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On the Evolution of a Counter-Universal Pattern of Split Ergativity

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In his classic article on ergativity, Dixon (1979:95) states: "if a split [in an ergative system] is conditioned by tense or aspect, the ergative marking is ALWAYS found in either past tense or perfect aspect" (emphasis in the original). In the intervening years, this universal claim has been upheld in the typological literature, and a number of explanations have been proposed to account for it (cf. Dixon 1979, DeLancey 1981, Estival and Myhill 1988). However, in four Cariban languages of South America, the tense-based universal is violated. The patterns of tense and alignment in these four languages are given in table 1.

Table 1. The Counter-Universal Tense-Based Split Ergative Patterns

□ = Ergative, ■ = Non-ergative (inverse)

Cariña	Panare	Pemóng	Kapóng
Future	Future	Future	Future
Present	Present	Present	Present
Past	Perfect/Passive	Past	Past
	Past	Past	Past

In Cariña only the future tense is ergative; in Panare, Pemóng, and Kapóng, the only non-ergative tense is the past (although in Pemóng and Kapóng ergative past tenses also exist). Descriptions of three of these languages have existed for several years (Kapóng in Adam (1905) and Edwards (1972), Pemóng in Armellada (1943), Edwards (1972), and Tuggy (1989), and Cariña in Mosonyi (1982)), however, most of the works in question have not been readily available outside Venezuela, and none of the authors has been aware of the typological tradition which discusses ergativity (note that most were published before Dixon (1979)). Panare has yet to be fully described in published work; the non-ergative system has been well-documented in Gildea (1989), and description of the ergative system is underway in Payne, Payne, and Gildea (in process). It is the purpose of this paper to point out these counter-universal patterns and then to discuss how and why they have evolved.

1 The data which show the counter-universal pattern

The first point to be made is that the patterns in Table 1 are supported by the data. To that end, I discuss the general morphosyntactic patterns found with both the ergative and non-ergative systems (both of which have been reconstructed in Gildea (1992)). In the Cariban non-ergative system, the verb bears personal prefixes which mark both A and O of transitive verbs, or S of intransitive verbs, in an inverse pattern (also active/stative in some languages).¹ A, S, and O nominals are not case-marked. Two word order patterns are attested: AOV/SV or OVA/VS (i.e., both treat A and S as a single — nominative — unit). In Cariban ergative languages, the verb bears proclitics which mark person of the absolutive (O and S) and enclitics which mark the person of the ergative A. These clitics are in

complementary distribution with free nouns which occur in a parallel order: absolutive preceding the verb, and ergative following. Absolutive nouns bear no special marking, but the ergative A noun (or the ergative enclitic) bears a suffix derived etymologically from Proto-Cariban **wiya*.² In the rest of this section, I present illustrative data from each language.

In Cariña, the verb bears absolutive person-marking clitics (marking S in 1a-b and O in 2a-b — Mosonyi 1982:45). When A occurs it is a free form, bearing the ergative marker *-wa* 'Dative' and occurring after (3a), before (3b), or between the verb and future auxiliary *-ma*.³

- | | | | | |
|-----|----|---|----|--|
| (1) | a. | <i>woonariümmiia</i>
ü-voona-rü-ma
1-cultivate-Infinitive-Fut
'I will cultivate' | b. | <i>avoonariümmiia</i>
a-voona-rü-ma
2-cultivate-Infinitive-Fut
'You will cultivate' |
| (2) | a. | <i>düaaroriümmiia</i>
ü-aaro-rü-ma
1-take-Infinitive-Fut
'(somebody) will take me' | b. | <i>adaaroriümmiia</i>
a-aaro-rü-ma
2-take-Infinitive-Fut
'(somebody) will take you.' |
| (3) | a. | V-Aux A
<i>adeenariümmiia</i> ü' <i>wa</i>
a-eena-rü-ma ü-' <u>wa</u>
2-have-Fut-Fut.Aux 1-Erg
'I will have you.' | b. | A V-Aux
ü' <i>wa</i> <i>adeenariümmiia</i>
ü-' <u>wa</u> a-eena-rü-ma
1-Erg 2-have-Fut-Fut.Aux
'I will have you.' |
| | c. | V A-Aux
<i>adeenariü</i> ü' <i>wama</i>
a-eena-rü ü-' <u>wa</u> -ma
2-tener-Fut 1-Erg-Fut.Aux
'I will have you.' | | |

In contrast to the ergative future, the direct/inverse present tense is shown in 4a-b (from Mosonyi 1982:27) and the past tense in 5a-b (Mosonyi 1982:28). Although the examples do not show this, Mosonyi (p.18) notes that the ergative marker is exceptional, since A is not usually case-marked. Other dialects of Carib have not yet innovated the ergative future, but they show no case-marking for either A or O in cognate past and present tenses (e.g. cf. Hoff 1968, Courtz pc).

