'There are three butterflies.'
- (50) Barato fara famine-ke.  
 plate(F) same+F two+F-DECL+F  
 'The two plates are the same.'

As the above examples show, feminine nouns govern feminine agreement when they are plural, just as they do in the singular. This is true whether the plural noun is animate (48,49) or inanimate (50). Thus, for feminine nouns the categories "animate" and "inanimate" cannot be established by gender agreement patterns.<sup>7</sup>

Table 3 contains a summary of the above facts. It differs from table 1 in two basic ways: (1) first and second person nominals are



included; and (2) the semantic categories of table 1 are now organized into the strictly grammatical classes of animate and inanimate nouns.

Table 3.—Classes of Jaruára nominals, as determined by gender agreement patterns.

		Agreement Governed	
		Singular	Plural
Nonthird persons		F	F
Animate nouns	Feminine	F	F
	Masculine	M	F
Inanimate nouns	Feminine	F	F
	Masculine	M	M

How do these facts compare with those of other Arauan languages? There is apparently no other Arauan language that has these exact patterns of gender agreement, although all are similar in some respects. (The following generalizations are based on the facts of gender agreement in the verb only; the facts of agreement within the noun phrase are somewhat different, and this is covered in chapter 3, below.)

Feminine agreement with first and second persons is a virtual universal in Arauan languages (Adams and Marlett 1987:3; Chapman and Derbyshire in press:99,100,149,150; Barbara Campbell 1986:fn5; Lois Koop 1981/82:260). Paumarí is a partial exception, in that one suffix (-ni/-na,

which is glossed "dependent intransitive") uses the masculine form for agreement with the first person. But the other final verb suffixes in Paumarí follow the same pattern as the other languages, for first and second persons.

There is greater variation from one language to another when it comes to gender agreement with nouns. In Madija and Dení there is straightforward masculine agreement with masculine nouns, and feminine agreement with feminine nouns, independent of whether the noun is singular or plural (Montserrat and Silva 1986:38; Lois Koop 1981/82:260). However, with mixed groups of males and females there is masculine agreement in Madija, and feminine agreement in Dení (Adams and Marlett 1987:3; Lois Koop 1981/82:260)). With Paumarí and Jamamadí, the gender distinction is neutralized for agreement with plural nouns; but the particular gender chosen for agreement with plural nouns is masculine in Paumarí but feminine in Jamamadí (Chapman in press:149,150; Barbara Campbell 1986:fn5).

Thus, Jamamadí is the language that comes closest to Jaruára, as expected. But Jaruára seems to be the only Arauan language in which animacy is a factor in gender agreement. This does not mean, though, that animate and inanimate do not exist as grammatical categories in other Arauan languages. In Madija the verb agrees in number with its object, but only for animate objects (Wright 1988:10). Likewise in Paumarí the verb agrees in number with the subject for only animate<sup>8</sup> nouns; and only for animate nouns do plural object pronouns precede the verb (Chapman in press:130,7). In Jamamadí the pluralizer me is only used for animate nouns (Barbara Campbell 1985:147). So the facts of Jaruára are not totally unique.

## CHAPTER 2

### INALIENABLY POSSESSED NOUNS

A relatively small subclass of Jaruára nouns are unique in having their inherent gender suppressed when they are in a particular syntactic relation, that of inalienable possession. Nouns in Jaruára can be possessed either alienably or inalienably. Most nouns are possessed alienably, while a relatively small subclass of nouns, consisting mostly of body parts, may be possessed inalienably. Examples of alienably possessed nouns are farina 'manioc meal' and yifo 'hammock' in (51) and (52), respectively.

- (51) Wero      ka      farina                      ama-ke.  
Wero(M) POSS cassava.meal(F) be-DECL+F  
'It's Wero's cassava meal.'
- (52) Oko          yifo                      sibi-to-ka-na-ka.  
1S+POSS hammock(M) tear-3-SIG.OTH-AUX-DECL+M  
'My hammock is torn.'

There are three important characteristics of alienable possession to notice in these examples. First, the order is possessor:possessed noun. Secondly, the enclitic ka is used to mark possession. (In (52), ka is phonologically merged with the person prefix o- '1s' to form oko.)

The third characteristic of alienable possession is that the possessed noun determines the gender of the noun phrase. The noun phrase

in (51) is feminine, as evidenced in the feminine verb agreement. It is clear that it is the possessed noun, farina 'cassava meal' which determines this gender agreement pattern, since the possessor Wero, a man's name, is masculine. In a similar way, the masculine verb agreement in (52) indicates that the noun phrase is masculine. This is clearly determined by the possessed noun yifo 'hammock,' since there is a first-person possessor. As pointed out in chapter 1, first person can govern only feminine clause-level agreement.

Inalienable possession is illustrated in (54) and (55), which are answers to the question in (53).

- (53) Himata moni        ama-ri?  
       what    sound(F) be-INTERR+F  
       'What is that sound?'
- (54) Okomobi        moni    ama-ka.  
       Okomobi(M) sound be-DECL+M  
       'It's the sound of Okomobi.'
- (55) Hinabori        moni    ama-ke.  
       Hinabori(F) sound be-DECL+F  
       'It's the sound of Hinabori.'

The possessed noun moni 'sound' is in the second position, just as farina 'cassava meal' in (51). But the similarity with alienable possession ends there. There is no possessive enclitic ka in (54) or (55). Furthermore, the clause-level gender agreement is masculine in (54) and feminine in (55); but the possessed noun is one and the same, moni 'sound.' Clearly it is the possessor in each case (a man in (54) and a woman in (55)) which governs clause-level gender agreement. In inalienable possession, it is the possessor which determines the gender of the noun phrase.

There are, then, two characteristics of inalienable possession which distinguish it from alienable possession: absence of ka, and determination of noun phrase gender by the possessor. When clauses such as (56) and (57) are considered, however, it becomes clear that of these two characteristics, only the second is really essential in distinguishing the two types of possession.

- (56) Rosira        mati            kobo-to-na-maki-mone,  
       Lucilia( F) 3+mother(F) arrive-away-AUX-again-REPORT+F  
       Rosira        ati-ke.  
       Lucilia(F) say-DECL+F  
       ‘Lucilia said her mother has arrived (back to her home).’
- (57) Rosira        bati            sawi-re-bona-ka.  
       Lucilia(F) 3+father(M) come-NEG+M-INTENT+M-DECL+M  
       ‘Lucilia’s father won’t come.’

The noun phrases in (56) and (57) are clearly examples of alienable possession, but without ka. This can be seen in the respective patterns of gender agreement. The feminine clause-level agreement of (56) is ambiguous, since both Rosira ‘Lucilia’ and mati ‘mother’ are feminine. The ambiguity is cleared up, though, in (57). Here it can only be bati ‘father,’ the possessed nominal, which triggers the masculine clause-level agreement. This pattern of a possessed kinship term governing the gender of the noun phrase is evident also in (7) and (8) above. It can be seen, then, that kinship terms are not among the nouns which can be inalienably possessed.

Cases of alienable possession without ka are not common in Jaruára; they occur only when the possessed noun is a kinship term and there is a third-person possessor. Such examples do indicate, however, that the only

really distinctive characteristic of inalienable possession is the fact that the possessed noun determines the gender of the noun phrase.

Most nouns cannot be inalienably possessed. The ones that can are mostly body parts and other nouns which describe similar part-whole relationships. A few, such as bori/borone 'container,' are hard to pin down semantically. All inalienably possessed nouns are characterized, however, by having a very close relationship with the nouns which possess them.

A list of inalienably possessed nouns I have encountered in Jaruára is presented in appendix B. The list is incomplete, but gives an idea of the semantic and morphophonological parameters of inalienably possessed nouns.

A notable characteristic of inalienably possessed nouns is that many are marked for gender to agree with the possessor. The word for 'name,' for example, has two forms, ino and ini. One is used for agreement with masculine possessors such as aba 'fish' (58), and the other for agreement with feminine possessors such as awa 'tree' (59).

(58) Aba        ino        e-ne-ama-ra?  
       fish(M) name+M be.like-AUX-AF-INTERR+M  
       'What is the name of that fish?'

(59) Awa        abe        ini        ama-ke,    hiyi.  
       tree(F) insect+F name+F be-DECL+F beetle.sp(M)  
       'The name of that tree insect is hiyi.'

In a similar way, tori 'inside' in (60) agrees in gender with the feminine possessor faha 'water,' and the masculine form toro is used for agreement with the masculine possessor yifo 'hammock' (61).



'path' is revealed by the agreement in the verb. Iyo 'feces' in (62) is another noun which can be inalienably possessed but is not in this particular context. Like hawi 'path,' it has feminine inherent gender.

Interestingly, the unpossessed form of iyo 'feces' is different from either of the two inalienably possessed forms, yoti and yoto (cf. appendix B). There are a number of nouns listed in appendix B which, like iyo, have three different forms. One is the unpossessed form, and the other two are for inalienable possession by feminine and masculine nouns, respectively.