- (4) a. Cariña Present Tense Direct Inflection (SAP A → 3O)

<i>s-aroo-da</i>	<i>m-aroo-da</i>	<i>kas-aaro-da</i>
1A-take-Pres	2A-take-Pres	1+2A-take-Pres
'I take it.'	'You take it.'	'We take it.'

- b. Cariña Present Tense Inverse Inflection (3A → SAP O)

<i>dü-aaro-da</i>	<i>ad-aaro-da</i>	<i>k-aroo-da</i>
1O-take-Pres	2O-take-Pres	1+2O-take-Pres
'S/he takes me.'	'S/he takes you.'	'S/he takes us.'

(5) a. Cariña Past Tense Direct Inflection (SAP A → 3O)

<i>s-aaro-i</i>	<i>m-aaro-i</i>	<i>kas-aaro-i</i>
1A-take-Pres	2A-take-Pres	1+2A-take-Pres
'I took it.'	'You took it.'	'We took it.'

b. Cariña Past Tense Inverse Inflection (3A → SAP O)

<i>dii-aaro-i</i>	<i>ad-aaro-i</i>	<i>k-aaro-i</i>
1O-take-Pres	2O-take-Pres	1+2O-take-Pres
'S/he took me.'	'S/he took you.'	'S/he took us.'

Of the four languages, the ergative system is the most limited in Panare: word order is OVA/VS, and no nominals are case-marked. However, the verb marking is morphologically ergative in that only absolutive is marked in personal prefixes. The S is marked in 6a and 7a, the O in 6b and 7b.

(6) The Panare Ergative Future, *-sejpa*

	S-V		S
a.	<i>wataramaséjpankë</i>		<i>yu tyakópe arakon pëj kuure</i>
	<u>Ø</u> -w-at-arama-séjpa-nkë		<u>yu</u> tyakó-pe arakon pëj kuure
	<u>1Abs</u> -Intr-Detr-hunt-Future-again 1Sg		other-Ad monkey on many
	'I will hunt again for more monkeys.'		

	O-V	A	O
b.	<i>y-amenkë-séjpa pi yu kapere</i>		
	<u>3Abs</u> -write-Future Neg 1Sg paper		
	'I'm not going to write anything'		
	(lit. 'I won't write the paper.')		

(7) The Panare Ergative Present ('Nonspecific aspect'), *-ni-ñe*

	S-V		S
a.	<i>wutën</i>		<i>yu</i>
	<u>Ø</u> -w-të-n		<u>yu</u>
	<u>1ABS</u> -Intr-go-Nonspec.Intr 1Sg		
	'I (am gonna) go.'		

	O-V	Aux	A
b.	<i>yéjkañe</i>	<i>kěj</i>	<i>arakon</i>
	<u>Ø</u> [^] -y-ejka-ñe	kěj	arakon
	<u>1Abs</u> -Tran-bite-Nonspec.Tran 3.be.Proximal monkey		
	'The monkey bites me / is gonna bite me.'		

Also, Panare has two passive inflections which are precisely parallel to the cognate past tense constructions in Kapóng and Pemóng. Payne (1990) and Gildea (1992) argue at length for the passive analysis (Payne for passive as opposed to ergative; Gildea for passive as opposed to nominalization). When these passives are reanalyzed as active past tenses, Panare will have another split in its ergative system, with past tense taking ergative case-marking on the A, and other ergative tenses having no case-marking.

(8) Two Panare Perfect/Passives

- a. *-sa* 'Perfect/Passive.Visible'

S-V Obl-A S
y-ani-sa' *yu-uya* *mankowa*
3Abs-get-Pass 1Sg-Dat poison (Abs)
'I got the poison / the poison was gotten by me.'

- b. *-jpë* 'Perfect/Passive.Inferential'

S-V Aux S (Obl-A)
y-ikitë-jpë *mën* *manko* (*toose uya*)
3Abs-cut-Pass is.Inan mango(Abs) Toose Dat
'The mango has been cut (by Toose).'

The Panare past-perfective clauses in 9a-b illustrate the non-ergative system. In both clauses A and O are not case-marked; in both clauses, the SAP participant is marked overtly in the verbal prefix, with the third person participant assumed. While not prototypically accusative, it is still clearly non-ergative.

(9) The Panare Direct/Inverse Past-Perfective

- a. 1A → 3O: Direct b. 3A → 1O: Inverse

V A O
tipetyú'mayaj chu arakon
ʔ-petyú'ma-yaj yu arakon
1A-hit-Past 1Sg monkey
'I hit the monkey.'

O-V A O
ayejkayaj arakon amën
a-ejka-yaj arakon amën
2O-bite-Past monkey 2Sg
'The monkey bit you.'

In Kapóng, all tenses except one past are ergative. In 10-12a the transitive clause takes a marked A (with ergative suffix *-wia* 'erg'), with the unmarked O immediately preverbal. The ergative sometimes is preverbal (10, 11b), sometimes a postverbal clitic (11a, 12a). In 12b the intransitive S is unmarked and immediately preverbal (exactly like O in the other examples).

(10) The Kapóng Ergative Future (Adam 1905:213)

A O V-Aux
Herod wia múre iwahroodun
Herod wia múre-Ø iwah-ro-odun
Herod Erg infant-Abs search-Inf-Future.Aux
'Herod will search for the infant.'

(11) The Kapóng Ergative Present Tense (Adam 1905:209)

O-V-A
a. *to-enoggo ia*
to-enoggo-Ø-Ø-ia
3PIAbs-send-Present-3-Erg
'He sends them.'

A O-V
b. *yura wia au-reba*
yura wia au-reba-Ø
1Sg Erg 2Abs-give-Present
'I give you.'

(12) A Kapóng Ergative Past Tense

- | | | | | | | |
|----|---------------------------------|----------------------------|---|----|----------------------------|--------------|
| | O | V | A | | S | V |
| a. | <i>Tègina waràio</i> | <i>woh-za wia</i> | | b. | <i>ono braro tok</i> | <i>dözak</i> |
| | <u>tegin</u> a <u>waraio</u> -Ø | woh-sa-u-ia | | | ono braro <u>tok</u> -Ø | dö-zak |
| | one man- <u>Abs</u> | kill-Perfect-1- <u>Erg</u> | | | far not 3PI-Abs go-Perfect | |
| | 'I killed one man.' | | | | 'They had not gone far' | |

The Kapóng non-ergative past tense is illustrated in 13a-b: the A occurs with no ergative case-marker and the verbal prefix varies for the SAP rather than for absolutive (cf. Gildea 1992:82ff for discussion of Cariban inverse prefixes).

(13) The Kapóng Direct Past Tense (Adam 1905:56; Edwards 1972:47)

- | | | | | | | | | | |
|----|-------------------|-------------|----|--|------------------|------------------------|---|-----|---|
| | V | A | | A | O | V | [| Loc |] |
| a. | <i>s-eygama-i</i> | <i>yura</i> | b. | <i>piiyaikma</i> | <i>tok aröi</i> | <i>timörö iiwiktak</i> | | | |
| | 1A-say-Past | 1Sg | | piiyaikma tok arö-i | timörö iiwik-tak | | | | |
| | 'I said it.' | | | giant they carry-Past | 3Refl house-into | | | | |
| | | | | 'The giant; carried them into his; house.' | | | | | |

In Pemóng, ergative tenses include two futures, the present, and two pasts. The two futures (in 14a-b) correspond most closely to that seen above for Kapóng, with either an absolutive proclitic (14a) or a preverbal absolutive (14b), and an ergative enclitic. The present and past tenses are precisely parallel.

(14) The Pemóng Ergative Futures

- | | | | | |
|----|-----------------------|----|---------------------------|------------------------|
| | O-V-A-Aux | | O | V-Erg-Aux |
| a. | <i>ayaröyasee</i> | b. | <i>upon</i> | <i>kokayapeman</i> |
| | a-arö-Ø-ya-see | | u-po-n-Ø | koka-Ø-ya-pe-man |
| | 2Abs-take-1-Erg-1.Fut | | 1-clothes-Poss-Abs | wash-1-Erg-Future-3.be |
| | 'I will take you' | | 'I will wash my clothes.' | |

(15) The Pemóng Ergative Present Tense (Tuggy 1989)

- | | |
|--------------------------|--------------------|
| <i>töpon</i> | <i>kokaauya</i> |
| <u>tö-po-n</u> -Ø | koka-Ø-a-uya |
| 3Refl-clothes-Poss-Abs | wash-Present-2-Erg |
| 'You wash your clothes.' | |