Some nouns that have a distinct unpossessed form have only one form for inalienable possession that is used whether the possessor is feminine or masculine. An example is atiwa 'thorn,' which has only one form, atine, which is used in all cases of inalienable possession. Some nouns, in fact, have only one form for all three uses. Moni 'sound,' for example, is unpossessed in (53) above, but the phonological form is identical to that used for inalienable possession by masculine (54) or feminine (55) possessors.

There are many inalienably possessed nouns which I have not yet observed in a context in which they are unpossessed. This is why no unpossessed form has been included for most of the nouns in Appendix B. In these cases I cannot be certain about what the unpossessed form is, or whether its inherent gender is feminine or masculine. Undoubtedly most or all of them have feminine inherent gender, since the only masculine noun I have encountered which can be inalienably possessed is atiwa 'thorn.'

For a few nouns, however, it seems unlikely that a context will be found in which they are unpossessed. For example, the noun boti/botone



refers to a stand of a particular given tree species, and it is hard to imagine its use without the species of tree being specified. Mate/mete 'stump' and boni/bono 'fruit' can be used in a generic way when the tree species is unknown or unspecified; but even then they do not occur as unpossessed, since the noun phrases awa mate 'tree stump' and awa boni 'tree fruit' are used.

Before going on to compare Jaruára with the other Arauan languages, here is a summary of the facts about inalienably possessed nouns in Jaruára.

(1) A relatively small subclass of nouns may be inalienably possessed. In the relation of inalienable possession, the possessive enclitic ka is not used, and the possessor determines the gender of the noun phrase.

(2) Many inalienably possessed nouns show gender agreement with the possessor.

(3) Inalienably possessed nouns can occur in contexts where they are unpossessed, revealing their inherent gender. Some nouns have a distinct form for this use.

The relation of inalienable possession exists with the same basic characteristics in the other Arauan languages (except in Paumari, see below). In Madija, the relation is called "obligatory possession" by Adams and Marlett (1987:11) and "intrinsic possession" by Monserrat and Silva (1986:16), but the basic facts are the same as those of Jaruára. The Madija examples below show "normal" possession with -kha (65) in which the morpheme pa (part of the noun phrase) agrees in gender with the possessed noun, and not with the possessor; and "obligatory" possession (66, 67) in

which there is clause-level gender agreement with the possessor, and the inalienably possessed noun apha-ni/ephe 'leaf' also shows gender agreement.

- (65) I-kha phowi pa wabowi dza.  
 1P-GEN string.hammock(M) ?+M tree.sp LOC  
 'Our hammocks were in the dugouts.'  
 (Adams and Marlett 1987:12)
- (66) ø-apha-ni ø-ime-ni.  
 3-leaf-F 3A-large-STAT+F  
 'Its leaves (of tsokero plant(F)) are large.'  
 (Adams and Marlett 1987:10)
- (67) ø-ephe ø-hidzora-i.  
 3-leaf+M 3A-wide-STAT+M  
 'Its leaves (of katapatshi plant(M)) are wide.'  
 (Adams and Marlett 1987:10)

Sentences (68)–(70) show that the situation is basically the same in Dení. Inalienably possessed nouns are described as having “predictable gender” (Lois Koop 1981/82:255).

- (68) Punikha uza dihi-tu-na-vi.  
 3S(F)+POSS house(M) burn-3-VB.CLASS-PERF+M  
 'Her house burned.' (Koop and Koop 1985:95)
- (69) ø-zapani kuma-ru.  
 3S-hand+F hurt-NONFOC+F  
 'Her hand hurts.' (Lois Koop 1981/82:265)
- (70) ø-zepe kuma-ri.  
 3S-hand+M hurt-NONFOC+M  
 'His hand hurts.' (Lois Koop 1981/82:265)

As is the case with Jaruára and Madija, it is the possessed noun that governs gender agreement (68) when -kha is used. And when a “predictable-gender” noun such as zapani/zepe 'hand' is possessed (69,70), then the

possessor governs gender agreement, both at the clause level and in the inalienably possessed noun.

As far as I can tell, inalienable possession as such has not been described for Jamamadí, although it has been noticed that there is possession without ka, and that some nouns have two forms, depending on the gender of the possessor (Barbara Campbell 1985:144,146). It seems clear, though, from examples such as those below, that two distinct syntactic relations are involved. Examples (71) and (72) show that when ka is used, there is gender agreement with the possessed noun, i.e. sibati 'banana' and bani 'meat,' respectively. But in (73) and (74) it is the possessor (awa 'tree' and wati 'arrow,' respectively) that governs clause-level gender agreement, and the inherent gender of bono 'fruit/shaft' is suppressed in this context.

- (71) oka        sibati        manakone  
       1S+POSS banana(F) price+F  
       'my banana price' (Barbara Campbell 1985:148)
- (72) oka        bani        manaki  
       1S+POSS meat(M) price+M  
       'my meat price' (Barbara Campbell 1985:148)
- (73) Yana        awa        bono    koro-hi-wite        habit        kaba-ra.  
       John(M) tree(F) fruit threw-agent-away+F happy(F) eat+F-DECL  
       'Happy (a dog) ate the fruit (that) was thrown away by John.'  
       (Barbara Campbell 1985:133)
- (74) Wati        bono    tii-ni        oda hawa-to-ne.  
       arrow(M) shaft cutting-NOM 1P finish-state-SC+M  
       'The arrow shaft cutting was finished by us.'  
       (Barbara Campbell 1985:160)

These examples also show that some nouns have a masculine and a feminine form, such as manakone/manaki 'price' (71,72) and that others, such as bono 'fruit/shaft' (73,74) only have one inalienably possessed form.

In Paumarí there is possession with and without ka-, and there is gender agreement with the possessor when ka- is not used—but only within the noun phrase. At the clause level, contrary to the other Arauan languages, gender agreement is always with the possessed noun, no matter what kind of possession is involved. In (75) below, for example, there is possession with ka-, and gender agreement with the possessed item, mai'da 'comb.' In (76) there is inalienable possession, and there are two different patterns of gender agreement: the possessed noun, jora-ni 'mat,' agrees in gender with the possessor, Maria 'Mary;' but the demonstrative and the verb agree in gender with jora 'mat,' and not with Maria 'Mary.'

- (75) O-karaga-'a-ha            ada    Fatima    ka-mai'da.  
 1s-find-ASP-THEME+M DEM+M Fatima(F) GEN-comb+M  
 'I found Fatima's comb.'  
 (Chapman and Derbyshire in press:100)

- (76) O-raba-'a-ha            ada    Maria    jora-ni.  
 1S-weave-ASP-THEME+M DEM+M Mary(F) mat (M)-F  
 'I wove Mary's sleeping mat.'  
 (Chapman and Derbyshire in press:i00)

This clause-level gender agreement with the possessed noun in inalienable possession constitutes an important syntactic difference between Paumarí and the other Arauan languages.

It seems also that in all the Arauan languages, the inalienably possessed nouns can occur in contexts where they are unpossessed. In Madija, the prefix to- when applied to body parts makes them into feminine

inherent gender nouns (Adams and Marlett 1987:10). In Dení and Jamamáí, apparently nothing has been written specifically on this subject; but both languages have inalienably possessed nouns with three forms, and presumably one form is the one used when the noun is unpossessed (Koop and Koop 1985; Robert Campbell, personal communication). As for Paumaráí, as we have seen, the possessed noun determines the gender of the NP in both types of possession, so inalienable possession is not really a separate syntactic relation in Paumaráí, at least not to the extent of the other Arauan languages.

Given the information on clause-level gender agreement in Jarúára in table 3, and given the fact that the masculine form of inalienably possessed nouns is used when the possessor is a third person masculine singular nominal, animate or inanimate (cf. (61,63)), it would seem reasonable to expect that the masculine form would also be used when the possessor was a third person masculine plural inanimate nominal. As (77) shows, this is indeed the case.

- (77) Fowa            iso            na-ka-me.  
       cassava(M) stalk+M CAUS-go-back+M  
       'He goes to get some cassava stalks.'

Surprisingly, though, there are a number of other person categories that call for the masculine form as well, which were not predicted in table 3. The examples below show the "masculine" form of inalienably possessed nouns used with first and second person singular possessors (78,79), and with first person plural exclusive and inclusive (80,81). (The feminine

forms for these nouns are mani (78), tabori (79,80), and tame baki (81), cf. appendix B.)

- (78) O-mano fowa-ke.  
 1s-arm swell-DECL+F  
 'My arm is swollen.'
- (79) O-ki-bana            ti-taboro-ya.  
 1s-go-IM. FUT 2S-home-OBL  
 'I will go to your house.'
- (80) Bare                    ka-ke--hare-ka,                    ota taboro-ya.  
 other.kind(M) go-come-PST.1(+EYEW)+M-DECL+M 1+3 home-OBL  
 'An Indian from another tribe has come to our village.'
- (81) e teme bako  
 1+2 foot inside.surface  
 'the sole of our foot'

As pointed out earlier in table 3, these are all persons that govern feminine agreement at the clause level, and (78) shows that this has not changed.