(16) The Pemóng Ergative Past Tense

- | | |
|-----------------|-------------------------|
| <i>i-tö-'pä</i> | <i>i-kä'pa-'pä-i-ya</i> |
| 3Abs-go-Past | 3Abs-smear-Past-3-Erg |
| 'He went.' | 'He smeared him.' |

The Pemóng non-ergative past tense is poorly documented, partly because it is not thoroughly described in the grammar sketches, and partly because it does not occur in any of the texts I have reviewed so far. The partial paradigm given by Armellada (1943), and the prefix *mö-* '2A' combined with the lack of an ergative enclitic in the full-sentence example from Tuggy (1989), indicate that this past tense is descended from the Proto-Cariban non-ergative verbal system:

(17) The Pemóng Direct Past Tense

a. (Armellada 1943:188)

b. A full sentence example (Tuggy 1989)

<i>Ø-entana-i</i>	'I ate'
<i>m-entana-i</i>	'you ate'
<i>n-entana-i</i>	'he ate'

Ø	V
<i>a-po-n</i>	<i>mö-koka-tai</i>
2-clothes-Poss	<u>2A</u> -wash-Past
'You washed your clothes.'	

To summarize this section, the tense-based universal claim made by Dixon is violated by four Cariban languages: in each language, future is ergative and at least one past tense is non-ergative. In Cariña and Pemóng (which are somewhat better documented than Kapóng and Pemóng) it is clear that the non-ergative past tenses are also perfective. In Kapóng, the examples from narrative text indicate perfectivity as well. In Pemóng, we have only Armellada's translations to guide us — since he translates the non-ergative past tense into the Spanish Preterite (a perfective past tense), it seems reasonable to conclude perfectivity here as well. In the next section, I address how this counter-universal split came to be.

2. The Reanalysis: from Nominalized Subordinate to Main Clauses

The source of ergativity in the Cariban family is actually fairly transparent: all Proto-Cariban subordinate clauses are organized according to an ergative pattern, and this ergative pattern comes along with subordinate clauses when they are reanalyzed as main clauses. The reanalysis of biclausal constructions into simple clauses is a typologically well-attested method of tense/aspect/modality (TAM) renewal (for a representative sample and references to others, see the papers in Traugott and Heine (1991)). The Cariban case in particular is thoroughly argued in Gildea (1992).

As an analogy, take the complex tenses of English: all clauses with modal auxiliaries began as biclausal constructions with infinitive complements. The etymologically superordinate verb becomes the modern modal auxiliary and the etymologically nonfinite complement becomes the modern main — although still arguably nonfinite — verb. Similarly, the modern English present continuous verb comes etymologically from a nominalized verb in a prepositional phrase:

(18) a. s[I VP[am PP[at NP[building PP[of NP[a house]]]]]].
 ↓ ↓ ↓ ↓ ↓ ↓
 b. s[I VP[am Ø building Ø NP[a house]]]

While synchronic analysts might disagree as to the precise structure of the VP in 18b, all would agree that (i) the syntactic structure of the two etymological prepositional phrases has been lost, and (ii) the word *building* cannot be analyzed as a derived noun synchronically.

It is this type of reanalysis which we encounter in the Cariban family. Since the morphosyntax of Proto-Cariban subordinate clauses determined the morphosyntax of the innovative ergative tenses, I begin illustration of the reanalysis by illustrating reconstructed Proto-Cariban subordinate clauses (Lexical items from Girard 1971:227, 247, 258, 335; Morphosyntax from Gildea 1992:114, 122-5):

(19) Reconstructed Proto Cariban Nominalized Subordinate Clauses

a. Transitive NP

[[Possessor	Possessed]	(Oblique)]
(O)	(V-Nmlzr)	(A-Dat)
* <i>tina</i>	y- <i>ari</i> - <i>tipu</i>	(<i>u-wiya</i>)
water	Gen-carry-Abs. Nmlzr.Past	1-Dative

'the carrying of the water by me' (lit. 'the water's carrying by me')

b. Intransitive NP

[Possessor	Possessed]
(S)	(V-Nmlzr)
* <i>etipi</i>	w- <i>ena-tipu</i>
bone	Intran-fall-Abs.Nmlzr.Past

'the (past) falling of the bone. (lit. 'the bone's [past] falling.')