For a minority of inalienably possessed nouns, first and second person singular call for the feminine form, as indicated in (82) and (83).

- (82) Owisi karaso-na--ke.  
 1s+leg be.asleep-AUX-DECL+F  
 'My leg is asleep.'
- (83) Tiwini o-wato-o-ka-re.  
 2s+name 1s-know-1s-DECL-NEG+F  
 'I don't know your name.'

Also, it seems that for compound nouns, the second noun is usually the feminine form, while the first noun is usually the masculine form, for

first and second person singular possessors. Compare, for example, oteme baki 'the sole of my foot' with (81) above.

There are only a few persons which regularly call for the feminine form of inalienably possessed nouns. There is the third person feminine singular, of course, as illustrated in (59) and (60) above. But aside from this there are only two other cases where the feminine form of the nouns is used, i.e. third-person feminine plural (84), and third person masculine animate plural (85).

- (84) Awa        mate        fota-ke-re.  
       tree(F) stump+F big+P-DECL+F-NEG+F  
       'The tree stumps are not big.'
- (85) Aba    me atari        me sowe-nine-ke.  
       fish PL scales+F 3P remove-AUX+F-DECL+F  
       'They are scaling the fish.'

A summary of the pattern outlined above is contained in column I under Jaruára in table 4. (My data do not contain any examples where the possessor is second person plural, and where a choice of forms is possible. This is why I have used parentheses for this box in the table. I would expect that the masculine form is used in this case, based both on the overall pattern of Jaruára, and on comparison with the Arauan languages which are most closely related to Jaruára.) Column II under Jaruára indicates the pattern of clause-level gender agreement, from table 3, included here for the purpose of comparison. I have also included these same two kinds of information from the other four Arauan languages in the table, again for comparison.

Table 4. Choice of inalienably possessed noun forms as compared with clause-level gender agreement patterns, in five Arauan languages.

Person of Possessor	Jaruára		Dení		Madija		Jamamadí		Paumarí	
	I	II	I	II	I	II	I	II	I	II
1S	M(F)	F	M	F	M	F	M	F	M	F(M)
2S	M(F)	F	M	F	M	F	M	F	F	F
3S(F)	F	F	F	F	F	F	F	F	F	F
3S(M)	M	M	M	M	M	M	M	M	M	M
1+3	M	F	M	F	M	F	M	F	M	F(M)
1+2	M	F					M	F		
2P	(M)	F	M	F	M	F	M	F	F	F
3P(F)	F	F	F	F	F	F	M	F	M	M
3P(M) AN	F	F	M	M	M	M	M	F	M	M
3P(M) INAN	M	M								

Sources: (I) Lois Koop 1981/82:257; Adams and Marlett 1987:9; Barbara Campbell 1985:146; Chapman and Derbyshire in press 99,100.

(II) Cf. sources p. 19.

When the two columns for Jaruára are compared, it is evident that, while clause-level gender agreement is generally feminine, the form of inalienably possessed nouns that is generally chosen is the masculine one. Lois Koop (1981/82:261) notices this same phenomenon in Dení. She concludes that the “unmarked” gender for verb endings is feminine, but that for body parts it is masculine. As a matter of fact, the summaries in table 4 show that this is apparently true in all the Arauan languages. So,



although there is a good deal of variation (in both columns) from one language to another, there does seem to be some common principle at work. The reason for this seems to be that, in all these languages, it is possible for the masculine form of an inalienably possessed noun to co-occur with feminine clause-level agreement, but the opposite never occurs. That is, never does the feminine form of an inalienably possessed noun co-occur with masculine clause-level agreement. There must be some deeper explanation for this, involving the function of gender and gender agreement in these languages, but at this point it remains just an interesting fact.

## CHAPTER 3

### GENDER AGREEMENT IN TRANSITIVE CLAUSES

In chapter 1, several variables which determine gender agreement were discussed: first, whether the nominal is a noun (i.e. third person) or not; if it is a noun, then whether it is feminine or masculine; if it is masculine, whether it is singular or plural; and if it is plural, whether it is animate or inanimate. These variables were discussed only in the context of intransitive clauses, not because they are not relevant in transitive clauses (they are), but because in transitive clauses there is still another variable to consider—whether gender agreement at the clause level is with the subject or the direct object (hereafter referred to as S and O, respectively). In Jaruára discourse it is clear that, although there is usually gender agreement with the S, there are a significant number of cases where there is agreement with the O.

I have included table 5 so that the facts of gender agreement in "Peccary Hunt," the text contained in appendix C, can be seen more readily. In this chart, intransitive clauses are labeled I, followed by the S nominal in each case. For transitive clauses, the S and the O nominals are identified. Parentheses are used to indicate nominals which are omitted from the clause; that is, they are implicit. If one nominal unambiguously governs gender agreement, it is marked by square brackets. There are two

situations in which transitive clauses are ambiguous as to which nominal governs gender agreement. Occasionally it is because gender agreement is not indicated in the clause (as in clause 38); but usually it is because the S and the O both govern the same gender (as in 6, 24, and others).

Table 5. Charting of S and O nominals of "Peccary Hunt"

1. I - ota	14. [ <u>(kobaya)</u> ] - <u>ota</u> O S	27. I - ota
2. <u>yama</u> - <u>ota</u> O S	15. [ <u>(kobaya)</u> ] - <u>oye</u> O S	28. [ <u>kobaya</u> ] - <u>ota</u> O S
3. I - ota	16. <u>tamiyara</u> - [ <u>ota</u> ] O S	29. <u>Mito</u> - ( <u>kobaya</u> ) S O
4. <u>kobaya</u> - [ <u>yome me</u> ] O S	17. <u>kobaya</u> - [ <u>ota</u> ] O S	30. ( <u>Mito</u> ) - ( <u>kobaya</u> ) S O
5. <u>kobaya</u> - [ <u>yome me</u> ] O S	18. ( <u>kobaya</u> ) - [ <u>ota</u> ] O S	31. I - Mito
6. <u>yara</u> - ( <u>1S</u> ) O S	19. I - oye	32. <u>fowa</u> - [ <u>me</u> ] O S
7. <u>yara</u> - ( <u>1S</u> ) O S	20. I - e	33. <u>me</u> - <u>ota</u> O S
8. <u>yara</u> - <u>ota</u> O S	21. I - ( <u>1S</u> )	34. I - ota
9. [ <u>kobaya</u> ] - <u>ota</u> O S	22. I - ota	35. <u>yifari</u> - <u>ota</u> O S
10. I - (kobaya)	23. I - ota	36. I - ota
11. [ <u>(kobaya)</u> ] - ( <u>1S</u> ) O S	24. <u>Mito</u> - <u>kobaya</u> S O	37. I - ota
12. [ <u>(kobaya)</u> ] - <u>oye</u> O S	25. <u>kobaya</u> - [ <u>(1S)</u> ] O S	38. <u>kobaya ataro</u> - <u>me</u> O S
13. [ <u>(kobaya)</u> ] - <u>oye</u> O S	26. I - ota	39. ( <u>kobaya</u> ) - [ <u>ota</u> ] O S

(Table 5 cont.)

40. I - (1S)

41.  $\frac{\text{yama}}{\text{O}} - \frac{?}{\text{S}}$

42. 1 - yama kaminaba

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As table 5 shows, there are eight clauses in "Peccary Hunt" (4, 5, 16, 17, 18, 25, 32, 39) where there is unambiguous clause-level gender agreement with the S. But there are also a good number of clauses (9, 11, 14, 15, 28) in which it is the O that governs gender agreement.

This somewhat puzzling pattern of gender agreement, sometimes with the S and sometimes with the O, has been attested in the other Arauan languages as well. For the four languages which I am using for comparisons in this study, four different rules have been proposed to explain this situation. This is partly due to different linguistic facts in the four languages, and partly due to different theoretical viewpoints adopted by those who have written on the languages.

In Dení, the rule is simple: the S governs gender agreement, except when the S is first or second person (Lois Koop 1981/82:260). If the S is first or second person, gender agreement is with the O. (The two additional rules mentioned for Dení in Section 1 must also be kept in mind, i.e. that first and second persons always govern feminine agreement, as do mixed groups of males and females.)

It seems obvious that Jaruára is quite different than Dení in this respect. One has to look no farther than the text in Appendix C. There

are five transitive clauses in this text where there is unambiguous gender agreement with a first-person subject: 16, 17, 18, 25, 39. And there are cases in other texts where there is gender agreement with the O, and the S is not first or second person.

- (85) Awani me hita-ra-ri.  
 wasp PL 3.ERG+sting-NEG-PST.2(+EYEW)+M  
 'The wasps didn't sting him.'

Since in (85) the S, awani me 'wasps,' is feminine (recall from section 1 that all plural animate nouns govern feminine agreement in Jaruára), there is unambiguous gender agreement with the (implicit) O, i.e. Saba, a man. (The gloss '3.ERG' for the person prefix is justified below.)

For Paumarí two kinds of transitive clauses have been proposed, one in which an "ergative system" is operating, and another in which an "accusative system" is operating (Chapman and Derbyshire in press:6ff). "Ergative" clauses have the following characteristics: gender agreement with the O; SVO order; marking of the S with -a; marking of the O with the demonstrative; and use of the third-person subject prefix bi-.

"Accusative" clauses, on the other hand, are characterized by gender agreement with the S; OVS or SOV order; marking of the S with the demonstrative; marking of the O with -ra; and use of  $\emptyset$  as the third person subject prefix. According to Chapman and Derbyshire (in press:38),

"accusative" clauses have two special pragmatic functions. The OVS-ordered clauses are used to give special prominence to the O nominal, and the SOV-ordered clauses to give more prominence to the S nominal. (The SVO-ordered "ergative" clauses are unmarked for prominence.)

The facts of Jaruára are similar to those of Paumarí in some respects. There are two types of transitive clauses in Jaruára. In the most common type, which can be considered to parallel the Paumarí "accusative" type, the following are characteristic: gender agreement with the S; marking of the O with ra (but not always); and the use of O for the third person subject prefix. Most of the clauses in "Peccary Hunt" are of this type; and although the object marker ra does not occur in this particular text, examples (86) and (87) from other texts show its association with the other two variables. In both of these clauses, there is unambiguous gender agreement with the (implied) S, which is a man in each case, since the O in both cases is animate plural, and therefore feminine. (The 'chomeur' gloss for ra is justified below.)

- (86) Me ra ha-ne.  
       3P CHO call-AUX+M  
       'He called them.'
- (87) Yima me ra mowa-ne-bonaha.  
       Juma PL CHO fight-AUX+M-INTENT+M  
       '...so that he could fight the Juma (Indians).'

In a significant minority of Jaruára clauses, on the other hand, the following are characteristic: gender agreement with the O, and the use of hi- for the third person subject prefix.<sup>9</sup> These clauses thus can be considered to parallel the Paumarí "ergative" type described above. A good number of clauses in "Peccary Hunt" are of this type: 9, 11, 14, 15, 28, 29, and 30. And in the following examples from other texts, the association of the two variables is clear.

- (88) Maya           noko   aba       me hi-kaba-te-ama-ka.  
 tree.sp(M) seed+M fish.sp PL 3.ERG-eat-CUST-AFFIRM-DECL+M  
 'The aba fish eat the seeds of the maya tree.'
- (89) O-ka-niso  
 1S-POSS-younger. brother(M)
- ta-hi-na-haro-ama-ke,  
 give-3.ERG-AUX-PST.2(+EYEW)+F-AFFIRM-DECL+F
- oko               hayo       bonehe.  
 1S+POSS radio(F) INTENT+F  
 'My younger brother gave me that radio.'

In (88) and (89) there is unambiguous gender agreement with the O, i.e. maya noko 'maya seeds' and rayo 'radio,' respectively, and in both the third person subject prefix is hi-. This association is also clear in (85) above. (In (85) hi- is phonologically merged with the verb root ita 'sting.')

With these similarities between Jaruára and Paumarí in view, it could be that the best way to analyze transitive clauses in Jaruára is to postulate accusative and ergative systems. From a theoretical point of view, though, it seems to me preferable to postulate two constructions within a single system, if possible. (There are good reasons why this is apparently not possible for Paumarí, which I do not intend to go into in this thesis.) Two such "integrated" views have been proposed, one for Jamamadí and one for Madija.

As expected, the facts of Jamamadí parallel those of Jaruára quite closely. One type of transitive clause is characterized by gender agreement with the S, marking of the O with -ra (almost always), and the use of  $\emptyset$  for the third person subject prefix. The other type is characterized by gender agreement with the O, and the use of hi- for the

third person subject prefix. In addition, there is a difference in word order, but only in relative clauses--the order is SOV rather than the OSV of the first clause type (Barbara Campbell 1985:132).

The analysis proposed by Barbara Campbell (1985:132) is that this second construction is passive. The semantic patient becomes the surface S, and thus there is one simple gender agreement rule: the surface S governs gender agreement. I will return to the Jamamadí analysis in a moment; but first I wish to present the Madija analysis, so that the two can be compared.

Madija also has two transitive clause types that parallel those outlined above. In one type there is gender agreement with the S, the third-person subject prefix is  $\emptyset$ , and there is an additional verb prefix ki- when a third-person subject is plural. In the second type there is gender agreement with the O, the third-person subject prefix is i-, a suffix -mana indicates a plural third-person subject, and a suffix -bakhi is used when the O is plural and animate (Wright 1988:56).

Drawing on the concepts of Relational Grammar, Wright (1988) and Adams and Marlett (1988) claim that the first construction above is an "antipassive." That is, a clause that is semantically transitive becomes intransitive on the surface, because the patient, which is the O at the initial level becomes a "chomeur" at the "final" (i.e. surface) level. That is, it has no grammatical relation on the surface.

The antipassive construction can be visualized as follows (Adams and Marlett 1988:2):



(90)	Agent	Patient
Initial Level	subject	direct object
Final Level	subject	chomeur

A basic difference of this approach is that it postulates more than one level of grammatical relations. The initial level is not theoretically the same as the semantic roles. Although there may be a one-to-one correspondence of the two in this construction in Madija, this is not always true in other languages (cf., for example, Rosen 1984).

The argument for the antipassive is based on the similarities and differences among the various transitive and intransitive constructions. Most importantly, the antipassive is similar to intransitives in two respects. In both there is gender agreement with the S, and both use the third person subject prefix *ø-*. At the same time, clauses of the second type above are claimed to be simple transitives. They are fundamentally different than intransitives in these same two respects, i.e. they have gender agreement with the O, and they use *i-* for the third person subject prefix. In addition, simple transitives (unlike antipassives and intransitives) use *-bakhi* for agreement with plural animate objects.

The argument, thus, is that antipassives are like intransitives in these ways because they are intransitive on the surface, while simple transitives are different in the same respects, and in addition are the only clauses to have number agreement with the O – because they are the only clause type to have an O on the surface. Also, it is now possible to state a simple rule for gender agreement: there is gender agreement with the surface absolutive (i.e. the S of surface intransitives (including

antipassives) and the O of transitives). And it is now possible to label i-: it is the third person ergative subject prefix, i.e. for use only in surface transitives.

The Madija analysis contains one additional argument, regarding ki- and -mana, the indicators of a plural third person subject for antipassives and transitives, respectively. But the argument is quite involved, and as far as I can tell this aspect of Madija is irrelevant to Jaruára; so I will not go into these details here.

The Jamamadí and Madija analyses I have outlined above are quite different in their implications. Applied to Jaruára data, the Jamamadí analysis says that clauses such as (86) and (87) above are simple transitives, and that those like (85), (88), and (89) are passives. The Madija analysis, on the other hand, would say that (86) and (87) are antipassives, and that it is (85), (88), and (89) that are simple transitives.

Actually, either analysis will work with the Jaruára data. According to the Jamamadí analysis, ra would be a surface O marker, and hi- would be a third person agent prefix only used with passives. There would be gender agreement with the surface S in all constructions. According to the Madija analysis, ra would be a chomeur marker, and hi- would be the ergative third person subject prefix. Gender agreement would be with the absolutive. All rules would apply to the final (surface) level.

There is one reason, though, why the Madija analysis is in my opinion preferred for the Jaruára data. That is that it captures the basic similarity between antipassives like (86) and (87), and intransitives. Both constructions have gender agreement with the S, and both use Ø- for

the third person subject prefix. Simple transitives such as (85), (88) and (89) show a different pattern. They have gender agreement with the O, and they have a different third person subject prefix, hi-. Ra never occurs in simple transitives because there is an O, not a chomeur. Simple transitives are different from intransitives and antipassives because they are the only clauses which are transitive on the surface.

However, if the antipassive analysis is accepted for Jaruára, as I believe it should be, there is one problem. There are many more antipassive clauses in Jaruára discourse than simple transitive clauses. The proportions are even more disparate than the "Peccary Hunt" text would indicate. In the texts that I have transcribed, the overall proportion of antipassive to simple transitive clauses is about six to one. This may or may not be significant. But I would have expected a "derived" construction such as the antipassive to be in the minority, as for example passive clauses are in the minority in English. If this is significant, then it would be a point in favor of the passive analysis for Jaruára, since clauses such as (85), (88) and (89), which are in the minority, would be treated as passives.

Of course, just recognizing that a Jaruára speaker has these two constructions available does not explain the choice of one over the other in a given context. Possibly there is no firm rule to account for such choices. But on the other hand, it does seem that some tendencies can be observed in the distribution of these constructions.

Before I suggest a tendency, recall that in Paumari, "accusative" clauses have the pragmatic function of giving prominence to the S or the O, depending on the word order. Consider also the case of the passive in

English. It seems that one of the uses of the English passive is to topicalize the patient. It is not possible, however, to predict when English speakers will use the passive, at least partly because there are other ways of topicalizing the patient (by varying sentence stress for example, cf. Reinhart 1982:3).