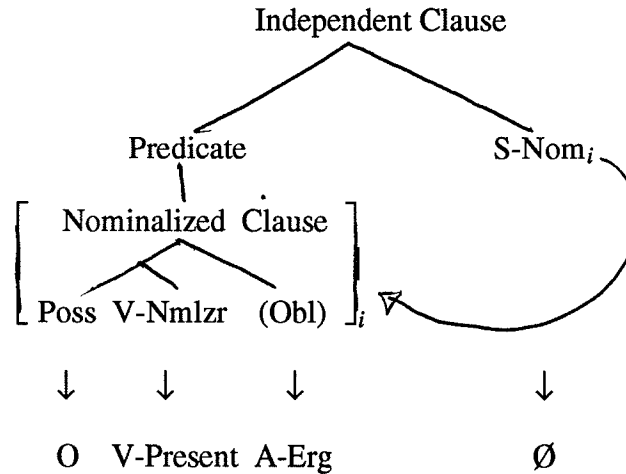
In both 19a-b, the first word is a possessor, the second a verb bearing **tipu*, which derives an obligatorily possessed noun. In 19a, the possessor is the notional O, in 19b, the notional S. Although the possessors in both 19a-b are free nouns, possession can also be expressed via a set of pronominal proclitics bound to the possessed. The morphosyntax of possession thus marks a de-facto absolutive category. In 19a, the notional A optionally occurs bearing the dative postposition, as an oblique adjunct to the noun phrase. This unique case-marking on the notional A creates a de-facto ergative category. It should be noted that such nominalizations are the only reconstructable type of subordinate clause in the Cariban family (and remain the only means of subordination in most modern Cariban languages). In the rest of this section, I illustrate how these ergatively organized subordinate clauses surface into main clauses.

The simplest case to illustrate is Present tense in Kapóng, Pemóng, and Makushi. The structure of the biclausal source construction is represented above the row of arrows in 20: a nominalized clause (like those illustrated in 19a-b) occurs as the predicate noun of a predicate nominal clause. There is no copula in simple present tense equative clauses, so the predicate noun is followed immediately by the pleonastic S, a demonstrative which is coreferential with the entire nominalized clause. An English approximation of this source would be 'That_i (is) [the destroying of the city by the enemy]_i.' The row of arrows points to how each part of the source is reanalyzed. The S of the superordinate clause is simply lost, and the previously subordinate clause becomes the new main clause present tense construction.

Examples 21 and 22 show the 'before' and 'after' pictures from Apalaí and Pemóng, respectively. In 21a-b, the first word is a nominalized verb, possessed by its notional S (*j*- '1' in 21a, *a*- '3' in 21b). The demonstrative pronoun which follows is the subject of the superordinate clause, yielding a literal parsing something like 'That is my going.' However, the active translation given by Koehn and Koehn (1986) indicates that at least the semantic portion of reanalysis is well underway. In Pemóng (22a-b), the etymological demonstrative is completely lost, and the translation indicates a straightforward present tense

clause. The unmarked possessor has become the unmarked absolutive (indicated as $-\emptyset$ 'Abs' in the glossing); the etymological nominalizer has become the present tense marker (Apalaí *-ry* and Pemóng *-\emptyset* both reconstruct to Proto-Cariban as action nominalizers — cf. Gildea 1992:123-4). The etymologically oblique A phrase has become obligatory, either as a free noun or as the reduced enclitic form seen in 22b.

(20) Present Tenses: Ergative Nominalization in an "Equative" Clause



(21) Apalaí Equative Clause with a Nominalized Verb as the Predicate Noun

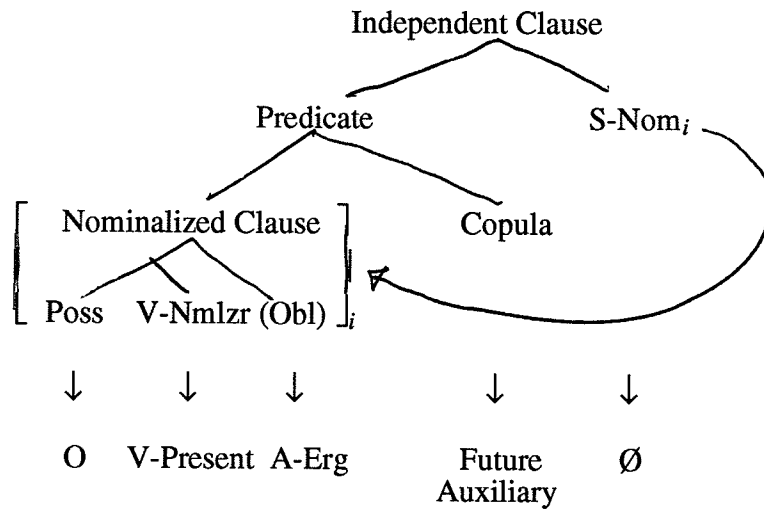
- a. *j-yto-ry* *moro* b. *a-yto-ry* *moro*
 1Abs-go-Action.Nmlzr that 3Abs-go-Action.Nmlzr that
 'I was going.' 'He was going.'
 (lit. 'That is my going') (lit. 'That is his going'.')