Topicalization seems to be a relevant concept for explaining the choices Jaruára speakers make, as well, when they choose between the simple transitive and antipassive constructions. But since Jaruára is an ergative language, unlike English, it is the simple transitive construction which is used to topicalize the patient/O, while the antipassive is used to topicalize the S.

This hypothesis is based on a curious fact in Jaruára discourse: nouns are often omitted in a clause, presumably because they are understood. In the "Peccary Hunt" text, for example, the noun kobaya 'peccary' is omitted in clauses 10-15, 18, 29, 30, 31, 39; and Mito 'Milton' is omitted in 30, 31. In fact, kobaya 'peccary' is omitted more times (11) than it is included (8). In all of these cases except four (i.e. kobaya 'peccary' in 18, 39, and Mito 'Milton' in 30, 31) the noun which is omitted is the surface absolutive. That is, it is either the O of a simple transitive clause, or the S of an antipassive (or of an intransitive, in the case of clause 10), as determined by the gender agreement pattern, and the presence or absence of the ergative third person subject prefix hi-.

At least two of these exceptions--the omission of Mito 'Milton' in 30, 31--are possibly explainable by the fact that these clauses are the second and third clauses in one sentence (or at least they are in the same

breath group), so there is perhaps no need to repeat Mito 'Milton' after he is introduced in the first clause (29). Furthermore, there are even fewer exceptions in the other texts I have transcribed. In one text the facts are quite impressive. The main character is mentioned by name only three times at the beginning, and once in the middle of the story. His name is omitted in a total of 23 clauses, always as the surface absolutive.

It is thus possible to make the generalization that in Jaruára, if a noun<sup>10</sup> is omitted, it is very likely to be the surface absolutive. It seems that what is involved here is some notion of topic. Reinhart (1982) defines the topic of an English sentence in terms of "aboutness," and she points out that sentence topics in English are marked by low stress (p.4). I would add that they are also commonly referred to with pronouns rather than nouns. These phenomena seem to me fundamentally similar to the omission of nominals in Jaruára.

Barbara Campbell (1986:176,177) observes that two characteristics of topics (along with others) in Jamamadí discourse are that they tend to govern gender agreement, and to not be mentioned after their introduction. As we have seen, these are also characteristic of Jaruára discourse. She also states that the notion of topic is relevant in Jamamadí at at least three levels: episode, paragraph and subsidiary levels. I am not prepared at this point to form a hypothesis regarding at what level(s) the notion of topic might be relevant in Jaruára, but it would certainly be important to include this in future research.

An adequate theory of topic in Jaruára must also attempt to account for the presence of nominals, not only their absence. It is, of course, true that surface absolutive nominals are not always omitted. There are

undoubtedly a number of factors involved in determining whether a topic nominal is omitted or not in a given context. Possibly the following are among such factors: how many characters there are in the story, how often the characters change, and whether the story is familiar or not to the hearers.

## CHAPTER 4

### THE MORPHOPHONOLOGY OF GENDER AGREEMENT

Jaruára morphophonology is rich and complex, and it seems that most of the morphophonological variation occurs in the context of gender agreement. At the present state of my knowledge of Jaruára, I am not able to give a full treatment of this variation, or even to separate what is due to gender agreement and what is due to other causes. Rather, what I intend to do in this last chapter is to show the main kinds of alternations that are associated with gender agreement. The analysis of the phonological processes responsible for these alternations must wait until a later date, when Jaruára morphophonology can be studied as a whole.

In previous chapters I have already begun to give an idea where there is gender agreement in the clause, and where there is not. Inherent gender nouns never show any gender agreement. Inalienably possessed nouns usually do, but a sizable minority do not, since for nouns such as nabati 'stomach' the same form is used for both genders. There is almost always gender agreement in the verb, but never in all its constituents.

The verb typically has one or more prefixes and suffixes, in addition to the root. Prefixes, whether person-agreement subject prefixes or others, never show gender agreement. In the two pairs of sentences below, for example, it is clear that the third person ergative prefix hi-





Verb roots that take the auxiliary, on the other hand, do not show gender agreement. Rather, it is the auxiliary that shows agreement. This is evident in (99,100) below, where the verb root *amo* 'sleep' is invariable, whereas the auxiliary *-na/-ne* shows gender agreement.

- (99) *Amo-na-awine-ke.*  
 sleep-AUX+F-INFR+F-DECL+F  
 'It appears she is sleeping.'
- (100) *Amo-ne-awa-ka.*  
 sleep-AUX+M-INFR+M-DECL+M  
 'It appears he is sleeping.'

The situation of verb suffixes is similar to that of roots. A few suffixes never show gender agreement, for example *-te* 'customarily/characteristically' in these sentences.

- (101) *Kanawa itaoba to-ha boka-te-ra-ama-ke.*  
 canoe(F) tree. sp(M) 3-be sink-CUST-NEG+F-AF-DECL+F  
 'A canoe made of *itaoba* wood does not sink.'
- (102) *Karafokana, kome-ni kita-te-re-ama-ka.*  
 ant.sp(M) hurt-NOM strong-CUST-NEG+M-AF-DECL+M  
 'The sting of the *karafokana* ant doesn't hurt much.'

Most verb suffixes, though, do show gender agreement at least in some contexts. The suffix for negation, for example, shows gender agreement in the context shown in (103) and (104); but in that of (105) and (106) there is only one form for both genders.

- (103) *Siba-ka-re.*  
 bad-DECL-NEG+F  
 '(The shoe(F)) fits well.'

- (104) Aba ima-ka-ra.  
 fish(M) fat-DECL-NEG+M  
 'The fish has little fat.'
- (105) Makari siba-o-na  
 clothing(F) look.for-1S-AUX+F  
  
 o-wasi-ra-ra-ke.  
 1S-find-NEG-PST.1(+EYEW)+F-DECL+F  
 'I looked for my clothes, but couldn't find them.'
- (106) Heroso hiya-ra-re-ka.  
 watch(M) good-NEG-PST.1(+EYEW)+M-DECL+M  
 'The watch is broken.'

There are many verb suffixes that always show gender agreement. An example is the near past tense suffix -ra/-re, in (105) and (106) above.

Aside from nouns and verbs, there are few other words that show gender agreement. But then, there are not many Jaruára words that are not nouns or verbs. This is probably mainly due to the fact that most adjectives are actually a subclass of verbs in Jaruára, since they use much of the same morphology as other verbs.

There are some words, though, that belong to other classes, and some of them show gender agreement. Examples are the demonstrative pronouns ifa/ife, the question word hibaka/hike, and the adverb haro/hari illustrated below.

- (107) Hibaka ama-ri?  
 who+F be-INTERR+F  
 'Who is it?' (referring to a woman)
- (108) Hike ama-ra?  
 who+M be-INTERR+M  
 'Who is it?' (referring to a man)
- (109) Ifa ama-ke.  
 that+F be-DECL+F  
 'That's the one.'

- (110) Ife ama-ka.  
that+M be-DECL+M  
'That's the one.'
- (111) Maka hofine-ke haro.  
snake(F) lie+F-DECL+F there+F  
'There's a snake lying there.'
- (112) Inohowe hofa-ka hari.  
alligator(M) lie+M-DECL+M there+M  
'There's an alligator lying there.'

Most of the morphophonological alternations involved in gender agreement are vowel alternations. That is, no segment or sequence of segments is added or subtracted, only the quality of a vowel is changed. There are four vowels in the Jaruára phonological inventory, so if we admit the possibility of any vowel representing feminine agreement, and any vowel representing masculine agreement, then there are twelve possible alternations. It seems remarkable that at least eight of the possible alternations actually occur. That is, at least the following alternations (feminine agreement first) are found: a/e, e/a, a/i, i/a, e/i, i/e, i/o, o/i. The ones which do not occur, or which I have not yet seen, are a/o, o/a, e/o, o/e. In the description of these alternations which follows, I do not attempt to be exhaustive, but only to show the more common contexts where each alternation occurs.

The first alternation, a/e, is quite common in verb roots (cf. 98, 99 above), and in many inalienably possessed nouns, such as afe/efe 'leaf'<sup>11</sup> and others (cf. appendix B). It also occurs in the negation suffix -ra/-re (101,102) and the near past suffix -(ha)ra/-(ha)re (105,106).

The e/a alternation occurs in the auxiliary verb -na/-ne (95,96), and in many common suffixes, including the declarative suffix -ke/-ka



- (121) Yima me one wati-ka-na-make hari.  
 Juma PL other+F catch-SIG.OTH-AUX-again ?  
 'He is going to catch more Juma (Indians).'
- (122) Manira owa hi-ha-hare-ka.  
 Manira other+M 3.ERG-keep-PST.1(+EYEW)+M-DECL+M  
 'Manira kept the other (photograph(M)).'

The next alternation, a/i, is found only in the 'optional' first syllable of some verb suffixes. (More research needs to be done on this syllable; at this point the most that I can say is that it seems optional when preceded by a verb root ending with /a/, but mandatory when preceded by a root or suffix that ends with any of the other three vowels.) Two of the suffixes which have this alternation are the near past (non-eyewitness) -(ha)ni/- (hi)no (123,124) and -(ha)bone/- (hi)bona 'intensive' (125,126).

- (123) Waho bofe-ya maka ita-hani-ke.  
 tree.sp(F) under-OBL snake(F) stay-PST.1(-EYEW)+F-DECL+F  
 'The snake was under the waho log.'
- (124) Bibiri to-ke-hino-ka, serika  
 Bibiri(M) away-go+M-PST.1(-EYEW)+M-DECL+M tree.sp(M)  
 siri-ne bonaha.  
 cut-AUX+M INTENT+M  
 'Bibiri left to cut serika trees (to get latex).'
- (125) Rosira mati ta-sawi-habone-ke.  
 Lucilia(F) mother(F) ?-come-INTENT+F-DECL+F  
 'Lucilia's mother will come.'
- (126) Afoso ite-hibona-ka.  
 Alfonso(M) stay+M-INTENT+M-DECL+M  
 'Alfonso will stay.'

The i/a alternation occurs in the interrogative suffix -ri/-ra (127,128), and it also occurs as part of the ine/a alternation, which in turn occurs in many verb roots (cf. 111,112), in the auxiliary -nine/-na,<sup>12</sup> (129,130), and in the modal -awine/-awa (cf. 99,100):

(127) Bari e-na-awine-ri?  
 ax(F) how.many-AUX+F-INFR+F-INTERR+F  
 'How many axes are there?'

(128) Hike ka yobe ama-ra?  
 who+M POSS house(M) be-INTERR+M  
 'Whose house is that?'

(129) Boi ha-nine-ke.  
 cow(F) call-AUX+F-DECL+F  
 'The cow is lowing.'

(130) Awi ha-na-ka.  
 tapir(M) call-AUX+M-DECL+M  
 'The tapir is whistling.'

The next alternation, e/i, is not common. I am aware of only two contexts, i.e. the "optional" first syllable of the distant past (non-eyewitness) -(he)meye/-(hi)mata (131,132) and the word bite/biti (133,134), which is the kinship term for 'daughter/son' and also can be used as an adjective meaning 'small.'

(131) Yima me wata-ma-re-hemete-mone-ke.  
 Juma PL(M) exist-back-NEG-PST.3(-EYEW)+F-REPORT+F-DECL+F  
 'The Juma (Indians) were no more.'

(132) Faya to-kiyoma-make-himata-mona-ka fahi.  
 then away-enter-again-PST.3(-EYEW)+M-REPORT+M-DECL+M then.  
 'Then (the Juma man) went back inside.'

(133) Yimawa bite ini seo-ka-na-ka.  
 knife(F) small+F blade+F sharpen-SIG.OTH-AUX-DECL+M  
 'He is sharpening the small knife.'

(134) Bani biti o-wa-habone-o-ke.  
 animal(M) small+M 1S-see+F-INTENT+F-1S-DECL+F  
 'I'm going to look at the birds.'

The i/e alternation is not common, either. It is found only in one verb suffix, and in one inalienably possessed noun. The suffix, -ni/-ne (135,136) is used for questions, and can replace -ke/-ka in declarative clauses. Ihi/ehene (137,138) may not actually be a noun, since its meaning 'because of/due to' is not very noun-like; but I have placed it in the class of nouns because it behaves like other inalienably possessed nouns.

- (135) Ti-fimi-ni?  
2S-be.hungry-ALT+F  
'Are you hungry?'
- (136) Tama-sa-ne-awa-ne?  
many-still-?-INFR+M-ALT+M  
'Are there many (pieces of kona root(M)) left?'
- (137) Makari tohiya-ra--ke, atabo ihi.  
clothing(F) get.dirty-PST.1(+EYEW)+F-DECL+F mud(F) due.to+F  
'The clothes were dirty with mud.'
- (138) Makari hoti-hara-ke, baroro  
clothing(F) get.a.hole-PST.1(+EYEW)+F-DECL+F cockroach(M)  
  
ehene.  
due. to+M  
'A cockroach put a hole in the shirt.'

One of the most common alternations is i/o, since many inalienably possessed nouns have it, for example tori/toro 'inside' in (60,61). Two verb suffixes also have this alternation, i.e. the imperative -hi/-ho (139,140) and the near past (noneyewitness) -(ha)ni/-(hi)no (cf. 123,124).

- (139) Hima, hoka-kabote-ti-bisa-hi!  
let's.go pull-quickly-2S-also-IMP+F  
'Hurry, you pull (the rope(F)) too!'
- (140) Koro-ti-nisa-ho!  
throw-2 S-down-IMP+M  
'Throw (the grasshopper(M)) down!'

The last vowel alternation to be discussed is o/i. It occurs in two verb suffixes, the past (eyewitness) -(ha)ro/- (hi)ri (141,142) and the distant past (eyewitness) -(ha)maro/- (ha)mari (143,144).

- (141) Okaniso  
 1S+POSS+younger.brother (M)
- ta-hi-na-haro-ama-ke, oko  
 give-3.ERG-AUX+F-PST. 2 (+EYEW)+F-AF-DECL+F 1S+POSS
- rayo       bonehe.  
 radio(F) INTENT+F  
 'My brother gave me that radio.'
- (142) Okaniso  
 1S+POSS+younger.brother (M)
- ta-hi-ne-hiri-ama-ka, oko  
 give-3.ERG-AUX+M-PST. 2 (+EYEW)+M-AF-DECL+M 1S+POSS
- moto                bonaha.  
 motorcycle(M) INTENT+M  
 'My brother gave me that motorcycle.'
- (143) Ati    ehene        ota        ka-ma-hamaro-ota-ke.  
 voice due.to+M 1+3 (F) go-back-PST.3 (+EYEW)+F-1+3-DECL+F  
 'We went back home because of what he said.'
- (144) Okobi                        hiyari  
 1S+POSS+father (M) speak+NOM
- fawa-ne-mari-ama-ka fahi.  
 stop-AUX+M-PST.3 (+EYEW)+M-AF-DECL+M then  
 'Then my father stopped talking.'

Finally, there is one morphophonological change tied to gender agreement which does not involve a vowel change; rather, it involves the addition of a syllable. This is the -ne which is found on a number of inalienably possessed nouns, on the masculine form. Compare, for example, hawi and hawine 'path' in (62) and (63). It is also true, however, that for some inalienably possessed nouns, both the feminine and masculine forms



are marked with -ne so that it distinguishes not feminine and masculine, but rather the inalienable possessed form from the unpossessed form. Examples are afo/afone 'heart of palm' and atiwa/atine 'thorn' (where the order is unpossessed form/inalienably possessed form).

Although there are many differences in the details of morphology between Jaruára and the other Arauan languages, many of the morphophonological principles at work are basically similar. The characteristics all five languages share are the following. Gender agreement is mainly found in the verb and in inalienably possessed nouns, with some of the words from other classes showing gender agreement. Within the verb, some suffixes show gender agreement and some do not. In all five languages, the most common type of morphophonological change is vowel alternation, but all have at least one pattern in which a full syllable is added for one gender (Montserrat and Silva 1986:33; Adams and Marlett 1987:3,5,9; Chapman and Derbyshire in press:99,100,102,118ff; Robert Campbell 1987; Barbara Campbell 1985:146,149,150; Koop and Koop 1985:7,25,28.)

Some important points of difference include the following. In Paumarí verb roots never show gender agreement, and apparently this is true for Dení as well (Shirley Chapman, personal communication; Koop and Koop 1985). Jaruára and Jamamadí are the only two Arauan languages that have some inalienably possessed nouns which do not show gender agreement; and they are also the only two that have no consonant alternations (Barbara Campbell 1985:144). Consonant alternations in the other languages include the following: the Madija adjective suffix -ni/-hi, the Paumarí thematic (verb) suffix -ja/-a/-ra, and the Dení perfective aspect -ni/-vi (Montserrat

and Silva 1986:26; Chapman and Derbyshire in press:150; Koop and Koop 1985:7). In Paumari and Dení there can be gender agreement in only one place in the verb (Chapman and Derbyshire in press:149; Lois Koop 1981/82:258). Finally, Dení is unique in having a rule saying that when certain final verb suffixes do not show gender (most do), the last vowel of the preceding suffix changes to show gender agreement (Koop and Koop 1985:20).