(22) The Pemóng Present Tense $-\emptyset$

- a. *yuurö-\emptyset entakna-\emptyset*
 1-Abs eat-Present
 'I eat.' (Edwards 1972:40)
- b. *töpong* *kokaauya*
tö-po-n-\emptyset *koka-\emptyset-a-uya*
 3Refl-clothes-Poss-Abs wash-Present-2-Erg
 'You wash your own clothes.' (Tuggy 1989)

The second reanalysis differs from the first only in the addition of a future tense copula to the source construction (cf. English 'It_i will be [the destroying of the city by the enemy]_i'). This copula then remains, combining with the etymological nominalizer to mark future tense. The result of such a reanalysis is seen in 24 (repeated from 3a above): the etymological possessive proclitic becomes the absolutive, the nominalizer *-rü* joins with the third person form of the copula *ma* to mark future tense, and the A occurs bearing the ergative suffix *-'wa*. The Pemóng future in 14a above is derived from the same source, except with the auxiliary *se* rather than *ma*.

(23) Ergative Nominalization Plus Copula Becomes Ergative Future Tense

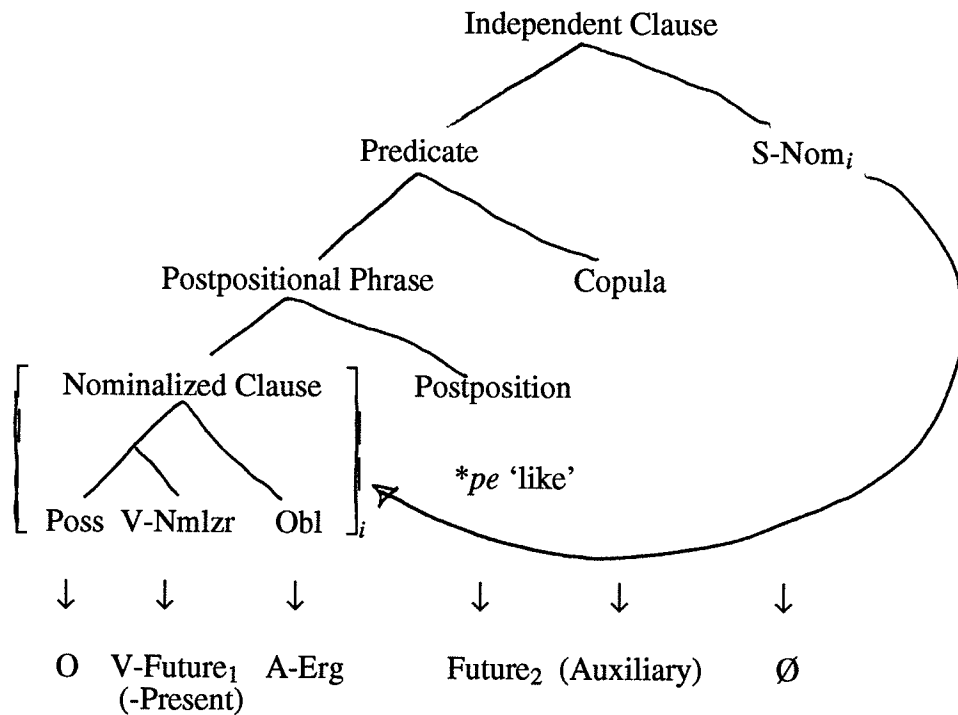


(24) The Cariña future revisited (from 3a)

adeenarümmüa ü'wa
 a-eena-rü-ma ü-'wa
 2Abs-have-Fut-Fut.Aux 1-Erg
 'I will have you.' (Mosonyi 1982:20)

By adding a postposition to the source construction in 23, we derive the source construction for a second future tense, given in 25.