## NOTES

1. The unpublished sources referred to in Derbyshire 1986 and in this thesis are authored by members of the Summer Institute of Linguistics, and many are available in microfiche from the Academic Book Center, 7500 W. Camp Wisdom Rd., Dallas, Texas 75236. Those that are not available in microfiche can be obtained directly from the authors.
2. All transcriptions in this thesis, both of Jaruára and of the other Arauan languages, are orthographic. The phonemes of Jaruára are /i/, /e/ ([e]~[ɛ]), /o/ ([u]~[o]), and /a/; /b/, /t/, /k/, /f/ ([ɸ]), /s/, /h/, /m/, /n/, /r/ ([ʁ]~[l]), /w/, and /y/.
3. In Jaruára, a given morpheme may not have two variants in every context. For example, the auxiliary -na/-ne has feminine and masculine forms where it comes at the end of the verb; but it only has one form, -na, when it precedes the recent past suffix -ra/-re. The verb word wai-ne 'he bit' found in clause 13 of the text in appendix C would be wai-na if there were feminine agreement. But it is -na and not -ne that is used in wai-na-re-ka 'he bit' in clause 12, even though there is obvious masculine agreement in the verb word. If there were feminine agreement, i.e., if the verb were wai-na-ra-ke, -na would remain the same. This is why the auxiliary suffix is marked

as showing masculine agreement in clause 13, whereas it is not marked as showing gender agreement in clause 12. This is the rule I have tried to follow in my notation: a morpheme is only marked as showing gender agreement if another variant is possible in that particular morphological sequence.

4. He also said that some plants have a stronger spirit than others, and it would be interesting to investigate whether this correlates with gender classes.
5. However, Lois Koop (1981/82:254) says that all nouns related to the earth, such as shiba 'stone,' erekesi 'clay,' and vatiza 'garden' are feminine.
6. For one thing, there are no sentences in my data where any place names or nouns of the category "other natural phenomena" are plural. Also, I include heavenly bodies among animate nouns based on (a).

- (a) Amowa me tama-ke.  
 star PL many-DECL+F  
 'There are many stars.'

But I have also come across (b),

- (b) Abariko siko-ne-awa-ka.  
 moon/month(M) five-AUX+M-INFR+M-DECL+M  
 'There are five months.' (i.e., she is five months pregnant.)

where abariko 'moon/month' is inanimate by my criterion since there is masculine agreement. However, it is possible that abariko is only inanimate when it means 'month,' but animate when it means 'moon.' For further questions regarding the animate/inanimate distinction, cf. also note 7.

7. There is some evidence that animate and inanimate feminine nouns can be distinguished by another grammatical means. It appears that the pluralizers -rawa (49) and me (45) are only used for feminine and masculine animate nouns, respectively, but more research needs to be done on this.
8. "Animate" for Paumarí is defined as humans and large animals, while other nominals (including small animals) are inanimate (Chapman and Derbyshire in press:130).
9. Apparently hi- is not used when the O is first person singular. Instead, when there is gender agreement with the O, an extra o- '1S' is inserted near the end of the verb, as in (c).

(c) Bote                      owa ita-hare-o-ke.  
       sting-ray(M) 1S   sting-PST.1(+EYEW)-1S-DECL+F  
       'The sting-ray stung me.'

Compare (d) from the same text:

- (d) Bote owa ita-ka.  
 sting-ray(M) iS sting-DECL+M  
 'The sting-ray stung me.'

It seems that even if the first-person singular is the possessor of the O, it is treated as the O in this construction:

- (e) Oma oko kabikana  
 piranha(M) 1S+POSS hook(F)  
 to-wa-ka-ma-re-o-ke.  
 away-SIG.OTH-go-back-PST.1(+EYEW)-1S-DECL+F  
 'A piranha stole my hook.'
- (f) Bahama oko wati  
 fish.sp(M) 1S+POSS arrow(M)  
 baka-na-kosa-re-o-ke.  
 break-AUX-in.two-PST.1(+EYEW)-1S-DECL+F  
 'A bahama fish broke my arrow in two.'

Compare (g).

- (g) Oma oko kabi kana  
 piranha(M) 1S+POSS hook(F)  
 to-wa-ka-ma-hare-ka, mati kihi.  
 away-SIG.OTH-go-back-PST.1(+EYEW)-DECL+M line(F) too  
 'The piranha stole my hook, and the line, too.'

I do not know if this construction is used with any other person except the first person singular.

10. It appears that only nouns, and not pronouns, may be omitted in Jaruára discourse. Furthermore, for a noun phrase involving inalienable possession, apparently only the possessor may be omitted.

11. I have purposely not included a discussion of whether a vowel change affects only one vowel or more than one, and whether the vowel(s) affected is(are) final or not. These questions will have to be taken up in future morphophonological analysis.
12. Recall that in another context (99,100) the auxiliary is -na/-ne, so that -na is the feminine form in one context, but the masculine form in another. The case of the negative suffix is even more striking. In one context (101,102) it is -ra/-re; but in (103) and (104) it is just the opposite, -re/-ra.

## APPENDIX A

### KEY TO ABBREVIATIONS



## APPENDIX A

## KEY TO ABBREVIATIONS

Jaruára:

1	
1+2	first person
1+3	first person plural, inclusive
2	first person plural, exclusive
3	second person
AF	third person
ALT	affirmative
AN	alternative final suffix
AUX	animate
CAUS	auxiliary
CHO	causative
CUST	chomeur
DECL	customary
DUAL	declarative
ERG	dual subject
(+EYEW)	ergative
(-EYEW)	eyewitness
(F)	non-eyewitness
+F	feminine inherent gender
FUT	feminine gender agreement
gen.	future
IM.FUT	generic term
IMP	immediate future
INAN	imperative
INFR	inanimate
INSTR	inferential
INTENT	instrumental
INTERR	intensive
(M)	interrogative
+M	masculine inherent gender
NEG	masculine gender agreement
NOM	negative
OBL	nominalizer
P	oblique
PL	plural
PST.1	pluralizer
PST.2	immediate
PST.3	past past
POSS	remote past
	possessive

Jaruára (cont.)

REPORT	reportive
SIG.OTH	significant other
sp	species

Other Languages:

3A	third person, absolutive
ASP	aspect
DEM	demonstrative
GEN	genitive
LOC	locative
NONFOC	non-focus
PERF	perfective
SC	stem closure
STAT	stative
THEME	theme
VB.CLASS	verb class

## APPENDIX B

### LIST OF INALIENABLY POSSESSED NOUNS

## APPENDIX B

## LIST OF INALIENABLY POSSESSED NOUNS

Fem.	Masc.	1st Person Singular	Unpossessed Form	Gloss
abate	ebete	obete		tongue, cheek
abe	ebene		yama abe(F)	insect
afe	efe			leaf
afone-----afone				heart of palm
akabori	(n)			new leaf
akori-----akori				cotton
atahone-----atahone				sap
atari	ataro			skin, scales, bark
ate	ete	owete		forehead; edge (e.g. of stream)
ate mate	ete mete	owete mete		front of waist
ati-----ati		owati		voice
atine-----atine			atiwa(M)	thorn
ator-----ator		oko atori		decoration
awe	ewene			handle, stick, beam
baikani-----baikani				middle
baki	bako			underside
bari-----bari		obari		back, outer part
behe-----behe				new leaf
beheri-----beheri		(n)		beside
bofe-----bofe			bofe(F)	lower part, under; the ground
boko-----boko		oboko		chest
boko hoti---boko hoti		oboko hoti		notch in middle of chest
boni	bono	obono		beak, snout; fruit
	bono kone	obono kone		mustache
bori	borone		boro(F)	basket, container, pen
bosiri-----bosiri				scent gland (of peccary)
boti	botone			stand (of tree species)

botofi-----botofi			hardest part of
eenoki-----eenoki	oko eenoki		tree trunk
ame          emene	oko emene	ama (F)	waist, middle
			blood,
			menstruation
enekeri-----enekeri	oko enekeri		jaw, gills
enete kone	onete kone		beard (on chin)
eyeheri-----eyeheri	oko eyeheri		companion
fanaki          fanako	ofanoko		thigh
faroboti----faroboti	ofaroboti		armpit
fehe          fehene			juice, sap
habi          habo			root
hani          hano		yama hani (F)	writing, design,
			drawing
hasabori----hasabori	oko hasabori		lungs
hawi          hawine		hawi (F)	path
hife          hifene			egg
hiwe          hiwene			heat
hoti          hotone		hoti (F)	hole
ibe-----ibe			piece
ifi          ifo	owifi		lower lip
ihi          ehene	owehene		due to
ime-----ime	oko ime		meat
ini          ino	owini		tooth; name;
			branch
ino hoti----ino hoti	onohoti		mouth
ino hoti      ino hoti	onohoti fehe		saliva
fehe      fehene			
isi          iso	owisi		lower leg,
			handle, piece
			of stalk
isi ate      iso ete	owisi ate		shin
isi nabati   iso nabati	owisi nabati		back of lower
			leg
isi witi      iso witi	owisi witi		knee
kanamori----kanamori	oko kanamori		shadow, spirit,
			reflection,
			photograph
kobabari----kobabari			joint
kome          komene			pain
kori          korone			nakedness
kote-----kote			piece
kowani-----kowani			far side
mahi          maho	omoho		smell
mani          mano	omano	mani (F)	arm, tributary,
			front paw
mani          mano			inside of elbow
tehekani   tehekani	omano tehekani		
mati          matone		mato (F)	vine, rope, cord,
			string, inside
			bark
mate          mete			tree trunk
mate bari      mete bari	omete bari		buttocks
mese-----mese			top surface