(25) The “attributive” source construction for the ergative future tenses



In 25, the superordinate S remains pleonastic, but the subordinate clause is now further embedded into a postpositional phrase, which is then the predicate complement of the superordinate copula — the closest English approximation would be something like ‘It_i is/will be like [the destroying of the city by the enemy]_i’. After reanalysis, the superordinate subject is gone and there are now three potential pieces of morphology to mark future tense: etymologically the nominalizer, the postposition, and the copula. In Kapóng, the copula also drops out, leaving the etymological nominalizer *-dok* (< **-topo* ‘Locative/Instrumental Nmlzr’) to combine with the etymological postposition *bee* (< **pe* ‘like’) as a complex future marker (26). In Pemóng, the etymological nominalizer is \emptyset , so the only overt markers of future are *-pe* (< **pe* ‘like’) and the invariant third person auxiliary *man* (< *man* ‘3.be’).

- (26) The reanalyzed future in Kapóng, *-dok bee* with no auxiliary.

<i>eegii</i>	<i>suuruuruui</i>	<i>adokgong</i>	<i>bee</i>
eegii	suuruuruui- \emptyset	ar \emptyset - <i>dok</i> - \emptyset -gong	bee
casava	flour-Abs	carry-Fut ₁ -1.Incl.Erg-Pl	Fut ₂
‘We (Incl) will carry casava flour.’ (Edwards 1972:47)			

- (27) Pemóng *-pe* with invariant third person auxiliary

<i>upon</i>	<i>kokayapeman</i>	<i>penanne</i>
u-po-n- \emptyset	koka- \emptyset - \emptyset -ya- <i>pe</i> -man	penanne
1-clothes-Poss-Abs	wash-Fut ₁ -1-Erg-Fut ₂ -Fut.Aux	tomorrow
‘I will wash my clothes tomorrow.’ (Tuggy 1989)		

These represent the etymological sources of the three counter-universal ergative tenses. The ergative past tense is formed according to the same pattern already documented in Indo-Iranian, where the nominalization becomes a passive participle and then the passive becomes an ergative (cf. Comrie 1978:377). This process is addressed in more detail in Gildea 1992:259-68. Now that we have examined the morphosyntactic sources of the innovative Cariban ergative tenses, what remains is to explain how they have combined with the conservative non-ergative past tenses to produce the counter-universal pattern in these four languages.

3. The direction of tense renewal: from future to past

In table 2, I add three more languages to those in Table 1. At the far left, Carib and Hixkaryana both conserve the non-ergative Proto-Cariban verbal system throughout the tense-aspect paradigm. At the far right, Makushi has lost all vestiges of the Proto-Cariban system, leaving behind only the innovative ergative system. In this array of languages, we see the path of change: first, the present-future distinction collapses into a single ‘nonpast’ category (Hixkaryana); then a new future tense is innovated and balance is restored to the paradigm (Cariña). Beginning with Panare and moving to the right, all Proto-Cariban nonpast tenses are lost; in each language, new ergative tenses are innovated. The Proto-Cariban past tense hangs on the longest: in Panare, the only past tenses are conserved from Proto-Cariban verbal tenses (i.e. the passive has yet to be reanalyzed as an ergative past tense — cf. Payne 1990); in Kapóng, the conservative past tense still occurs with some frequency in discourse, but the innovative ergative past tenses are more common (Gildea 1992:184); in Pemóng, the conservative past tense is still attested in certain paradigms, but it is not

readily encountered in text (Gildea 1992:188); in Makushi, the conservative tenses are all gone, leaving behind only the innovative ergative system.

Table 2. The Evolution of the Counter-Universal Split Ergative Patterns

■ = non-ergative □ = ergative

Carib	Hixkaryana	Cariña	Panare	Kapóng	Pemóng	Makushi
Future	Non-Past	Future	Future	Future	Future	Future
Present		Present	Present	Present	Present	Present
Past	Past	Past	Passive	Past	Past	Past
			Past	Past	Past	

This table leaves us with (at least) two questions: first, how do we know the direction of change is non-ergative to ergative? It seems equally plausible that a historically prior ergative system is being replaced by an innovative non-ergative system (cf. Derbyshire 1985). In brief, the nonergative system can only be reconstructed as the Proto-Cariban verbal system, whereas the ergative system must be reconstructed with nonverbal meanings — ergativity in main clauses is clearly the innovation (c.f. Gildea 1992, chapters 2-4).

Second, given that the innovative ergative system does include a past tense, it is not logically necessary that a counter-universal split ever occur — had the past tenses been the first to disappear from the conservative system, presumably the universal pattern would have occurred, with ergative past tenses and non-ergative non-past tenses. In fact, past tenses *are* replaced first in many ergative languages (in *all* other split-ergative languages described to date). The question, then is why does the change begin in future/nonpast tenses? The answer is due to the unique source of ergativity in the Cariban family. All other split ergative languages have their genesis from passive/perfect participles (cf. Comrie 1978, Dixon 1979, Estival and Myhill 1988), which are inherently oriented towards past events. The Cariban reanalysis is not driven by reanalysis of a passive, but rather by regeneration of tense-aspect morphology in the typologically common way: paratactic constructions begin to carry the functional load of degenerating TAM inflections, then they are reanalyzed as simple main clauses. Such a regeneration often begins with nonpast tenses (cf. English, where the modal auxiliaries are used to make predictions about the future, but past tense is conservative). The Cariban tense regeneration would have been unremarkable except that Cariban subordinate clauses are ergative, and when they arrived in main clauses, future tense main clauses become ergative first.

Notes

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1 I use the terms A, S, and O to mean, respectively, the grammatical relations transitive subject, intransitive subject, and direct object. I follow Dixon (1979) in using these terms, with the exception that I determine A and O on the basis of syntactic patterns, rather than by which is “more agent-like”.

² As the ergative systems are innovated independently, not all are identical. The Panare A is not case-marked, and neither Cariña nor Panare has reduced an ergative A to a postverbal clitic. These distinctions are partially due to the languages being at different stages of the same reanalysis process, and partially due to differences in source constructions for the tenses in question.

³ Mosonyi (1982) was apparently not familiar with the term 'ergative'. On p. 18, he distinguishes the ergative use of the dative/allative suffix *-'va* from all other uses (e.g. agent phrase of a passive), saying it is "properly named" the subject pronoun. Use of the term 'Ergative' in these examples is mine. Similarly, Mosonyi does not distinguish the future auxiliary *-ma* 'Fut.Aux' from the homophonous third person copula *ma* '3.be' — the choice of term is again mine.

References

- Adam, L. (1905) "Grammaire de l'Accawai". *Journal de la Société des Américanistes* (N.S.) 2.43-89, 209-240.
- Armellada, C. de. (1943) *Grammatica de la Lengua Pemón*, vol. I. Caracas: Artes Gráficas.
- Comrie, B. (1978) "Ergativity". In *Syntactic Typology*, Winfred P. Lehman (ed), 329-94. Sussex: The Harvester Press.
- DeLancey, S. (1981) "An interpretation of split ergativity". *Language* 57.626-57.
- Derbyshire, D. (1985) *Hixkaryana and Linguistic Typology*. Arlington: University of Texas at Arlington and SIL.
- Dixon, R. M. W. (1979) "Ergativity". *Language* 55.59-138.
- Edwards, W. (1972) *An Introduction to the Akawaio and Arekuna Peoples of Guyana*. Guyana: Amerindian Languages Project, University of Guyana.
- Estival, D. and J. Myhill (1988) "Formal and functional aspects of the development from passive to ergative systems." In *Passive and Voice*. Masayoshi Shibatani (ed), 441-491. Philadelphia: John Benjamins.
- Gildea, S. (1989) *Simple and Relative Clauses in Panare*. University of Oregon M.A. Thesis.
- Gildea, S. (1992) *Comparative Cariban Morphosyntax: On the Evolution of Ergativity in Independent Clauses*. University of Oregon, Ph. D. dissertation. Ann Arbor: UMI.
- Girard, V. (1971) *Proto Carib Phonology*. University of California, Berkeley, Ph.D. dissertation.
- Hopper, P. and S. Thompson (1980) "Transitivity in grammar and discourse". *Language* 56.251-299.
- Koehn, E. and S. Koehn (1986) "Apalai". In *Handbook of Amazonian Languages*. Desmond C. Derbyshire and Geoffrey K. Pullum (eds), 33-127. Berlin: Mouton de Gruyter.
- Mosonyi, J. (1982) *Morfología verbal del idioma cariña*. Universidad Central de Venezuela, Caracas, Thesis for the title of Profesor Agregado.
- Payne, T. (1990) "Transitivity and ergativity in Panare". In *Amazonian Linguistics: Studies in Lowland South American Languages*, ed. by D. L. Payne. Dallas: University of Texas Press.
- Payne, T., D. L. Payne, and S. Gildea (In Process) *Panare Reference Grammar*. University of Oregon, ms.
- Traugott, E. and B. Heine (1991) *Approaches to Grammaticalization* (2 vols). Amsterdam: John Benjamins.

Tuggy, E. (1989) "Pemong verb morphology (Arekuna dialect)". Presented at two special colloquia, University of Oregon, Summer 1989.