meteri-----meteri				feathered breast (of birds)
moni-----moni	omoni	moni (F)		noise, sound
mowe-----mowe				blossom
nabati-----nabati	onabati			stomach
namiti-----namiti	onamiti			neck
namiti bari-namiti bari	onamiti bari			back of neck
namiti namiti	onamiti			
hotokori----hotokori	hotokori			throat
neme-----neme		neme (F)		sky; top part
noki noko	onoko			eye, face; seed; opening end
noki baki noko bako	onoko baki			cheek
	noko bako	onoko baki		beard on side of face
	kone	kone		
nokobiri----nokobiri		nokobi (F)		door
noki fehe noko fehene	onoko fehe			tear
noki kori noko korone	onoko kori			eye
noki masiri noko masiri	onoko masiri			eyelash
(kone) (kone) (kone)				
noki noko	onoko yowahari			eyebrow
yowahari yowahari	(kone)			
(kone) (kone)				
nokosi-----nokosi	onokosi			in front of
nowati-----nowati	(n)			in back of
rike rikene	oko rikene			wave
saharine----saharine		sahari (F)		broth
sikirine----sikirine		siki (F)		white sand
sobori-----sobori	oko sobori			navel
(n) sokone				starchy juice
	sowiri	oko sowiri		penis
tabori taboro	otaboro	tabora (F)		place, village, home
tafe tefe				food
tahari-----tahari	oko tahari			rib
tame teme	oteme			foot, footprint, back paw
tame baki teme bako	oteme baki			sole of foot
tame bari teme bari	oteme bari			top of foot
tame rabo teme rabo	oteme rabo			ankle
tame temene	oko temene			grave
tanarine----tanarine		tana (F)		rack
tati-----tati	otati			head
tati afone--tati afone	otati afone			brains
tati kone---tati kone	otati kone	tata kona (F)		hair (of head)
tehe tehene				medicine
tene	otene			scrotum
tomari-----tomari				section of bamboo
tome tomene				piece
tone-----tone				bone
tori toro				inside part

tosi-----tosi	otosi		waist
tosi bari---tosi bari	otosi bari		lower back
wahati-----wahati	oko wahati		liver
warabi/        warabo/	owarabo/		ear
narabi        narabo        onarabo			
warabi awe    warabo ewene			horn
watari        watarine	oko watari		dream
wati-----wati			place of ____
wehe        wehene			brightness,
			light
witi-----wati	owiti		nose; edge
wiye        wiyene		yama wiye(F)	box, container
ye-----ye	oye		hand, finger
ye atari    ye ataro	oye atari		finger nail
ye baki     ye bako	oye baki		palm of hand
ye bari----ye bari	oye bari		back of hand
yehe        yehene	oko yehe	yaha(F)	fat
ye hone     ye honene	oye hone		instrument, tool
ye tabi     ye tabi	oye tabi		wrist
ye tonokori-ye tonokori	oye tonokori		knuckles
yifori-----yifori			tail
yohari-----yohari	oko yoha		breast
yohari fehe yohari fehene	(n)		mothers milk
yohari iti--yohari iti	oko yoha iti		breast
			(including
			area
			surrounding)
yohari noki yohari noko	oko yoha noki		nipple
yokari-----yokari	oko yoka	(n)	urine
yokohori----yokohori			stinger
yome        yomene			indistinct
			figure, outline
yoti        yoto	oko iyo	iyō(F)	feces
yoti tafe    yoto tefe	oko yoto tefe		intestines

(n) not elicited, but probably exists

## APPENDIX C

### A SHORT JARUÁRA TEXT



## APPENDIX C

## Peccary Hunt

by José Bucana

- (1) Ota to-wa-ka                      (2) yama                      ota yete-na                      (3) ota to-wa-ka.  
 1+3 away-DUAL-go+F                      jungle(F) 1+3 hunt-AUX+F                      1+3 away-DUAL-DECL+F  
 We went hunting.
- (4) Kobaya    yome me wasi-hara-ke.  
 white-collared peccary(M) dog PL find-PST.1(+EYEW)+F-DECL+F  
 The dogs found a white-collared peccary.
- (5) Kobaya                      yome me kiyō-ha.  
 peccary(M) dog PL hole.up-?+F  
 The dogs holed up the peccary.
- (6) Yara                      ti-o-na.  
 trap(F) cut-1S-AUX+F  
 I cut (the sticks for) a trap.
- (7) Yara                      o-kowa.  
 trap(F) 1S-weave+F  
 I wove the trap.
- (8) Yara                      ota na-wita.  
 trap(F) 1+3 CAUSE-stay+F  
 We put the trap in place (at the end of a hollow log).
- (9) Kobaya                      ota kawa-ka-ne.  
 peccary(M) 1+3 poke-INSTR-AUX+M  
 We poked the peccary (with sticks).
- (10) Ka-me                      (11) ma-o-ka-ne.  
 go-back+M                      hold-1S-INSTR-AUX+M  
 He came out, and I held him (against the wall of the trap with a stick).
- (12) O-ye                      wai-na-re-ka.  
 1S-hand bite-AUX-PST.1(+EYEW)+M-DECL+M  
 He bit my hand.

- (13) O-ye wai-ne.  
1S-hand bite-AUX+M  
He bit my hand.
- (14) Ota nabo-he.  
1+3 kill-?+M  
We killed him.
- (15) Ota horo-ka-mise.  
1+3 pull-SIG.OTH-up+M  
We pull him up (out of the trap).
- (16) Tamiyara ota sa-na.  
tree.sp(M) 1+3 pull.off-AUX+F  
We pulled off (some inner bark from) a tamiyara tree.
- (17) Kobaya ota wete-na-ota-ke waha.  
peccary(M) 1+3 tie-AUX-1+3-DECL+F now  
Then we tied up the peccary.
- (18) Ota wete-na.  
1+3 tie-AUX+F  
We tied him up.
- (19) 'O-ye koma-ke.  
1S-hand hurt-DECL+F  
'My hand hurts.
- (20) E to-wa-ka-ma-haba-e-ke' (21) o-na-hara-o-ke.  
1+2 away-DUAL-go-back-FUT+F-1+2-DECL+F 1S-say-PST.1(+EYEW)-1S-DECL+F  
Let's get going, ' 1 said.
- (22) Ota ka-ka-ma-ota-ke fahi.  
1+3 DUAL-go-back-1+3-DECL+F then  
So we started home.
- (23) Ota ka-ka-ma.  
1+3 DUAL-go-back+F  
We were going.
- (24) Mito kobaya weye-ne.  
Milton(M) peccary(M) carry-AUX+M  
Milton carried the peccary.
- (25) Kobaya wara-o-na.  
peccary(M) take-1S-AUX+F  
I took the peccary.
- (26) Ota ka-ka-ma.  
1+3 DUAL-go-back  
We went futher.

- (27) Ota ka-ka-ma.  
1+3 DUAL-go-back  
We went further.
- (28) Kobaya ota ka-ka-me.  
peccary(M) 1+3 SIG.OTH-go-back+M  
We were coming with the peccary.
- (29) Mito wara-hi-na-me (30) weye-hi-ne  
Milton(M) take-3.ERG-AUX-back+M carry-3.ERG-AUX+M
- (31) kobo-hi-ka-na-ma-hare-ka tabora-ya.  
arrive-?-SIG.OTH-AUX-back-PST.1(+EYEW)+M-DECL+M village(F)-OBL  
Milton took the pig, and he arrived at the village carrying it.
- (32) Fowa me koro-na-ni (33) me ota wasi-ma.  
cassava(M) 3P plant-AUX-PST.1(-EYEW)+F 3P 1+3 find-back+F  
We saw some of the people, who were planting cassava (I think).
- (34) Ota ka-ma-wa-ota-ke, waha.  
1+3 go-back-now-1+3-DECL+F now  
We all came on together.
- (35) Yifari ota yome, fatara-ya.  
banana(F) 1+3 eat garden(F)-OBL  
We ate bananas in the garden.
- (36) Ota ka-ma (37) ota kobo-ka-na-ma.  
1+3 go-back+F 1+3 arrive-DUAL-AUX-back+F  
We came on, and arrived.
- (38) Kobaya ataro me ite.  
peccary(M) skin+M 3P skin  
They skinned the peccary.
- (39) (unintelligible word) ota kaba-wa-ota-ke fahi.  
? 1+3 eat-now-1+3-DECL+F then  
Then we ate the peccary.
- (40) Faya ama-o-ke (41) yama kamina-ba  
enough be-1S-DECL+F thing(F) say-FUT
- (42) wata-ma-ka-re.  
exist-back-DECL+F-NEG+F  
I'm finished, there's no more to say.

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